



universität
wien

MASTER THESIS

Titel der Master Thesis / Title of the Master's Thesis

**„Climate Displacement: New Challenges and Developments on the Protection of Persons
Displaced due to Environmental Disasters“**

verfasst von / submitted by

Victoria Vaamonde Villar Schor

angestrebter akademischer Grad / in partial fulfilment of the requirements for the degree of
Master of Arts (MA)

Wien, 2020 / Vienna 2020

Studienkennzahl lt. Studienblatt /
Postgraduate programme code as it appears on
the student record sheet:

UA 992 884

Universitätslehrgang lt. Studienblatt /
Postgraduate programme as it appears on
the student record sheet:

Master of Arts in Human Rights

Betreut von / Supervisor:

Christoph Pinter

Climate Displacement: New Challenges and Developments on the Protection of Persons Displaced due to Environmental Disasters

Introduction	4
1. The Relationship between Climate Change and Displacement	4
1.1 The Increase in Environmental Disasters due to Climate Change	6
1.2 Migration Triggered by Climate Change: The Five Displacement Scenarios	9
i. Cyclones, Floods, Tsunamis and Extreme Storms	12
ii. Hurricanes	13
iii. Wildfires	14
iv. Drylands, Draughts, and Desertification.....	14
v. Sea-Level Rise.....	15
vi. Earthquakes.....	17
vii. Volcanos.....	17
1.3 The Consequences of Environmental Disasters and Environmental Migration ...	18
1.4 Environmental Migrants or Environmental Refugees?	23
2. The International Human Rights Protection System and the Rights of Persons Affected by Environmental Disasters	27
2.1 Right to Seek Asylum and the International Refugee Law	29
2.1.1. United Nations Convention Relating to the Status of Refugee and its Protocol.....	30
2.1.2 The European Union Qualification Directive and Subsidiary Protection	40
2.1.3 The African Union and its Extended Concept of Refugee	41
2.1.4 Refugee Protection in the Inter-American Human Rights System: The Cartagena Declaration and the San José Declaration on Refugee and Displaced People	43
2.1.5 The ASEAN Declaration and the Arab Convention and the Protection of Refugees	44
2.2 Internal Displacement due to Environmental Disasters	46
2.2.1 Principles on Internal Displacement	46
2.2.2 The Kampala Convention	49
2.3 The Rights of Migrants.....	49
2.3.1 The Applicability of the Convention to Cases of Persons Displaced due to Environmental Disasters.....	51
2.4 Temporary Protection on the Grounds of Humanitarian Protection	52
2.5 International Human Rights Law and International Humanitarian Law	54
3. Gaps in the Protection of Persons Displaced by Environmental Disasters	55
3.1 First Gap: Voluntary or Forced Migration?	59

3.2 Second Gap: The Absence of Provisions on Permanent Displacement and Durable Solutions	62
3.3 Third Gap: The Disappearance of Small Island Developing States and the Status of their Citizens.....	64
3.4 Fourth Gap: The Absence of Provisions on the Protection of Cross-Border Displaced Persons due to Environmental Disasters	69
3.5 The Fifth Gap: There is no International Protection System for the Specific Needs of Environmentally Displaced Persons	71
4 . The International Framework on Climate Change, Environmental Disasters, and Human Mobility.....	72
4.1 Measures of the Mitigation of Climate Change Effects: UNFCCC, the Kyoto Protocol, and the Paris Climate Agreement	73
4.2 Measures for the Reduction of the Risks of Environmental Disasters: The Hyogo and Sendai Frameworks	76
4.3 Measures for the Protection of Displaced Persons: The New York Declaration for Refugees and Migrants, the Global Compact for Refugees, and the Global Compact for Migration.....	79
4.4 Measures of Protection of Persons Affected by Environmental Disasters: The Draft Articles on the Protection of Persons in the Event of Disasters and the Nansen Initiative Developments	81
5. Addressing the Protection Gap	83
5.1 First Solution for the Protection Gap: Extend the Concept of Refugees through a new Additional Protocol to the 1951 Convention	85
5.2 Second Solution for the Protection Gap: A New Declaration or Convention on the Rights of Environmentally Displaced Persons	87
5.3 Third Solution for the Protection Gap: Amending the UNFCCC Framework	89
5.4 Fourth Solution for the Protection Gap: Creation of Regional Protection Systems	90
Conclusion.....	94
Bibliography	96
Summary	112

Abbreviations

AALCO Asia-African Legal Consultative Organisation

OAS Organisation of American States

ASEAN Association of South East Asian Nations

CIREFCA Committee of International Conference on Central American Refugees

CRC Convention on the Rights of the Child

CSIRO Commonwealth Scientific and Industrial Research Organisation

EXCOM Executive Committee

IASC Inter-Agency Standing Committee

IASFM International Association for the Study of Forced Migration

ICCPR International Covenant on Civil and Political Rights

ICRC International Committee of the Red Cross

ICESCR International Covenant on Economic, Social and Cultural Rights

IDMC Internal Displacement Monitoring Centre

IDP Internally Displaced Person

IHRL International Human Rights Law

ILC International Law Commission

IOM International Organisation for Migration

IPCC Intergovernmental Panel on Climate Change

NGO Non-Governmental Organisation

OAU Organisation of African Unity

UN United Nations

UNHCHR United Nations Office of the High Commissioner for Human Rights

UNHCR Handbook on Procedures and Criteria for Determining Refugee Status

UDHR Universal Declaration of Human Rights

UNCHR United Nations High Commissioner for Refugees

UNFCCC United National Framework Convention on Climate Change

WMO World Meteorological Organisation

Introduction

Climate change has had a huge impact in the occurrence of environmental disasters, which have become more frequent and destructive. Persons displaced to other safe parts of their country or even to other States in order to avoid the negative impacts of climate change or as a result of the destruction of their place of origin. The question that this thesis is aiming to answer is: How are people displaced due to environmental disasters protected according to international law? In addition, this thesis aims to answer what gaps in protection are present within the international law framework and how the international community may address these gaps in order to provide an effective protection for persons displaced by environmental disasters.

The main objective of this thesis is to analyse the relevant international human rights law instruments in order to establish how and if persons who are displaced due to environmental disasters are protected. As the issue of environmental displacement is still highly controversial, an analysis of the current literature on the topic and the different theories and approaches will also be developed throughout the chapters.

In the first chapter, the nexus between climate change, the increase in the numbers of cases of environmental disasters, and the displacement of people is analysed. The second chapter presents what legal status is given to environmentally displaced persons by international law and what rights they may rely on according to each instrument. The third chapter aims to establish which situations of environmental displacement were not foreseen by international law instruments and analyse the gaps observed within the international framework. The fourth chapter provides an overview of the international framework concerning climate change and environmental disasters and how the international community treats and sees these displaced persons. Finally, the last chapter aims to analyse the different approaches used to address these gaps in protection, commenting briefly on their advantages and disadvantages.

1. The Relationship between Climate Change and Displacement

Climate change is an alteration in the average weather (temperature, precipitation and wind) of a certain location and the impacts it has on the oceans and other

bodies of water, glaciers and ice caps, land surfaces, and the atmosphere¹. The UNFCCC characterises climate change as:

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 period's ².

The IPCC states that human-induced global warming³ increases 0.2°C per decade⁴. Patteri Taalas, Secretary-General to the WMO, has stated that if no measures of prevention are taken, Earth's temperature will increase more than 3°C by the end of the Century, causing harmful impacts on human wellbeing⁵. Extreme environmental disasters are, for example, key factors on the recent rise in global hunger, which affects more than 820 million people around the world⁶.

Climate change, in itself, does not provoke the displacement of people. However, the impacts and consequences that climate change has on the environment may render life difficult or even impossible, causing the movement of populations. The increase in environmental disruptions, the inevitability of movements of peoples, and the possibility of human rights violations in these situations have received the attention of the international community. The United Nations Human Rights Council, for example, has addressed the impact of climate change in the full enjoyment of human rights and requested global cooperation and solutions to the issue⁷.

¹ H. Le Treut, et al., Historical Overview of Climate Change Science, available at: <https://www.ipcc.ch/site/assets/uploads/2018/03/ar4-wg1-chapter1.pdf> (accessed 06 May 2020)

² United Nation Framework Convention on Climate Change (adopted 9 May 1992) A/RES/48/189, Article 1 (2).

³ An increase in surface air and sea surface temperatures

⁴ IPCC 2018 Report Global Warming of 1.5°C. 'An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty', available from: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf (accessed 06 May 2020)

⁵ *Decade ending 2019 likely to be hottest on record*, United Nations, 3 December 2019, available at: <https://news.un.org/en/story/2019/12/1052661> (accessed 06 May 2020)

⁶ WMO Statement on the State of Global Climate in 2019, *World Meteorological Organisation*, available from: https://library.wmo.int/doc_num.php?explnum_id=10211 (accessed 06 May 2020)

⁷ United Nations Human Rights Council Res 16/11, 12 April 2011, Res 19/10, 19 April 2012, Res 25/21, 22 January 2014, and Res 28/11, 06 April 2015.

1.1 The Increase in Environmental Disasters due to Climate Change

The ILC's Draft Articles on the Protection of Persons in Situations of Disaster defines disaster as: 'a calamitous event or series of events resulting in widespread loss of life, great human suffering and distress, mass displacement, or large-scale material or environmental damage, thereby seriously disrupting the functioning of society'⁸. This concept was challenged by Germany, which stated that the definition of events should not only focus on sudden onset events but should also include slow onset processes, as droughts for example⁹. A differentiation can be drawn from this notion between the concepts of natural hazards and natural disasters. According to Matthew Scott, natural disasters are the consequence of the interaction between natural hazards and exposed and vulnerable social conditions¹⁰. For the author, the occurrence of natural hazards, such as floods, hurricanes, earthquakes, etc, is not exceptional, once governments may reduce the risks of these hazards, but the interplay of a natural hazard with social vulnerability may cause serious adverse human impacts. These impacts might include difficulties in the access to food, water, and shelter, and a decrease in the level of livelihoods and of healthcare¹¹. His definition recognises that, not only calamitous events have harmful impacts, but also that small-scale disasters might have a damaging impact on vulnerable groups¹².

According to the WMO, more than 90% of the natural disasters are related to the weather. Weather abnormalities caused by climate change enhance the occurrence of environmental disasters. The increase in rain and snowfall precipitation across the globe escalates the risk of wildfires and severe droughts and strengthen hurricanes and storms. Floods and droughts will become more common and there will be a higher risk of megadroughts by 2100. Crops will be lost and drinking water will suffer shortages¹³.

⁸ ILC's Draft Articles on the Protection of Persons in Situations of Disaster, 2016

⁹ ILC's Draft Articles on the Protection of Persons in the Event of Disasters with Commentaries, 2016

¹⁰ M. Scott, *Climate Change, Disasters, and the Refugee Convention*, Cambridge, Cambridge University Press, 2020, pp. 10-31

¹¹ *idem*

¹² *ibidem*

¹³ *The effects of global warming*, National Geographic, available from: <https://www.nationalgeographic.com/environment/global-warming/global-warming-effects/> (accessed 12 May 2020).

Munich Re noted in 1999 that ‘worldwide losses from natural catastrophes increased in the second half of the 20th century in a dramatic and disturbing way. This trend appears to have become even more firmly entrenched since the mid-1980s’¹⁴.

In the 2016 Provisional Statement by the WMO, its Secretary-General declared that:

Because of climate change, the occurrence and impact of extreme events has risen. Once in a generation heatwaves and flooding are becoming more regular. Sea level rise has increased exposure to storm surges associated with tropical cyclones¹⁵.

The 2019 WMO Statement attests that between the years of 2009 and 2019, Earth experienced an exceptional global heat, high levels of ice retreat and the record rise in sea levels due to the greenhouse gasses emitted by human activities. The daily Arctic ice-sea extent reached the second lowest levels in October 2019. Severe droughts affected various parts of Asia and other States in the southwest Pacific. Drought conditions in Australia expanded and intensified in 2019, making it the driest year since 1902. Honduras, Guatemala, Nicaragua, and El Salvador also experienced higher than normal dry conditions¹⁶. The number of global tropical cyclones was above average in 2019, having the northern hemisphere 72 cyclones compared to the average of 59. The period of 2018-2019 presented the highest number of cyclones in a season since 2008-2009 with 27 cyclones¹⁷.

The great concentrations of greenhouse gases in the Earth’s atmosphere increases the air and water temperatures causing the sea levels to rise due to warm water expansion and to the melting of land ice that flows into the ocean. Sea levels are in a continuous accelerated rise. Since 1880, the average sea levels have increased 23 centimetres, being 7 centimetres only in the last 25 years. Every year sea levels rise 3.2

¹⁴ Munich Re Report, 1999, p.16

¹⁵ Provisional WMO Statement on the Status of the Global Climate in 2016, *World Meteorological Organisation*, 14 November 2016, available from: <https://public.wmo.int/en/media/press-release/provisional-wmo-statement-status-of-global-climate-2016> (accessed 07 May 2020)

¹⁶ 2019 Concludes a Decade of Exceptional Global Heat and High-Impact Weather, *World Meteorological Organisation*, 3 December 2019, available from: <https://public.wmo.int/en/media/press-release/2019-concludes-decade-of-exceptional-global-heat-and-high-impact-weather> (accessed 07 May 2020)

¹⁷ *idem*

mm¹⁸. A report by the IPCC states that the sea levels are expected to rise between 26 and 77 cm by 2100¹⁹ while an analysis made by NASA predicts the rise to be of about 65 cm²⁰. In addition to the deterioration and erosion of lands, the contamination of crops and potable water and the possible absence of fundamental resources, the constant rise of sea levels that cities and Small State Islands at risk of becoming uninhabitable or even disappearing, force the movement local communities to other regions or other States.

An analysis by the European Commission concluded that the population potentially exposed to earthquakes increased from 1.4 billion in 1975 to 2.7 billion in 2015 and is the natural hazard that exposes the highest number of people. Flood is the most common natural disaster and affects more people in Asia (76,9%) and Africa (12,2%) than in other regions. Approximately 1 billion people in 155 countries are exposed to floods. The number of persons exposed to strong cyclone winds raised from 1 billion in 1975 to 1,6 billion in 2015²¹. Lackzo and Collett, when analysing the 2002 International Red Cross and Red Crescent's World Disasters Report, say that the number of people at risk of being affected by weather related disasters rose from 275.000 in the 1970s to 1.2 million in the 2980s, and to 18 million in the 1990s²². The UNHCR confirms that there is an increase of the number of persons affected by environmental disasters and it is due to the rising of vulnerability²³ and that

the total number of people affected by natural disasters has tripled over the past decade to 2 billion people, with the accumulated impact of national disasters resulting in an average of 211 million people directly affected each

¹⁸ C. Nunez, 'Oceans are rising around the world, causing dangerous flooding. Why is this happening, and what can we do to stem the tide?', 19 February 2019, National Geographic, available at: <https://www.nationalgeographic.com/environment/global-warming/sea-level-rise/> (accessed 05 May 2020)

¹⁹ M. Collins, et al, Long-term Climate Change: Projections, Commitments and Irreversibility, in *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate*, Cambridge, Cambridge University Press, 2013.

²⁰ P. Lynch and K. Weeman, 'New study finds sea level rise accelerating', 13 February 2018, available at: <https://climate.nasa.gov/news/2680/new-study-finds-sea-level-rise-accelerating/> (accessed 05 May 2020).

²¹ Pesaresi, M., et al, Atlas of the Human Planet Global Exposure to Natural Hazards 2017, available at: <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/atlas-human-planet-2017-global-exposure-natural-hazards> (accessed 06 May 2020).

²² F. Lackzo and E. Collett, *Assessing the Tsunami's Effects on Migration*, 01 April 2005, available from: <https://www.migrationpolicy.org/article/assessing-tsunamis-effects-migration>, and IFR World Disasters Report, available from <https://www.ifrc.org/Global/Publications/disasters/WDR/32600-WDR2002.pdf> (accessed 26 June 2020).

²³ UNHCR, *The State of the World's Refugees*, 2006, p. 28.

year. This is approximately five times the number of people thought to have been affected by conflict over the past decade²⁴.

Concerning the nexus between climate change and the migration of people, the IPCC recognises the environmental factors may cause the displacement of people, stating that:

Climate change is projected to increase displacement of people (medium evidence, high agreement). Displacement risk increases when populations that lack the resources for planned migration experience higher exposure to extreme weather events, such as floods and droughts. Expanding opportunities for mobility can reduce vulnerability for such populations. Changes in migration patterns can be responses to both extreme weather events and longer term climate variability and change, and migration can also be an effective adaptation strategy.²⁵

1.2 Migration Triggered by Climate Change: The Five Displacement Scenarios

The nexus between climate change and migration is still being debated. Castles proposes three major questions to the debate of climate migration. The first question is on the definition of ‘environmental refugee’: Who can be classified under the concept of environmental refugee? The second question he proposes is on the existence of environmental refugees: Can environmental factors be identified as a cause of human displacement? And finally, he questions: Who will provide protection to environmental refugees should they exist? ²⁶

Astri Suhrke stated that there are two opposing perspectives on the relationship between climate change and migration: 1. the minimalist perspective, which claims that environmental change can contribute to migration, but there is insufficient knowledge on the process to draw a concrete conclusion; and 2. the maximalist approach, which argues that environmental degradation has already displaced millions of persons and will

²⁴ *Idem* p. 27

²⁵ IPCC, Climate Change Synthesis Report, 2014, p. 73 available from: https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf (accessed 07 May 2020)

²⁶ S. Castles, New Issues in Refugee Research, Working Paper No. 70 Environmental Change and Forced Migration: Making Sense of the Debate, UNHCR, 2002

displace even more in the future²⁷. Jambor, in order to reconcile the two different positions, proposed that there should be an acknowledgment that there is no unanimous conclusion to the long-term effects of pollution and deforestation, but change in the traditional climatic patterns would threaten the basic livelihood of people and displace masses of persons²⁸.

Lonergan and Swain assert that

although the estimates and projections of environmental refugees are based almost entirely on anecdotal evidence and intuitive judgment, it is important not to trivialize the role environmental change and resource depletion may play in population movements²⁹

Lonergan also recognises five environmental factors that might lead to displacement: 1. natural disasters; 2. development projects that change the environment; 3. Progressive evolution of the environment; 4. industrial accidents; and 5. environmental consequences due to conflicts³⁰.

Myers identifies factors such as desertification, deforestation, lack of water, salinization of irrigated lands, and bio-diversity depletion as causes for environmental displacement. Myers also states that displacement is interlinked with the rapid-growth of population in less-developed countries as well as with climate change³¹. Black, on the other hand, states that migration is ‘an essential part of the economic and social structure of the region, rather than a response to environmental decline’³².

International organisations have recognised that natural disasters can be a cause for the displacement of people. The UNHCR Executive Committee affirmed in 1993 that environmental degradation was an underlaying cause for population displacements and

²⁷ A. Suhrke, *Pressure Points: Environmental Degradation, Migration and Conflict*, *American Academy of Arts and Sciences*, 1991.

²⁸ P. Jambor, *The Vietnamese Boat People and the Comprehensive Plan of Action: An Innovative Solution for an Enduring Problem*, Paper prepared for the Joint ILO-UNHCR Meeting on International Aid as a Means to Reduce the Need for Emigration. Geneva: United Nations High Commissioner for Refugees, 1992.

²⁹ S. Lonergan and A. Swain, *Environmental Degradation and Population Displacement*, 1999.

³⁰ S. Lonergan, *The Role of Environmental Degradation in Population Displacement*, GECHS Project Research Report 1, 1998.

³¹ N. Myers and J. Kent, *Environmental Exodus an Emergent Crisis in the Global Arena*, Climate Institute, 1995.

³² R. Black, *Refugees, Environment and Development*, New York, Routledge, 1998, p.28.

that the international community needed to address the issue in a comprehensive manner. Later, in conclusion n. 80, the EXCOM went further stating that:

Recognising that the underlying causes of large-scale involuntary population displacements are complex and interrelated and encompass gross violations of human rights, including in armed conflict, poverty and economic disruption, political conflicts, ethnic and inter-communal tensions and environmental degradation, and that there is a need for the international community to address these causes in a concerted and holistic manner³³.

Walter Kälin, a former UN Representative of the Secretary-General on the Human Rights of Internally Displaced Persons, has identified five scenarios in which climate change might trigger population movements³⁴:

- i. *Sudden onset disasters*: such as floods, hurricanes, cyclones, typhoons, and mudslides caused by heavy rain;
- ii. *Slow onset environmental degradation*: caused, for example, by rising of sea levels, increasing in the salinisation of water and soil, thawing of glaciers, droughts and desertification, and reduced water availability;
- iii. *Small island states* that are at risk of disappearing or becoming uninhabitable due to the rising of sea levels;
- iv. The designation of *high risks zones* by States' authorities;
- v. *Any unrest that disturbs public order, violence or armed conflict* triggered by the lack of essential resources.

Kälin's five scenarios can be observed in recent migration flows due to disasters. From January to July 2019 more than 10 million people were forced to displace within their own State due to environmental hazards³⁵.

³³ United Nations Executive Committee Comprehensive and Regional Approaches within a Protection Framework no. 80 (1996) A/AC.96/878, available at: <https://www.unhcr.org/excom/exconc/3ae68c6e24/comprehensive-regional-approaches-protection-framework.html> (accessed 12 May 2020)

³⁴ W. Kälin and N. Schrepfer, 'Protecting People Crossing Borders in the Context of Climate Change Normative Gaps and Possible Approaches', UNHCR, February 2012.

³⁵ IDMC, *Mid-Year Figures: Internal Displacement from January to June 2019*, 12 September 2019.

Migration patterns and flows can be responses to extreme weather events and long-term climate variability and change³⁶. The Internal Displacement Monitoring Centre reports that 1.900 environmental disasters triggered 24.9 million new internal displacements across 140 countries and territories in 2019, the highest number of displacements due to disasters recorded since 2012³⁷. The number of internal displacements caused by environmental disasters is three times that of internal displacements caused by violence and conflict³⁸. Out of the 24.9 million new displacements, 23.9 million were due to weather related events and 947.000 were due to geophysical events. Weather related displacements were occasioned by extreme temperatures (24.500), landslides (65.800), droughts (276.700), wildfires (528.500), floods (10 million), cyclones, typhoons, and hurricanes (11.9 million), and other storms (1.1 million). Geophysical displacements were due to earthquakes (922.500) and volcanic eruptions (24.500). In the East Asia and Pacific region around 9.601.000 persons were displaced due to environmental disruptions, which makes up about 38.6% of the global total. In South Asia, 9.529.000 persons, or 38.3% of the global total, were displaced. Environmental disruptions were also the cause for the displacement of 3.448.000 persons in the Sub-Saharan Africa (13.9% of the global total), 1.545.000 persons in the Americas (6.2% of the global total), 631.000 persons in the Middle East and North Africa (2.5%), and 101.000 in Europe and Central Asia (0.4%)³⁹.

i. Cyclones, Floods, Tsunamis and Extreme Storms

In March 2019, cyclone Idai hit Mozambique bringing heavy storms, strong winds, and landfalls to the provinces of Sofala, Zambezia, Manica, and Inhambane. The cyclone left more than 600 people dead and another 1.85 million people in need of assistance in Mozambique. Idai also forced the displacement of 50.905 persons in Zimbabwe, 53.237 in Malawi, and 77.019 in Mozambique⁴⁰. The wind gusts of up to

³⁶IPCC AR5, available from: https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf (accessed 12 May 2020)

³⁷ IDMC, *Global Report on Internal Displacement 2019*, available from: <https://www.internal-displacement.org/sites/default/files/publications/documents/2020-IDMC-GRID.pdf> (accessed 12 May 2020), p.10.

³⁸ *idem*

³⁹ *ibidem* p.14

⁴⁰ *See 15*

220km/h of cyclone Kenneth, considered the strongest cyclone to hit the African continent, hit northern Mozambique and the Comoro Islands on April 2019. An estimate by OCHA indicates that 384.800 persons were affected by the cyclone, 185.000 in the Comoros Islands and 199.836 in Mozambique. IOM reports that around 1.000 persons have been displaced from Cabo Delgado in Mozambique, being most of them children, and have not yet returned to their locality of origin⁴¹. Considering both cyclones, about 2.2 million people were displaced⁴².

Cyclone Vayu forced the displacement of 289.000 people in India in June 2019. In October 2019, super Typhoon Hagibis hit the Northern Mariana Islands in Japan and displaced around 237.000 people⁴³.

In late 2004, the Indian Ocean Tsunami affected 12 countries, killing 225.000 persons and displaced over 2 million people, with many relocating to refugee camps in the region⁴⁴.

ii. Hurricanes

Category-5 hurricane Dorian forced the displacement of around 14.000 in Grand Bahama and in the Islands Abaco Islands in the Bahamas⁴⁵. Cyclone Fani, in south Asia, forced the Indian government to organise an evacuation of more than 1.8 million people from the coast of Odisha and of 289.000 persons from Gujarat due to cyclone Vayu⁴⁶. The southwest monsoon triggered more than 2.6 million displacements in India in 2019⁴⁷.

⁴¹ Mozambique: Tropical Cyclone Kenneth Baseline Assessment – Round 3, IOM, 27 September 2019, available from: https://reliefweb.int/sites/reliefweb.int/files/resources/Baseline_Assessment_Kenneth_Round_3_Final.pdf (accessed 07 May 2020)

⁴² C. Wachiya, *'One year on, people displaced by Cyclone Idai struggle to rebuild. Survivors in Mozambique are still trying to rebuild their lives. More assistance is needed to help them recover, and to support other countries affected by climate change.'*, 13 March 2020, available from: <https://www.unhcr.org/news/stories/2020/3/5e6a6e50b/year-people-displaced-cyclone-idai-struggle-rebuild.html> (accessed 07 May 2020)

⁴³ Internal Displacement Monitoring Centre, database available from: <https://www.internal-displacement.org/database/displacement-data#> (accessed 26 June 2020)

⁴⁴ K. F. Inderfurth, D. Fabrycky, and S. Cohen, *The 2004 Indian Ocean Tsunami: One Year Report*, December 2005, available from: <https://www2.gwu.edu/~sigur/assets/docs/scap/SCAP25-Tsunami2.pdf> (accessed 07 May 2020)

⁴⁵ *Hurricane Dorian - Bahamas: Humanitarian Situation Report No. 3*, UNICEF, 24 September 2019, available from: <https://reliefweb.int/report/bahamas/hurricane-dorian-bahamas-humanitarian-situation-report-no-3-24-september-2019> (accessed 12 May 2020)

⁴⁶ See 35

⁴⁷ *idem*

Intense floods in Iran displaced thousands of persons and inundated at least 26 of 31 Iranian provinces⁴⁸.

Hurricane Katrina, which hit the Gulf Coast of the USA in 2005, caused the temporary displacement of about 1.5 million people, all still remaining within the USA. Grier estimates that 300.000 persons that were displaced due to Katrina won't be able to return to their place of origin⁴⁹.

iii. Wildfires

Wildfires are typically responses to abnormally dry and/or warm conditions. In 2019, at least 22 wildfires triggered over 354.000 displacements in the United States. In July and August, 90.000 persons were forced to evacuate due to fires in the Carr, Holy and Mendocino Complex, and in November another 235.000 persons were displaced due to the Woolsey and Camp wildfires⁵⁰. In 2019, the number of fires was above average in high-latitude regions, including Siberia, Alaska, and the Arctic, where fires were previously extremely rare⁵¹.

In April 2015, the occurrence of a massive wildfire due to extremely dry weather and high air temperatures caused death of 30 people and the evacuation of more than 4.000 people in the Republic of Khakassia in the South Siberian part of Russia⁵².

iv. Drylands, Draughts, and Desertification

During the Désertif'Actions Conference in Montpellier, France, civil society organisations stated that there are implied links between desertification and the displacement of people. The Montpellier Appeal, which followed the Conference, stated that 'land degradation ... leads to precariousness and poverty conditions, and to an

⁴⁸ M. Specia, *Flooding Displaces Tens of Thousands in Iran. And More Rain Is Forecast*, The New York Times, 06 April 2019 <https://www.nytimes.com/2019/04/06/world/middleeast/iran-floods-evacuations.html> (accessed 12 May 2020)

⁴⁹ P. Grier, *The Great Katrina Migration*, CS Monitor, 12 September 2005, available from: <https://www.csmonitor.com/2005/0912/p01s01-ussc.html> (accessed 26 June 2020)

⁵⁰ See 37

⁵¹ See 5

⁵² IFRC, Emergency Plan of Action, 24 April 2015, available from: <https://reliefweb.int/sites/reliefweb.int/files/resources/Russia%20MDRRU019do.pdf> (accessed 26 June 2020)

increasingly large marginalisation which worsen migratory flows, political instability and economic losses'⁵³.

The environmental alterations produced by climate change to drylands have increasingly contributed to human migration. Changes in rainfall pattern influence the livelihoods of local people, specifically those persons who are supported by agriculture, pastoralism and fisheries. Droughts and desertification diminish crop production and pasture productivity, major contributors of livelihood and food insecurity⁵⁴.

Studies categorise movements due to droughts and/or drylands as a 'customary coping strategy', as a mean to stabilise income and food consumption⁵⁵.

In Mexico, extreme changes in rainfall pattern in dry states influenced a migration flow to the United States⁵⁶. OXFAM states that climate change represents shorter wet seasons in East Africa, meaning cases of severe droughts increased from once every decade, to once every two or three years⁵⁷. Severe droughts in 20 provinces of Afghanistan caused the displacement of 275.000 persons with another 2 million people estimated to be severely food insecure⁵⁸.

v. Sea-Level Rise

The displacement of persons due to the rise of sea-levels is not a recent development of climate change. In 1995, half of Bhola Island in Bangladesh became permanently flooded, which left 500.000 people homeless⁵⁹.

According to the World Bank, Bangladesh could permanently lose 7% of its territory and a much larger area could be affected by environmental hazards, such as six-

⁵³ Forum Désertif Actions, Rapport Final, 2006, available from: https://desertif-actions.org/wp-content/uploads/2019/05/rapport_final_DA_CARI_fr.pdf (accessed 12 May 2020)

⁵⁴ K. Warner, T. Afifi, K. Henry, T. Rawe, et al., *Where the Rain Falls: Climate Change, Food and Livelihood Security, and Migration* (UNU-EHS, 2012)

⁵⁵ F. Thornton, *Climate Change and People on the Move: International Law and Justice*, Oxford, Oxford Scholarship Online, 2018, p.27

⁵⁶ See 5

⁵⁷ F. Thornton, 2018, p. 24.

⁵⁸ OCHA, Humanitarian Bulletin Afghanistan, 1-30 April 2018, available at: https://reliefweb.int/sites/reliefweb.int/files/resources/20180525_ocha_afghanistan_monthly_humanitarian_bulletin_april_2018_en_final.pdf (accessed 26 June 2019)

⁵⁹ E. Wax, *In Flood-Prone Bangladesh, a Future That Floats*, the Washington Post, 27 September 2007, available from: <https://www.washingtonpost.com/wp-dyn/content/article/2007/09/26/AR2007092602582.html> (accessed 12 May 2020)

metre storm surges that could reach about 160 kilometres or more inland⁶⁰. According to an estimate by the Chinese Government, a rise of sea-levels of only half-metre would destroy the homes of 30 million persons⁶¹ and put more than 29 million persons that live within the major four deltas at risk⁶². Aside from Bangladesh and China, other countries that are at high risk of being compromised due to the rise of sea-levels are Egypt and India, with Thailand, Pakistan, Mozambique, Gambia, Senegal, and Suriname having a lower-risk but still sizable⁶³. In India, about 180 million people live within the coastal zone of the State and are at risk of being forced to be displaced due to the rise of sea-levels⁶⁴.

A recent study observed that at least eight islands in the Pacific Ocean have been submerged due to the rising of sea levels. The islands of Kepidau en Pehleng, Nahlap, Laiap, Nahtik and Ros have disappeared in recent years⁶⁵. The constant rise of sea levels forced the displacement of the inhabitants of the Carteret Islands in the Papua New Guinea to the Bougainville Island⁶⁶. Other Islands considered to be at risk of disappearing are Kiribati, Tuvalu, the Marshall Islands, the Maldives and several Caribbean islands⁶⁷.

The Solomon Islands, which are comprised of over 1000 predominantly volcanic islands in the Pacific, have a population of 560,000 which is mostly settled in low coastal areas. Eleven of the twenty islands in the coast of Isabel have been totally eroded or have

⁶⁰ World Bank, *World Development Report 1989*, available from <http://documents1.worldbank.org/curated/en/667381468339905228/pdf/PUB76820REPLACEMENT0WDR01989.pdf> (accessed 12 May 2020)

⁶¹ Y. Ruqiu, 'An assessment of the impact of climate change caused by human activities on China's Environment', National Environmental Protection Agency, 1990.

⁶² M. Han, J. Hu, and L. Wu, Adverse Impacts of Projected One-Metre Sea-Level Rise on China's Coastal Environment and Cities: A National Assessment, Centre for Global Change, 1990.

⁶³ See J.L. Jacobson, *Environmental Refugees: A Yardstick of Habitability*, 1990, J.G. Titus, *Changing Climate and the Coast*, 1990, and J.C. Topping, *Global Warming: Impact on Developing Countries*, 1990.

⁶⁴ V. Asthana, *The Potential Impacts of Sea-Level Rise on India*, 1993.

⁶⁵ P. Dunn, A. Kohler, R. Kumar, Identifying and assessing evidence for recent shoreline change attributable to uncommonly rapid sea-level rise in Pohnpei, Federated States of Micronesia, Northwest Pacific Ocean, *Journal of Coastal Conservation* volume 21, pp 719–730 (2017) (accessed 12 May 2020).

⁶⁶ T. Nace, *New Study Finds 8 Islands Swallowed by Rising Sea Level*, 09 September 2017, Forbes, available from: <https://www.forbes.com/sites/trevornace/2017/09/09/new-study-finds-8-islands-swallowed-by-rising-sea-level/#67a9432e5283> (accessed 12 May 2020)

⁶⁷ *Rising seas give island nation a stark choice: relocate or elevate. Climate change means the low-lying Marshall Islands must consider drastic measures, including building new artificial islands*, National Geographic, 19 November 2018 available at: <https://www.nationalgeographic.com/environment/2018/11/rising-seas-force-marshall-islands-relocate-elevate-artificial-islands/> (accessed 12 May 2020)

declined in area size. Between 1947 and 2014, Hetaheta Island lost 62% of its original land area, Sogomou Island lost 55%, and Kale Island lost 100% of its land⁶⁸.

vi. Earthquakes

In the region of Davao del Sur, in the Philippines, 167.000 people were forced to displace due to a 6.9 magnitude earthquake⁶⁹. A 6.0 magnitude earthquake in Sichuan, China, caused the death of 13 people, injured 220, and displaced around 95.000 people⁷⁰.

vii. Volcanos

In 1995, after the eruption of 8 volcanos in the Montserrat Island in the Caribbean, 7000 habitants were forced to evacuate⁷¹. In February 2020, the eruption of the volcano Taal in the Philippines affected at least 584,000 people in Batangas, Quezon, Laguna, and Cavite, causing the displacement of 195.000 people⁷². The eruption of volcano Mt. Ulawu, in Papua New Guinea, caused the voluntary displacement of between 3.000 and 5.000 people in June 2019⁷³.

UNHCR states that, even though there is no monocausal relationship between climate change and the displacement of persons, there is a clear link between the two phenomena. Environmental events interact with economic, political, cultural, and demographic factors to shape how people displace or not. Human mobility or immobility are not only related to the material conditions of the person but are also related to psychological and cultural factors⁷⁴. Migration caused by environmental disturbances is a multi-faceted phenomenon. Peoples movement triggered by environmental disturbances

⁶⁸ S. Albert et al, *Interactions between sea-level rise and wave exposure on reef island dynamics in the Solomon Islands*, 2016, available from: <https://iopscience.iop.org/article/10.1088/1748-9326/11/5/054011/pdf> (accessed 11 May 2020)

⁶⁹ OCHA, *Flash Update n 3*, 24 December 2019, available at: <https://reliefweb.int/sites/reliefweb.int/files/resources/20191224%20Flash%20Update%20no.%203%206.9-magnitude%20earthquake%20Davao%20del%20Sur%20final.pdf> (accessed 26 June 2020)

⁷⁰ ReliefWeb, *China earthquake affects over 243,000 people*, 20 June 2019, available from: <https://reliefweb.int/report/china/china-earthquake-affects-over-243000-people> (accessed 26 June 2020)

⁷¹ R. Monastersky, *The Call of Catastrophes*, Science News, Vol.151, 1997.

⁷² ReliefWeb, *Philippines: Taal Volcano*, January 2020, available from: <https://reliefweb.int/disaster/vo-2020-000002-phl> (accessed 26 June 2020)

⁷³ ReliefWeb, *Papua New Guinea: Mt. Ulawun Volcano*, June 2019, available from: <https://reliefweb.int/disaster/vo-2019-000118-png> (accessed 26 June 2020)

⁷⁴ IOM, *Human Mobility and Adaptation to Environmental Change*, World Migration Report 2020, p. 283.

may be internal, regional or international, temporary or permanent, and forced or voluntary.

1.3 The Consequences of Environmental Disasters and Environmental Migration

According to a report by Stern and Munich Re, environmental disasters impact in a direct loss - which represent the financial value of damages and the loss of capital assets - of a sum as high as \$100 billion annually. Climate change can aggravate conflicts and increase pre-existing vulnerabilities, such as poverty and State fragility⁷⁵. Climate variability and the occurrence of environmental extreme hazards as well as a great concentration of persons in hazard prone regions contribute to a rising trend in total direct losses due to environmental disasters. Catastrophes caused by environmental disasters affect more significantly the poorer population and could negatively impact their economic development⁷⁶. Albala-Bertrand noted that, for both developed and developing countries, the persons and activities most affected by environmental disasters are those belonging to poorer and most powerless social sectors, and that the lower the status of people, be it economic, political, or social, the larger the loss burden of an environmental disaster⁷⁷.

The persons most affected by climate change and environmental disruptions are people usually who are socially, economically, culturally, politically, institutionally and otherwise marginalised⁷⁸. The UNHCR Special Rapporteur on Internally Displaced Persons explains that vulnerability may also be exacerbated by discriminatory States' policies. In his report on the Protection of and Assistance to Internally Displaced Persons, the Rapporteur states that:

Vulnerability to displacement may be heightened by discriminatory State policies or practices. Non-documentation, the denial or deprivation of

⁷⁵ UN Security Council, *Addressing the Impacts of Climate-Related Disasters on International Peace and Security*, 2019.

⁷⁶ IOM, *Migration, Development and Environment: Migration Processes*, 2008, pp 12-18.

⁷⁷ J.M. Albala-Bertrand, *Natural disaster situations and growth: A macroeconomic model for sudden disaster impacts*, 1993, p.92

⁷⁸ IPCC Working Group II, *Climate Change 2014: Impacts, Adaptation, and Vulnerability, Summary for Policymakers*, (WMO and UNEP), p. 6.

citizenship for some ethnic or religious groups, for example, renders them stateless. Their rights as citizens are not fully recognized and they may be targeted, or not adequately protected, by national authorities⁷⁹.

Marginalised groups are often forced to occupy lands that are more exposed to environmental disasters⁸⁰. Thornton claims that there is a hidden social element to environmental displacement. She states that those affected by environmental disasters sometimes struggle to move, even when they should or want to, sometimes displacing into an equally or more dangerous areas⁸¹. Hagmann asserts that displacements induce environmental problems that can affect conflicts which risks the exacerbation of environmental deterioration⁸².

Heavy-rains, which triggered floods, in Burkina Faso caused damages to camps across Kongoussi, Pensa and Barsalogho – municipalities that host around 140.000 IDPS. Around 700 shelters were destroyed and another 2.900 were affected⁸³. Environmental degradation and human displacement, according to White, might involve conflicts, poor government policies, corruption, warfare and nefarious international involvement in the region⁸⁴.

The IOM has recognised that human mobility, both forced and voluntary, is being increasingly affected by environmental and climatic factors and that peoples' movements also have an impact on the environment⁸⁵. The UN Office of the High Commissioner for Human Rights (UNHCHR), during the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21)⁸⁶, stated that

⁷⁹ UNHCR Special Rapporteur on Internally Displaced Persons, *Protection of and Assistance to Internally Displaced Persons*, A/64/214, 03 August 2009.

⁸⁰ J. Morrisey, *Environmental Change and Forced Migration*, Oxford, University of Oxford, 2009.

⁸¹ Thornton 2018, p. 27.

⁸² T. Hagmann, *Confronting the Concept of Environmentally Induced Conflict Peace*, Conflict and Development, 2005, pp. 1-22.

⁸³ ReliefWeb, *Burkina Faso – Floods*, 11 June 2020, available from: <https://reliefweb.int/report/burkina-faso/burkina-faso-floods-un-ocha-anam-reliefweb-echo-daily-flash-11-june-2020> (accessed 26 June 2020)

⁸⁴ G. White, *Climate Change and Migration: Security and Borders in a Warming World*, Oxford, Oxford Press, 2011, p.23.

⁸⁵ Outlook on Migration, Environment and Climate Change, IOM, 2014, available from: https://publications.iom.int/system/files/pdf/mecc_outlook.pdf (accessed 12 May 2020)

⁸⁶ *Understanding Human Rights and Climate Change*, OHCHR, available from: <https://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf> (accessed 12 May 2020)

climate change affects the human rights to life⁸⁷, to self-determination⁸⁸, to development⁸⁹, to food⁹⁰, to water and sanitation⁹¹, to health⁹², to housing⁹³, to education⁹⁴, and to meaningful and informed participation⁹⁵. The IPCC projects that climate change will undermine food security⁹⁶; reduce renewable water and groundwater resources⁹⁷; increase risks for people, assets, economies and ecosystems⁹⁸; and increase the displacement of people⁹⁹. A report by the IPCC attests that people affected by water shortages in Africa and Asia increased from 74 to 250 million in 2020, as large river basins are projected to decrease due to climate change¹⁰⁰.

Robert Goldman and Walter Kälin state that displacement

breaks up the immediate family . . . cuts off important social and cultural community ties; terminates stable employment relationships; precludes or forecloses formal educational opportunities; deprives infants, expectant mothers, and the sick of access to food, adequate shelter, or vital health services; and makes the displaced population especially vulnerable to acts of violence, such as attacks on camps, disappearances, or rape¹⁰¹.

The human right to housing is threatened by climate change in a number of ways. Extreme weather events destroy homes and force the displacement of persons. Droughts, soil erosions, and flooding can gradually make lands uninhabitable. Sea level rise

⁸⁷ Universal Declaration of Human Rights (adopted and proclaimed 10 December 1948), Res 217 A (III), and International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976), 999 UNTS 171.

⁸⁸ Charter of the United Nations (signed 24 October 1945, entered into force 24 September 1973), 1 UNTS XVI. *International Covenant on Economic, Social and Cultural Rights* (adopted 16 December 1966, entered into force 3 January 1976), 993 UNTS 3, and the ICCPR.

⁸⁹ UN Charter, article 55.

⁹⁰ ICESCR, article 11.

⁹¹ General Assembly, General Comment No. 15 of the Committee on Economic, Social and Cultural Rights, Res 64/292

⁹² ICESCR, Article 12.

⁹³ ICESCR, Article 11.

⁹⁴ ICESCR, Article 13.

⁹⁵ ICCPR, article 25

⁹⁶ IPCC AR5, p. 13

⁹⁷ *Idem*

⁹⁸ *ibidem*, p. 69.

⁹⁹ *ibidem*, p. 73.

¹⁰⁰ IPCC, 2007 A, p.10

¹⁰¹ R. Goldman and W. Kälin, *Legal Framework*, in Cohen and Deng, *Masses in Flight*, pp. 74-92.

threatens low-lying lands and houses that are situated in coastal territories¹⁰². In study by Grote et al, an analysis shows that the groups most affected by tsunamis in relation to the destruction of their houses had a higher probability of migration¹⁰³.

Inadequacy in the resources or even the lack of essentials caused by an environmental disaster may result in malnutrition, starvation, famine, ill health and the occurrences of diseases. The World Bank estimates that an increase in the average global temperature of 2°C would put between 100 million and 400 million people at risk of hunger and could result in over 3 million deaths from malnutrition each year¹⁰⁴. Intense flooding and extensive dry periods in Southern Africa deteriorated food security, especially in Ethiopia, Somalia, Kenya, and Uganda, making about 12.3 million people food insecure in the Horn of Africa¹⁰⁵. Cyclone Idai contributed for the destruction of around 780.000 crops in Malawi, Mozambique, and Zimbabwe, undermining the already precarious food security in the region¹⁰⁶. According to WMO, in 26 countries of the 33 countries affected by a food crisis in 2018, climate variability and extreme weather events were key contributors in the increase of hunger and conflict¹⁰⁷.

Cyclone Kenneth caused flooding in several villages in the Comoros Islands, damaging roads and destroying telephone poles. Electric power was cut off in multiple locations. Around 35.000 houses were either partially destroyed (32.034) or totally destroyed (2.930)¹⁰⁸. Hurricane Dorian destroyed homes, left schools and hospitals without electricity, and flooded over 200 wells with ocean water leaving families without safe drinkable water¹⁰⁹. Around 1.957 persons affected by the hurricane are still living in government-led shelters¹¹⁰.

¹⁰² IPCC AR5, p.13

¹⁰³ U. Grote, S. Engel, and B. Schraven, *Migration due to the tsunami in Sri Lanka – Analyzing vulnerability and migration at the household level*, Bonn, 2006.

¹⁰⁴ The World Bank, *World Development Report 2010: Development and Climate Change* (2010)

¹⁰⁵ See 15

¹⁰⁶ *Idem*

¹⁰⁷ *Ibidem*

¹⁰⁸ *Southern Africa: Tropical Cyclone Kenneth Flash Update No. 2*, OCHA, 25 April 2019, available from: <https://reliefweb.int/report/mozambique/southern-africa-tropical-cyclone-kenneth-flash-update-no-2-25-april-2019> (accessed 26 June 2019)

¹⁰⁹ *After the storm: How The Bahamas continues to rebuild after Hurricane Dorian*, Mercy Corps, 26 March 2020, available at: <https://www.mercycorps.org/blog/six-months-after-hurricane-dorian> (accessed 12 May 2020)

¹¹⁰ See 45

The loss of the entire land mass of a country, including the disappearance of Small Island States, threatens the cultural identity and the survival of the communities that live in these territories. Dan Bondi Ogolla, Coordinator and Legal Adviser of the UNFCCC, has stated that ‘loss of land through sea level rise also impacts the right to self-determination and to property’¹¹¹.

In the Nuatambu region, the Solomon Islands, 50% of the houses have been washed into the ocean as a result of severe inundations and of dramatic shoreline recession. Many residents of the Nuatambu island were forced to relocate to the high volcanic island of Choiseul. Other economically disadvantaged persons, who did not have means to relocate, had to re-built temporary housing in vulnerable areas of Nuatambu¹¹². In addition to the regional relocations, the capital of the Choiseul Province is set to become the first capital to relocate its residents and services as a result of sea-level rise.

The possibility of a correlation between environmental disruptions and conflict over essential resources and the forced migration of persons has been discussed for decades. The Brundtland Report found, in 1987, that the deterioration of natural resources and its incapacity to support the local population is an underlying cause for conflict and the displacement of people. It states:

Poverty, injustice, environmental degradation, and conflict interact in complex and potent ways. One manifestation of growing concern to the international community is the phenomenon of 'environmental refugees'. The immediate cause of any mass movement of refugees may appear to be political upheaval and military violence. But the underlying causes often include the deterioration of the natural resource base and its capacity to support the population¹¹³.

¹¹¹ Human Rights Council, *Council discusses measures that can be adopted by States in addressing the effects of climate change on Human Rights*, 6 March 2015, available from: <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15658&LangID=E> (accessed 12 May 2020).

¹¹² See 68

¹¹³ Brundtland Report, World Commission on Environment and Development, 1987, available from: https://www.are.admin.ch/are/en/home/sustainable-development/international-cooperation/2030agenda/un_-milestones-in-sustainable-development/1987--brundtland-report.html (accessed 12 May 2020).

In a similar way, Naigzy Gebremedhin, when analysing the flow of refugees within Somalia and Ethiopia in 1991, stated:

‘Thousands of refugees have fled from the effects of environmental deterioration as well as the ravages of war. The two factors are difficult to separate. War has undoubtedly contributed to environmental degradation, but ecological crisis is itself a source of political conflict and instability in this region’¹¹⁴.

The consequences of environmental disruptions prevent persons from returning to their original location, making the continuous displacement of persons an issue. According to the IDMC, 90% of the internally displaced persons due to environmental disaster were displaced during the year of 2019, while the other 10% were persons displaced in previous years that still haven’t returned to their original locality¹¹⁵.

Migration flows also have an impact on the environment. The great influx of environmentally displaced persons leads to an additional demand for water and essential resources, to an over-exploitation of the natural vegetation which may cause erosion of the soil, an increase in water and soil pollution, reduction or loss of reserved lands in drought periods, and spreading and reduction of resistance to various types of diseases¹¹⁶.

1.4 Environmental Migrants or Environmental Refugees?

The UN Convention Relating to the Status of Refugees characterises refugees as persons owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion are unwilling to avail themselves the protection of their country of nationality and as the persons who are outside their country of nationality and are unable to return to it owing to such fear¹¹⁷. The Convention establishes criterion for a person to be considered for a refugee status. Refugees are either forced or compelled to relocate by external forces.

¹¹⁴ N. Gebremedhin, *The Environmental Dimension of Security in the Horn of Africa: The Case of Somalia* cited in W. F. G. Cardy, *Environment and Forced Migration*, United Nation Environment Programme, Nairobi, 1994.

¹¹⁵ See 37

¹¹⁶ W. F. G. Cardy, *Environment and Forced Migration a Review*, 2018, p.6.

¹¹⁷ Convention Relating to the Status of Refugees (adopted 28 July 1951, entered into force 22 April 1954), 189 UNTS 137.

Migrants, on the other hand, make the decision to relocate and have control over their relocation. The most common motive that leads to voluntary migration is the person's desire to improve economically¹¹⁸. The term migrant is not defined by any international law instrument and there is no universally accepted definition at the international level. Two approaches are adopted in order to define the term migrant: the inclusivist, which considers the term migrant as an umbrella term covering all sorts of movements; and the residualist, which excludes those who flee wars or persecution¹¹⁹. The IOM considers a migrant a person who moves away from his or her place of usual residence, whether within a country or across an international border, temporarily or permanently, and for a variety of reasons. The UNHCR, however, considers a migrant a person who voluntarily leaves their country in order to take up residence somewhere else¹²⁰, thus excluding from the concept the persons that are forced to move in the terms of the Refugee Convention.

The term 'environmental refugees' was first cited by El-Hinnawi in a 1995 report for the United Nations Environment Programme. The concept created by El-Hinnawi encompassed

'those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affected the quality of their life [sic]. By 'environmental disruption' in this definition is meant any physical, chemical, and/or biological changes in the ecosystem (or resource base) that render it, temporarily or permanently, unsuitable to support human life.'¹²¹

As a consequence of the elaborated concept, El-Hinnawi concludes that there are three types of environmental refugees: i. those who have been temporarily displaced due

¹¹⁸ D. Bates, *Environmental Refugees? Classifying Human Migrations Caused by Environmental Change*, 2002, pp. 465–477.

¹¹⁹ Glossary on Migration, IOM, Available from: https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf (accessed 12 May 2020)

¹²⁰ Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol relating to the Status of Refugees, HCR/IP/4/Eng/REV.1, UNHCR 1979, available from: <https://www.unhcr.org/4d93528a9.pdf>

¹²¹ E. El-Hinnawi, *Environmental Refugees*, United Nations Environment Programme, 1985, p.4.

to an environmental disruption and once the disruption is over and the locality rehabilitated, they return to their original location; ii. those who permanently displace and re-settle in a new area due to a permanent environmental change; and iii. those who migrate from their natural habitat, temporarily or permanently, in search for a better quality of life. El-Hinnawi includes, within the first category, persons affected by natural hazards such as earthquakes and cyclones or environmental accidents (temporary environmental disruption caused by a man-made accident). The second category englobes persons affected by permanent man-made changes, such as the establishment of large reservoirs. And finally, the third category involves, for example, persons whose resource base in their original habitat has deteriorated to an extent in which it can no longer support them, such as small farmers whose lands are being waterlogged and salinised. Additionally, El-Hinnawi identified a smaller category including the persons who are displaced by the destruction of their environment as an act of warfare¹²².

El-Hinnawi's concept of environmental refugee does not distinguish persons forced to flee due to a sudden onset disaster and those who choose to leave their homes due to a slow onset environmental degradation. The destruction and uninhabitability of a place that are caused by sudden onset disasters force persons to displace, while slow onset degradation may be a reason for a person to seek improvement and in consequence a relocation to a place where this improvement is possible. Conflicts caused by the lack of essential resources and the disappearance of lands are also external forces that compel persons to move.

Jacobson, following El-Hinnawi's concept, identified three categories of environmental refugees: i. those displaced temporarily due to local disruption such as an avalanche or earthquake; ii. those who migrate because environmental degradation has undermined their livelihood or poses unacceptable risks to health; and iii. those who resettle because land degradation has resulted in desertification or because of other permanent and untenable changes in their habitat¹²³.

Mayer also uses the term environmental refugees to describe

¹²² *Idem*

¹²³ J.L. Jacobson 1988, pp. 37-38

people who can no longer gain a secure livelihood in their erstwhile homelands because of drought, soil erosion, desertification, and other environmental problems. In their desperation, they feel they have no alternative but to seek sanctuary elsewhere, however hazardous the attempt. Not all of them have fled their countries; many are internally displaced. But all have abandoned their homelands on a semi-permanent if not permanent basis, having little hope of a foreseeable return¹²⁴.

Bates offered a vague definition of environmental refugees stating that they are ‘people who migrate from their usual residence due to changes in their ambient non-human environment’¹²⁵

Jiri Novosák and Robert Stojanov propose the use of three different term to distinguish those who are displaced due to an environmental disaster: 1. environmentally motivated migrants: as those persons who may leave a steadily deteriorating environment to prevent the worst-case scenario; 2. environmentally forced migrants: as those persons who have to leave in a permanent basis in order to avoid the worst, and 3. environmental refugees: as those who are forced to flee, temporarily or permanently, due to floods, extensive droughts, and other environmental disasters.

Gaim Kibreab claims that the term ‘environmental refugees’ is being increasingly used by States to justify more restrictive policies concerning the protection of refugees and that the indiscriminatory use of the term by academics is unintentionally contributing to the hardening of policies against involuntary migration¹²⁶.

William B. Wood, a former US State Department Geographer, created the term ecomigrant to define all persons who migrate for environmental reasons. He states that the prefix *eco* refers to environmental and economic reason at the same time¹²⁷. Wood affirms that migration, in general, has an element of both economic and environmental factors, and that no clear separation of the two factors can be made.

¹²⁴ N. Myers, *Environmental Refugees in a Globally Warmed World*, Oxford, Oxford University Press, 1993, pp. 752-761

¹²⁵ D. Bates 2002, p. 468

¹²⁶ D. Keane, *Environmental Causes and Consequences of Migration: A search for the Meaning of Environmental refugees*, 2004, p. 21

¹²⁷ See A. Zolberg and P. M. Benda, *Global Migrants, Global Refugees: Problems and Solutions*, p. 42 and D. V. Ivanov, D. K. Bekyashev, *Environmental Migration in International Law* p. 39.

The IOM have used the term environmental migrants to refer to ‘persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad’¹²⁸.

The various natures of environmental disruptions that causes persons to displace and the different forms of movement give rise to an inequality in treatment of these people and a differentiation in the applicable law, which might influence their international protection status. For the purpose of this study, the term environmentally displaced persons will be used to include those who forced to displace and those who voluntarily displace due to an environmental disaster.

2. The International Human Rights Protection System and the Rights of Persons Affected by Environmental Disasters

The UNHCR estimates that, since 2009, a person every second has been displaced by an environmental disaster, with around 22.5 million people displaced due to climate and weather events since 2008¹²⁹. The Internal Displacement Monitoring Centre and the Norwegian Refugee Council, in a 2016 report, stated that the likelihood of being displaced by a natural disaster in recent years has increased by 60% since the 1970s¹³⁰.

The International Human Rights System explicitly recognises three categories of displaced persons, acknowledging their rights and the obligations of States: i. refugees, ii. migrants, and ii. IDPs.

Persons in migrant-like situations have some control over the process of displacement, as their movement may be completely voluntary, and are in a low level of vulnerability, even when the movement is an adaptability response to the deteriorating environmental conditions. Persons in refugee-like situations have little to no control over

¹²⁸ International Dialogue on Migration n°10 - *Expert Seminar: Migration and the Environment*, IOM and UNFPA, 2008, item 23.

¹²⁹ *Disasters and Climate Change*, UNHCR Environment, available from <https://www.unhcr.org/environment-disasters-and-climate-change.html> (accessed 19 June 2020)

¹³⁰ *NRC Annual Report 2016*, NRC, 23 June 2017, available from: https://www.nrc.no/globalassets/pdf/annual-reports/2017/nrc_annualreport2016_230616.pdf (accessed 19 June 2020)

the displacement and have a high level of vulnerability. Olson affirms that refugees are coerced by an external force to leave their homes due to a change in the environment that makes it impossible for them to continue life as they knew it¹³¹. According to Shacknove a refugee is not a simple migrant, stating that migrants have theoretically chosen to move having been influenced by a hope for a better life while refugees are simply trying to rebuild the life they have lost. He states that 'it is the reluctance to uproot oneself, and the absence of positive original motivations to settle elsewhere which characterises all refugee decisions and distinguishes the refugee from the voluntary migrants'¹³². Bates categorises the decision to migrate as a continuum. She places persons who have absolutely no control over their relocation on the right end of the continuum, which she designates as 'involuntary relocation'. On the left end of the continuum she places persons who maintain full control over every decision in the relocation process, which she designates as 'voluntary migration'¹³³.

Environmentally displaced persons have more control over the process of displacement than refugees but less than migrants and present less vulnerability than refugees but more than migrants. According to Gregory White, there is compelling evidence that climate change causes international migrations flow, but there are different drives in peoples' movements and that can raise to different protection systems. In his analysis, White differentiates between three types of displaced persons: 1. those fleeing cataclysmic events, such as volcanic eruptions or hurricanes; 2. those seeking to escape an ecosystem decline due to governmental policies, such as the building of dams or defoliation during war; and 3. those that are pressed to move due to a slow unintentional and gradual climate degradation¹³⁴. Environmentally displaced persons may be compelled to move, or their displacement may be voluntary.

An analysis by Sanjula Weerasinghe, published by the UNHCR, concluded that traditionally refugee flows may have a nexus with environmental disasters and climate

¹³¹ M. E. Olson, Refugees as a Special Case of Population Redistribution, in L.A.P. Gosling and L.Y.C. Lim (eds), *Population Redistribution: Patterns, Policies and Prospects*, United Nations Fund for Population Activities, New York, pp. 130-152.

¹³² A. E. Shacknove, *Who is a Refugee?*, Ethics, Vol. 95, No. 2, 1985, University Chicago Press, pp. 274-284

¹³³ Bates 2002.

¹³⁴ White 2011.

change, which might give rise to a need of international protection¹³⁵. Displacement due to natural disasters may be forced or voluntary, internal or cross-border, and temporary or permanent. Considering the many causes and consequences of environmental disasters and the various natures of human mobility due to such disasters, the applicability of international human rights protection systems may differ, giving persons affected by environmental disasters different rights and legal status.

2.1 Right to Seek Asylum and the International Refugee Law

Article 14 of the UDHR guarantees the individual's right to seek and enjoy asylum from persecution¹³⁶. It is universally accepted as a principle that the granting of asylum and the formal recognition of refugee status have a peaceful, non-political and exclusively humanitarian nature¹³⁷ and should not be regarded as an unfriendly act¹³⁸. Following the same notion as the UDHR, the Convention Relating to the Status of Refugee of 1951 confirms the right to asylum and the right of persons to seek refuge¹³⁹. The right to seek asylum was better developed through the Refugee Convention, in an international level, and through regional legal instruments. The EU Charter of Fundamental Rights¹⁴⁰, the American Convention on Human Rights¹⁴¹, the ASEAN Human Rights Declaration¹⁴², the Arab Charter on Human Rights¹⁴³, and the African Charter on Human and Peoples' Rights¹⁴⁴ all protect the right to seek asylum.

¹³⁵ S. Weerasinghe, *In Harm's Way: International protection in the context of nexus dynamics between conflict or violence and disaster or climate change*, UNHCR, 2018.

¹³⁶ UN General Assembly, *Universal Declaration of Human Rights*, 10 December 1948, 217 A (III), available at: <https://www.refworld.org/docid/3ae6b3712c.html> (accessed 19 June 2020)

¹³⁷ CIREFCA, *Principles and Criteria for the Protection of and Assistance to Central American Refugees, Returnees and Displaced Persons in Latin America*, January 1990, available at: <https://www.refworld.org/docid/4370ca8b4.html> (accessed 19 June 2020)

¹³⁸ OAU, *Convention Governing the Specific Aspects of Refugee Problems in Africa* ("OAU Convention"), 10 September 1969, 1001 U.N.T.S. 45, Article 2 (2), available at: <https://www.refworld.org/docid/3ae6b36018.html> (accessed 19 June 2020)

¹³⁹ *Refugee Convention*, Article 1 (A) (2).

¹⁴⁰ European Union, *Charter of Fundamental Rights of the European Union*, 26 October 2012, 2012/C 326/02, article 18

¹⁴¹ OAS, *American Convention on Human Rights*, "Pact of San Jose", Costa Rica (adopted 22 November 1969, entered into force 18 July 1978), Article 22 (7).

¹⁴² ASEAN, *ASEAN Human Rights Declaration*, 18 November 2012, article 16

¹⁴³ League of Arab States, *Arab Charter on Human Rights*, 15 September 1994, Article 23.

¹⁴⁴ OAU, *African Charter on Human and Peoples' Rights* ("Banjul Charter"), 27 June 1981, CAB/LEG/67/3, Article 12 (3).

2.1.1. United Nations Convention Relating to the Status of Refugee and its Protocol

The refugee definition, as established by the Convention, was conceived based on a UN notion of refugee flows as a European phenomenon. It was drafted and adopted after the Second World War and had a limited scope of application, with only persons fleeing from events that happened before 1 January 1951 and within Europe having the right to seek refuge. The Protocol adopted in 1967 removed the limited scope giving the Convention a universal coverage¹⁴⁵.

The Convention identifies as refugees, persons who due to a wellfounded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion and are unwilling to avail themselves of the protection of that country; or who, not having a nationality and being outside the country of their former habitual residence as a result of such events, are unable or, owing to such fear, are unwilling to return to it¹⁴⁶. According Shacknove, refugee status should only be given to the persons ‘whose government fails to protect their basic needs, who have no remaining recourse other than to seek international restitution of these needs, and who are so situated that international assistance is possible’.

Robinson states that a person cannot be considered a refugee in the conditions imposed by the Convention in cases where the Government is combating the events which gave rise to the refugee claim and has the means to offer protection, because in such situations there would be no reason for the person not avail themselves of the protection of their country of nationality¹⁴⁷.

For a person to be granted refugee status, they must fulfil all the elements as established by the Convention.

i. well-founded fear

Concerning the well-founded fear element, the UNHCR affirms that:

¹⁴⁵ *Introductory Note*, UNHCR, p. 2, available at <https://www.unhcr.org/3b66c2aa10.html> (accessed 05 July 2020)

¹⁴⁶ Refugee Convention, article 1 (a) (2).

¹⁴⁷ N. Robinson, *Convention Relating to the Status of Refugees: Its History, Contents and Interpretation, A Commentary* (Geneva 1953), 46

In general, the applicant's fear should be considered well founded if he can establish, to a reasonable degree, that his continued stay in his country of origin has become intolerable to him for the reasons stated in the definition, or would for the same reasons be intolerable if he returned there¹⁴⁸.

The well-founded fear has a subjective element – the fear of persecution itself – and an objective element – the fear must have an objectively justifiable basis. The determination of refugee status must, at a first moment, consider the applicant's statements rather than a judgment on the situation in the claimant's country of origin¹⁴⁹. The well-founded fear is not only based on the claimant's own personal experience. Experiences shared by friends, relatives and persons who belong to the same social group may show that the claimant might be a victim of persecution in the future, meaning their fear is well-founded¹⁵⁰.

A claimant's fear is also well-founded, genuine and objectively justifiable when the person asking for refugee status has already been subjected to persecution, serious harm or direct threats, and there is no good reason to consider that such persecution or serious harm will not be repeated¹⁵¹.

In relation to environmental disasters, the New Zealand' Immigration and Protection Tribunal concluded that past experiences with environmental disasters raise the presumption that the claimant might face a risk of being exposed to similar disasters and harms in the future, if there is no relevant evidence that the State of origin have not taken measures to decrease disaster risks¹⁵²

ii. *of persecution*

The definition of persecution is not defined by the Convention, but articles 31 and 32 of the Convention mention threats to life and freedom, including threats of death,

¹⁴⁸ United Nations High Commissioner for Refugees, *Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol Relating to The Status of Refugees*, paragraph 42.

¹⁴⁹ *idem*

¹⁵⁰ *ibid*

¹⁵¹ UNHCR, *Annotated Comments on the EC Council Directive 2004/83/EC of 29 April 2004 on Minimum Standards for the Qualification and Status of Third Country Nationals or Stateless Persons as Refugees or as Persons who otherwise need International Protection and the Content of the Protection granted*, OJ L 304/12, 30 September 2004.

¹⁵² *AC (Tuvalu)*, [2014] NZIPT 800517-520, New Zealand: Immigration and Protection Tribunal, 4 June 2014, available at: https://www.refworld.org/cases,NZ_IPT,585151694.html (accessed 30 June 2020)

torture, or other cruel, inhuman or degrading treatment or punishment¹⁵³. Goodwin-Gill and McAdam affirm that acts of persecution are not limited to those covered by the prohibition of torture, inhuman or degrading treatment or punishment or repeated punishment for the breach of the law, which is out of proportion to the offence¹⁵⁴. Foster states that violations of economic, social, and cultural rights may also amount to persecution¹⁵⁵.

Hathaway affirms that the term persecution implies an element of intent to harm or failure to protect and proposes a framework in which there is a gradation scale in order to verify acts of persecution. In his model, there is a categorisation of the essence of human rights according to the nature of the right, as in the scale of non-derogable civil and political rights – to which violations are always acts of persecution-, derogable civil and political rights, to finally rights contained in the UDHR that are not in any other instrument – to which violations are only conscientious objection¹⁵⁶. Carlier, following the model proposed by Hathaway, suggests the use of three elements in order to decide if the concrete case involves acts of persecution: the level of severity of risked harm, the level of likelihood that it will occur and the level of proof¹⁵⁷.

Kelley claims that proving a well-founded fear of persecution locally is already enough of a burden on the claimant and that ‘to require a claimant to demonstrate that everywhere is unsafe from persecution seems to set the test too high’¹⁵⁸. The UNHCR also affirms that the fear of persecution does not need to be extended to the whole territory of the refugee’s country of nationality, meaning the claimant will not be excluded from refugee status simply because they could have sought refuge in another part of the same country, if the circumstances would not be reasonable to expect them to do so¹⁵⁹.

¹⁵³ E. Fiddian-Qasmiyeh, G. Loescher, K. Long, and N. Sigona, *The Oxford Handbook of Refugee and Forced Migration Studies*, Oxford University Press, 2014, p. 38.

¹⁵⁴ Goodwin-Gill, G., Mc Adam, J., *The Refugee in International Law*, 3rd edition, Oxford: Oxford Univ. Press, 2007, at p. 90

¹⁵⁵ See M. Foster, *International Refugee Law and Socio-economic Rights: Refuge from Deprivation*, Cambridge: Cambridge University Press, 2007

¹⁵⁶ J. Hathaway, *The Law of Refugee Status*, Toronto, Butterworths, 1991, pp. 108–112

¹⁵⁷ J.Y. Carlier, *Droit d’asile et des refugies : De la protection aux droits*, Recueil des cours de l’academie de droit international de La Haye, Leiden: Martinus Nijhoff, 2008, p. 197.

¹⁵⁸ N. Kelley, The Internal Flight/Relocation/Protection Alternative: Is It Reasonable?, *International Journal of Refugee Law*, v. 14, issue 1, 2002, pp. 8–9

¹⁵⁹ UNHCR Handbook item 91

The concept of persecution has been strictly interpreted as to mean an act by the government against individuals¹⁶⁰, and even though the Refugee Convention does not require persecution to arise from a State's action, the state practice focused on the State as being the sole agent of persecution¹⁶¹. Zimmerman states that, aside from severe human rights violations, there is a second element to the notion of persecution which is the State's failure to protect the individual¹⁶².

As set out in the UNHCR's Handbook, the claimant might be subject to measures that as themselves don't account for acts of persecution, but when combined with other adverse effects, as for example the insecure state of the country of origin, can justify a claim to well-founded fear of persecution on cumulative grounds¹⁶³.

iii. *for reasons of race, religion, nationality, membership of a particular social group or political opinion*

The UNHCR states that persecution on the reasons of religion may take different forms, including the prohibition of membership to a certain religious community, the prohibition of private or public worship, and other measures of discrimination. The concept of race includes all kinds of ethnic groups and the notion of nationality is not limited to the notion of citizenship, but also refers to membership of an ethnic or linguistic minority¹⁶⁴.

The Convention does not provide an exhaustive list of groups that might constitute a particular social group. The UNHCR Handbook affirms that women, families, tribes, occupational groups, and LGBTQI+ persons might constitute 'particular social groups'¹⁶⁵. The institution defines 'particular social group'

as a group of persons who share a common characteristic other than their risk of being persecuted, or who are perceived as a group by society. The

¹⁶⁰ J. B. Cooper, Environmental Refugees: Meeting the Requirements of the Refugee Definition, *New York University Environmental Law Journal*, v. 6, 1998, pp. 480 – 529.

¹⁶¹ C. Phuong, Persecution by Third Parties and European Harmonization of Asylum Policies, 16 *Georgetown Immigration Law Journal*, v. 16, 2001, p. 82.

¹⁶² A. Zimmerman and C. Mahler, *The 1951 Convention Relating to the Status of Refugees and Its 1967 Protocol: A Commentary*, Oxford: Oxford University Press, 2011, p. 345.

¹⁶³ UNHCR Handbook item 53

¹⁶⁴ UNHCR, *Handbook and Guidelines on Procedures and Criteria for Determining Refugee Status*, Geneva, 2011, available at: <https://www.refworld.org/pdfid/4f33c8d92.pdf> (accessed 06 July 2020)

¹⁶⁵ *idem*

characteristic will often be one which is innate, unchangeable, or which is otherwise fundamental to identity, conscience or the exercise of one's human rights¹⁶⁶.

The UNHCR considers two approaches in order to establish if a particular group fits the definition contained in the Refugee Convention. The first approach is the 'protected characteristic' which examines if a group is united by an 'immutable characteristic or by a characteristic that is so fundamental to human dignity that a person should not be compelled to forsake it'¹⁶⁷. An immutable characteristic refers to an innate feature (such as sex or ethnicity) or unalterable for other reasons (e.g. by a historical fact of past association, occupation, or status)¹⁶⁸. The second approach considers the 'social perception' and whether a particular group's characteristics set them apart from the general society¹⁶⁹.

2.1.1.1 The applicability of the Refugee Convention to persons affected by environmental disasters

The applicability of refugee law to persons environmentally displaced is still debated. Olson defends the extension of the concept of refugee to include persons displaced due to environmental disaster, identifying five external drives that force population displacements: 1. physical threats, such as floods, volcanic eruptions, hurricanes, etc.; 2. economic insufficiency, such as droughts or famine; 3. religious persecution; 4. ethnic persecution; and 5. ideological persecution¹⁷⁰. Jessica Cooper also affirms that persons who are affected by environmental disasters are entitled to seek asylum and request refugee status, claiming that a failure to decide or a negligent decision by authorities is required in order for an environmental disaster to happen. Cooper claims that governments play a pertinent role in creating environmental crisis and that persons

¹⁶⁶ UNHCR, *Guidelines on International Protection: Membership of a particular social group within the context of Article 1A (2) of the 1951 Convention and/or its 1967 Protocol relating to the Status of Refugees*, HCR/GIP/02/02, item 11, available from: <https://www.unhcr.org/3d58de2da.pdf> (accessed 06 July 2020)

¹⁶⁷ *Idem*, item 6

¹⁶⁸ *idem*

¹⁶⁹ *Ibid*, item 7

¹⁷⁰ M. E. Olson, Refugees as a Special Case of Population Redistribution, in L.A.P. Gosling and L.Y.C. Lim (eds) *Population Redistribution: Patterns Policies and Prospects*. New York: United Nations Fund for Population Activities. 1979, p 130.

who are affected by environmental disasters are effectively victims of a governmental prosecution, and for that reason are entitled to seek refuge¹⁷¹.

Stephen Castles, on the other hand, claims that only a narrow group of people who have been affected by environmental disaster can claim asylum. Castles identifies cases where the concept environmental refugees can be applied to define those displaced by environmental reasons. He affirms:

The term 'environmental refugee' could only have a legal meaning in the narrow sense of people forced to flee when repressive forces use environmental destruction, such as defoliation or polluting water, as an instrument of war against a specific group. Cases include US use of Agent Orange during the Vietnam War and actions of the Iraqi Government against the Marsh Arabs.¹⁷²

Walter Kälin, when analysing the five displacement scenarios, has observed that people affected by natural disasters may be entitled to seek and be granted refugee status when a natural disaster is a starting point of a conflict over natural and essential resources and if the elements of the Refugee Convention are met. In summary, he argues that persons displaced by environmental disaster fulfil the requirements of the Refugee Convention when: 1. authorities deny any assistance and/or protection to certain groups of persons in the grounds of the Convention; 2. government policies related to environmental disasters and climate change have a discriminatory impact on a specific group of people or when the destruction of the environment is intended to persecute the group; and 3. armed conflict are triggered by disputes over shrinking natural resources, if the persecutory acts are due to the grounds established by the Convention¹⁷³.

Concerning the persecution requirement, Rafiqul Islam states that many governmental policies can lead to natural disasters, putting certain groups in a vulnerable and risky position. In his opinion, every person who belongs to the particular group of

¹⁷¹ J. B. Cooper 1998.

¹⁷² S. Castles, 2002, pp. 8-9.

¹⁷³ Kälin and Schrepfer 2012.

climate refugees and lack any political leverage to mitigate and address the environmental risks of climate change is victim of State's persecution¹⁷⁴.

When discussing the possibility of granting refugee status for persons affected by environmental disasters, Shacknove claims that there are sources of vulnerability beyond social control, but as environmental disasters are often complicated and exacerbated by human actions, a claim for refugee status may be legitimate. He states that there are certain types of environmental disasters, such as the devastation of a flood or famine due to the corrupt distribution of material aid, that can be mitigated by the creation of social policies and when the State is unwilling or unable to protect an individual from physical threats or grave violations of human rights, 'a basis for a legitimate claim to refugeehood' is created¹⁷⁵.

Myers proposed a definition of refugees that comprises 'persons who can no longer gain a secure livelihood in their traditional homelands because of what are primarily environmental factors of unusual scope', including those affected by factors such as:

drought, desertification, deforestation, soil erosion and other forms of land degradation; resource deficits such as water shortages; decline of urban habitats through massive over-loading of city systems; emergent problems such as climate change, especially global warming; and natural disasters such as cyclones, storm surges and floods, also earthquakes, with impacts aggravated by human mismanagement¹⁷⁶.

He continues stating that additional factors also interact with environmental disasters to cause the displacement of populations. He states that deficient policies and government systems marginalise people in an economic, politic, social and legal sense which exacerbates environmental problems¹⁷⁷.

Matthew Scott affirms that certain acts by governments might be considered acts of persecution against persons affected by environmental disasters. He notes that systemic

¹⁷⁴ M. R. Islam and M. J. H. Bhuiyan, *An Introduction to International Refugee Law*, 2013, Brill Nijhoff, p. 222.

¹⁷⁵ Shacknove, 1985.

¹⁷⁶ Myers 1995

¹⁷⁷ *Idem*, p. 18

discrimination (e.g. ineffective access to income and home loans that contribute to segregation that leads to a group living in a more exposed area), failure to maintain flood control systems, failure to have an early warning system and evacuation plans that reach vulnerable groups, discriminatory acts in disaster relief, indirectly discriminatory housing destruction, and indirectly discriminatory flood protection infrastructure are all acts that could potentially be categorised as a failure of protection, and give reason to a refugee claim. In the issue of environmental disasters, Scott recognises there are two potential claims for persons affected by natural disasters: 1. the person is outside their country of habitual residence and is compelled to apply for a refugee status to avoid having to return to an aftermath of an environmental disaster; and 2. the person may fear the exposure to serious human rights violations in the context of a foreseeable disaster and could claim refugee status¹⁷⁸.

António Guterres claims that the Convention as well as the UNHCR's mandate would be applicable in situations where persons affected by environmental disasters are forced to flee due to their government's conscious refusal of assistance in order to punish or marginalise the group on one of the five grounds established in the Refugee Convention¹⁷⁹. The UNHCR explicitly includes in the concept of refugees and offers protection to persons affected by disasters, including drought and famine, where they are linked to situations of persecution or armed conflict rooted in racial, ethnic, religious, or political divides, or disproportionately affect particular groups¹⁸⁰.

2.1.1.2 The Rights of Refugees

The Convention establishes, in its article 12 to 30, the rights which individuals are entitled to once their refugee status are recognised. First, all refugees must be given identity papers and travel documents which allow them to travel outside of the host country.

The Convention affirms that refugees must receive:

¹⁷⁸ M. Scott, *Climate Change, Disasters, and the Refugee Convention*, Cambridge, Cambridge University Press, 2020.

¹⁷⁹ Guterres 2008

¹⁸⁰ UNCHR, *The refugee concept under international law Global compact for safe, orderly and regular migration*, New York 12-15 March 2018, available from: <https://www.unhcr.org/events/conferences/5aa290937/refugee-concept-under-international-law.html> (accessed 06 July 2020)

1. *the same treatment as nationals of the receiving country with regards to:*
 - Freedom of Religion and Religious Education¹⁸¹
 - Free Access to Courts and Legal Assistance¹⁸²
 - Access to Elementary Education¹⁸³
 - Social Security Protection¹⁸⁴
 - Protection of Intellectual property (e.g. inventions and trademarks)¹⁸⁵
 - Protection of literary, artistic, and scientific work¹⁸⁶
 - Equal treatment by taxing authorities¹⁸⁷
2. *the most favourable treatment provided to nationals of a foreign country with regards to:*
 - The right to belong to a trade union¹⁸⁸
 - The right to belong to other non-political non-profit organisations¹⁸⁹
 - The right to engage in wage-earning employment¹⁹⁰
3. *the most favourable treatment possible, which must be at least as favourable as to that accorded aliens generally in the same circumstances, with regards to:*
 - The right to own property¹⁹¹
 - The right to practice a profession¹⁹²
 - The right to self-employment¹⁹³
 - Access to housing¹⁹⁴

¹⁸¹ Convention Relating to the Status of Refugees (adopted on 28 July 1951, entered into force 22 April 1954) UNGA Resolution 429 (V), article 4.

¹⁸² *Idem*, article 16

¹⁸³ *Ibid*, article 22

¹⁸⁴ *Ibid*, article 24

¹⁸⁵ *Ibid*, article 14

¹⁸⁶ *Ibid*

¹⁸⁷ *Ibid*, article 29

¹⁸⁸ *Ibid*, article 15

¹⁸⁹ *Ibid*

¹⁹⁰ *Ibid*, article 17

¹⁹¹ *Ibid*, article 13

¹⁹² *Ibid*, article 19

¹⁹³ *Ibid*, article 18

¹⁹⁴ *Ibid*, article 21

- Access to higher education¹⁹⁵

4. *the same treatment as that accorded to aliens generally with regards to:*

- The right to choose their place of residence¹⁹⁶
- The right to move freely within the country¹⁹⁷
- Access to public relief and assistance¹⁹⁸

The Convention affirms that ‘in the same circumstance’ implies that any requirements that an individual of the receiving country must fulfil to enjoy the right, must also be fulfilled by the refugee, according to the exact same length and conditions, with only the exceptions of requirements which nature is impossible to fulfil¹⁹⁹.

2.1.1.3 Non-Refoulment Principle and Voluntary Repatriation

The principle of non-refoulement prohibits States from returning persons to a place where there is a threat to their freedom, or they are at risk of being subjected to violations of fundamental rights on the grounds mentioned by the Convention. The return of a person to their country of origin must only take place if the person is in fact protected from persecution and other violations of human rights. The UNHCR requires that physical, legal, and material safety must be in place for a person to be returned or voluntary repatriated to their place of origin²⁰⁰. Under the refugee convention, the principle of non-refoulment is applicable to refugees and asylum seekers and regardless if the country of origin is involved in armed conflict or is in a time of peace²⁰¹.

In relation to persons displaced due to an environmental disaster, the New Zealand Immigration and Protection Tribunal decided in 2014 that ‘exposure to the impacts of natural disasters can, in general terms, be a humanitarian circumstance, such that removal is considered unjust or unduly harsh’²⁰². The UN Human Rights Committee has recently stated in the case *Teitiota v New Zealand* that if a place has become uninhabitable as a result of the rising of sea-levels due to climate change or other

¹⁹⁵ *Ibid*, article 22

¹⁹⁶ *Ibid*, article 26

¹⁹⁷ *Ibid*

¹⁹⁸ *Ibid*, article 23

¹⁹⁹ *Ibid*, article 6

²⁰⁰ UNHCR Global Consultation 15.

²⁰¹ G. S. Goodwin-Gill and J. McAdam, *The Refugee in International Law*, Oxford University Press, 2007.

²⁰² *AD (Tuvalu)* [2014] NZIPT 501370–371 (4 June 2014)

environmental disaster, persons that have their habitual residence on that place are protected against refoulement, as their return will result in a violation of the right to life²⁰³.

2.1.2 The European Union Qualification Directive and Subsidiary Protection

The Treaty of Amsterdam confers the power to adopt measures concerning asylum and other form of international protection to Member States of the European Union. The Common European Asylum System was created with the objective to establish common asylum procedure and minimum standards, including the determination of States responsibility, the conditions of reception, and the qualification of third country nationals as refugees. The EU Qualification Directive clarifies the grounds in which a person may be granted asylum and the foundations for exclusion and cessation and improves access of beneficiaries of international protection to rights and integration measures²⁰⁴. It conceptualises refugees on the same terms as the Refugee Convention. On the other hand, the Directive is the first legally binding instrument that establishes, in its article 9, a non-exhaustive list of acts that are considered acts of persecution. The list includes acts of physical, sexual, or mental violence; legal, administrative, police, and/or judicial measures that are discriminatory; disproportionate or discriminatory prosecution or punishment, etc²⁰⁵. The Directive also explicitly affirms that non-state actors may be potential actors of persecution, alongside the State and parties and organisations that are in control of the State or a substantial part of its territory²⁰⁶.

The Directive establishes the definition of ‘internal protection’, which gives States the possibility of determining that person is not in need of international protection if the applicant can reasonably expect to stay in part of their country of origin where they have no well-founded fear of being persecuted or no risk of serious harm²⁰⁷.

²⁰³ UN Human Rights Committee, *Ioane Teitiota v. New Zealand*), CCPR/C/127/D/2728/2016, 7 January 2020.

²⁰⁴ European Commission, *Who qualifies for international Protection*, available at: https://ec.europa.eu/home-affairs/what-we-do/policies/asylum/refugee-status_en (accessed 05 July 2020)

²⁰⁵ European Union: Council of the European Union, *Directive 2011/95/EU of the European Parliament and of the Council of 13 December 2011 on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted (recast)*, 20 December 2011, OJ L. 337/9-337/26; 20.12.2011, 2011/95/EU, available at: <https://www.refworld.org/docid/4f197df02.html> (accessed 8 August 2020), article 9

²⁰⁶ *Idem*, Article 6

²⁰⁷ *Ibid*, article 8 (1)

The Directive provides Subsidiary Protection – which is complementary and additional to the protection given to refugees established by the Refugee Convention²⁰⁸ – for those persons who do not qualify for refugee status, but would face a real risk of suffering a serious harm consisting²⁰⁹ of the death penalty or execution; torture or inhuman or degrading treatment or punishment; or a serious and individual threat to a civilian's life or person by reason of indiscriminate violence in situations of international or internal armed conflict²¹⁰.

The EU also grants temporary protection in the events of mass influx of displaced persons from third countries who are unable to return to their country of origin, especially in situations where the asylum system is unable to process such great influx²¹¹. The Directive on Temporary Protection defines 'displaced persons' as persons who had to leave or have been evacuated from their country or region and are unable to return in safe and durable conditions, in particular persons who have fled areas of armed conflict or endemic violence and persons at serious risk of, or who have been the victims of, systematic or generalised violations of their human rights²¹².

2.1.3 The African Union and its Extended Concept of Refugee

In 1974, the African Union adopted the Convention Governing the Specific Aspects of Refugee Problems in Africa²¹³ and in 2009 the Kampala Convention²¹⁴. Both African Conventions used the expanded concept of refugees in order to assist mass outflows of people displaced by wars of independence throughout African States. The concept of refugees includes the protection of people who search for refuge due to

²⁰⁸ *Ibid*, article 33

²⁰⁹ *Ibid*, article 2 (f)

²¹⁰ *Ibid*, article 15

²¹¹ Council of the European Union, *On minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof*, 2001/55/EC of 20 July 2001, article 2 (a), available from:

<https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:212:0012:0023:EN:PDF> (accessed 06 July 2020)

²¹² *idem*, article 2 (c)

²¹³ Organisation of African Unity (OAU), *Convention Governing the Specific Aspects of Refugee Problems in Africa* ("OAU Convention"), 10 September 1969, 1001 U.N.T.S. 45, available at: <https://www.refworld.org/docid/3ae6b36018.html> [accessed 19 June 2020]

²¹⁴ African Union, *African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa* ("Kampala Convention"), 23 October 2009, available at: <https://www.refworld.org/docid/4ae572d82.html> (accessed 6 July 2020)

aggression, external occupation, foreign domination, or any other events that gravely disturb public order in part or in the entirety of their country²¹⁵. The convention did not limit the motives according to which a person may be granted refugee status but expanded from the Refugee Convention, but those who only fulfil the additional requirements set by the AU Convention and not those set in the Refugee Convention are only entitled to receive temporary protection²¹⁶. The persons who fulfil all the requirements are entitled to protection against refoulment²¹⁷ and discrimination²¹⁸, the right to a travel document²¹⁹, and the right to assistance in cases of resettlement²²⁰ of voluntary repatriation²²¹.

Even though the African Union's Refugee Convention does not foresee environmental disasters as a cause for cross-border displacement, Kolmannskog affirms the Convention has the potential to cover situations related to climate change and environmental disasters under the concept of 'serious disruption of public order' if the situation is severe enough. However, the author also recognises that African States do not support such interpretation, despite the regional practice of permitting persons who cross an international border due to an environmental disaster to remain temporarily²²².

Cooper identifies the desertification of the African Sahel as an example of a long-term environmental degradation and the influence it had on the displacement of persons. She affirms that 50% of people affected by severe desertification in the world are in the Sahel area and that Ivory Coast became a destination for about 1.4 million Sahelians refugees between 1968 and 1973. In the 1980's, 40.000 Mauritians and 1.5 million Nigerians were displaced due to severe droughts. Cooper claims that the government of the Sahel region were negligent and failed to provide adequate food to combat the famine and protect the basic need of its population, which in turn converted the persons displaced by the drought into environmental refugees²²³.

²¹⁵ African 1969 Convention, article 1 (2).

²¹⁶ *Idem*, article II (5)

²¹⁷ *Ibid*, article II (3)

²¹⁸ *Ibid*, article IV

²¹⁹ *Ibid*, article VI.

²²⁰ *Ibid*, article V (3)

²²¹ *Ibid*, article V (4)

²²² V. Kolmannskog, 'The Point of No Return - Exploring Law on Cross-Border Displacement in the Context of Climate Change', *Refugee Watch* No. 34, December 2009, p. 32.

²²³ J. B. Cooper 1998.

2.1.4 Refugee Protection in the Inter-American Human Rights System: The Cartagena Declaration and the San José Declaration on Refugee and Displaced People

The American Convention on Human Rights reaffirms the rights of persons to seek and be granted asylum in a foreign territory and reassures the principle of non-refoulement²²⁴. Aside from Venezuela, which has only acceded to the Protocol, Cuba and Guyana, which aren't states parties to either the convention or the protocol, all of the American States have ratified the Refugee Convention²²⁵.

The Cartagena Declaration was elaborated as a response to the high influx of refugees from Central American States, Mexico and Panama. The Declaration, even though it is not a binding instrument, is considered the basis for refugee protection in the region. As a mean to adapt to the local reality, it extended the concept of refugee to include persons who have fled their country of nationality because their lives, safety, or freedom have been threatened by generalised violence, foreign aggression, internal conflicts, massive violations of human rights or other circumstances that have seriously disturbed public order²²⁶. Natural disasters are not considered within the notion of 'other circumstances' as only human actions may disturb public order²²⁷.

In 1994, the OAS adopted the San José Declaration on Refugees and Displaced Persons. The Declaration stressed the complementarity between the protection systems established in International Human Rights Law, International Humanitarian Law, and Refugee Law, and stated that refugees and persons that migrate for other reasons have human rights which should be protected at all times (before and after their flight or return to their place of origin) and in all circumstances and places²²⁸.

The 2004 Mexican Declaration and Plan of Action to Strengthen International Protection of Refugees in Latin America focused on the durable solutions for refugees,

²²⁴ Inter-American Convention, article 22.

²²⁵ UNHCR, States Parties to the 1951 Convention relating to the Status of Refugees and the 1967 Protocol, available from: <https://www.unhcr.org/protection/basic/3b73b0d63/states-parties-1951-convention-its-1967-protocol.html> (accessed 06 July 2020)

²²⁶ Cartagena Declaration, article III (3)

²²⁷ J. McGregor, Refugees and the Environment, in Black, R. and Robinson V. (eds.) Geography and Refugees: Patterns and Processes of Change London: Belhaven, 157-70.

²²⁸ San José Declaration on Refugees and Displaced Persons, 7 December 1994, conclusion 10.

including integration and resettlement²²⁹. Local integration and new methods of resettlement were proposed, such as Solidarity Cities²³⁰, Integrated Borders of Solidarity²³¹, and regional solidarity resettlement²³².

The Brasilia Declaration on the Protection of Refugees and Stateless Persons of 2010 reaffirmed the expanded definition of the non-refoulment principle and included the notion a 'non-penalisation of illegal entry and non-discrimination'²³³. In its sixth decision, the declaration affirms that States should consider the possibility of adopting domestic instruments to address possible new refugee situations not foreseen by other international instruments for the protection of refugees²³⁴. The ninth decision recognises the importance of greater opportunities for regular migration and policies that respect the rights of migrants, regardless of their status²³⁵.

Later in 2012, the region adopted the Mercosur Declaration of Principles on International Protection of Refugees. The Mercosur Declaration aims to adopt common regional policies for the protection of refugee claimants and refugees and to create non-restrictive migration policies²³⁶. The declaration also aims for the full and unrestricted application of the non-refoulement principle²³⁷ and application and respect of the same rights to refugees, refugee claimants and any other regular migrants²³⁸.

2.1.5 The ASEAN Declaration and the Arab Convention and the Protection of Refugees

General Principle 16 of the ASEAN Human Rights Declaration guarantees the right to seek and receive asylum²³⁹. The Bangkok Principles on Status and Treatment of

²²⁹ *Mexico Declaration and Plan of Action to Strengthen International Protection of Refugees in Latin America*, 16 November 2004.

²³⁰ *Idem*, chapter 3 (1).

²³¹ *Ibid*, chapter 3 (2).

²³² *Ibid*, chapter 3 (3).

²³³ UNHCR, *Brasilia Declaration on the Protection of Refugees and Stateless Persons in the Americas*, 11 November 2010, p.1.

²³⁴ *Idem*, item 6.

²³⁵ *Ibid*, item 9.

²³⁶ *The Mercosur Declaration of Principles on International Refugee Protection*, 23 November 2012.

²³⁷ *idem*

²³⁸ *Ibid*.

²³⁹ ASEAN Human Rights Declaration, principle 16.

Refugees²⁴⁰, elaborated by the Asia-African Legal Consultative Organisation (AALCO), is a non-binding legal instrument adopted in 1966. Its principle 1 (2) extends the concept of refugee to any persons that, owing to external aggression, occupation, foreign domination or events that seriously disturb public order, in part or in the entirety of their country of origin or nationality, are compelled to leave their place of habitual residence and seek refuge in another place outside their country of origin or nationality²⁴¹. The Bangkok Principles protect refugees from being refouled²⁴², the right to a no less favourable treatment that generally accorded to aliens in similar circumstances with regards to basic human rights as accepted in international instruments²⁴³, and the right to receive compensation from the country which they left²⁴⁴.

The Almaty Declaration, which is a non-legally binding instrument, was adopted during a conference organised by the UNHCR, the IOM, UN Regional Centre for Preventive Diplomacy for Central Asia, and founded by the European Commission. The Declaration highlights the need for an enhanced cooperation in order to preserve ‘the asylum space and is consistent with international law, notably the principle of *non-refoulement*’²⁴⁵

The Arab Convention on Regulating Status of Refugees in Arab Countries not only applies the extended concept of refugees, but also explicitly included persons who takes refuge in another country other than their country of origin because of the occurrence of natural disasters or other grave events resulting in major disruption of public order²⁴⁶. The Convention prohibits the refoulment²⁴⁷ and discrimination²⁴⁸, ensures refugees the same level of treatment according to foreign residents²⁴⁹, and provides refugees with identification cards and travel documents²⁵⁰.

²⁴⁰ AALCO, *Bangkok Principles on the Status and Treatment of Refugees* ("Bangkok Principles"), 31 December 1966.

²⁴¹ *Idem*, article I (2)

²⁴² *Idem*, article III

²⁴³ *Ibid*, article IV

²⁴⁴ *Ibid*, article IX

²⁴⁵ Almaty Declaration, Almaty, Kazakhstan, 16 March 2011.

²⁴⁶ League of Arab States, *Arab Convention on Regulating Status of Refugees in the Arab Countries*, 1994, article 1, available at: <https://www.refworld.org/docid/4dd5123f2.html> (accessed 6 July 2020)

²⁴⁷ *Idem*, Article 8

²⁴⁸ *Ibid*, Article 7

²⁴⁹ *Ibid*, Article 5

²⁵⁰ *Ibid*, Article 10

2.2 Internal Displacement due to Environmental Disasters

The IDMC states that in 2019, 24.855.000 new internal displacements occurred due to natural disasters while 8.554.000 new displacements were due to conflicts and generalised violence, about 45.600.000 people were considered IDPs, while 26 million were refugees²⁵¹. A report by the UNHCR claims that 43% of the internally displaced persons are in three countries: Colombia (7.9 million), Syria (6.1 million), and the Democratic Republic of the Congo (4.5 million). Africa has 42% of the internally displaced persons population, the Americas have 19%, Asia and the Pacific region have 6.5%, the MENA region has 26.5%, and Europe has only 6% of the total population of IDPs living in the region²⁵².

2.2.1 Principles on Internal Displacement

The Guiding Principles on Internal Displacement is a non-binding instrument that outlines the standards of protection that should be available for IDPs within the domestic legal framework. The document was drafted by Francis M. Deng, the Special Representative of the UN Secretary General, in 1998. Kälén, the Chair of the process of creation of the Guiding Principles, has stated that ‘no new law in the strict sense of the word needed to be created in most cases when it came to the Guiding Principles’²⁵³, and while there are no monitoring systems ‘a global effort has begun to monitor and oversee compliance with their provisions. Governments, UN agencies, regional bodies, international and local NGOs, and the displaced themselves are all involved’²⁵⁴.

According to the Guiding Principles, IDPs are persons or groups of persons who are forced or obliged to flee or to leave their homes or places of habitual residence as a result of or in order to avoid the effects of armed conflicts, situations of generalised violence, violations of human rights or natural or human-made disasters, and have not

²⁵¹ IDMC, *Number of IDPs and refugees*, available from <https://www.internal-displacement.org/database/displacement-data> (accessed 07 July 2020)

²⁵² UNHCR, *Initiative on Internal Displacement 2020 – 2021*, Geneva, available from: http://reporting.unhcr.org/sites/default/files/UNHCR%20Initiative%20on%20Internal%20Displacement%202020-2021.pdf#_ga=2.122721611.1111271430.1590079208-609364649.1589758701 (accessed 07 July 2020)

²⁵³ W. Kälén, *How Hard Is Soft Law?*, Brookings/CUNY Project, 19 December 2001.

²⁵⁴ *idem*

crossed an internationally recognised State border.²⁵⁵ The Guiding Principles establishes the obligation of States to address internal displacement in the context of climate change and environmental disasters, with States bearing the primary responsibility of providing assistance and protection for displaced persons in all phases of the displacement²⁵⁶.

2.2.1.1 The Rights of IDPs

The Guiding Principles on the Protection of IDPs recognises the following rights:

- Prohibition of arbitrary displacement²⁵⁷;
- To life²⁵⁸;
- To dignity and physical, mental and moral integrity²⁵⁹;
- To liberty and security of person²⁶⁰;
- Liberty of movement that right to choose their residence²⁶¹;
- To seek safety in another part of the country, to leave their own country, to seek asylum in another country, and to be protected against forcible return²⁶²;
- To know the whereabouts of missing relatives²⁶³;
- Respect of family life²⁶⁴;
- To an adequate standard of living, including essential food and potable water, basic shelter and housing, appropriate clothing, and essential medical services and sanitation²⁶⁵;
- Prohibition of arbitrary deprivation of property and possessions²⁶⁶;

²⁵⁵ *Report of the Representative of the Secretary-General, Mr. Francis M. Deng, submitted pursuant to Commission resolution 1997/39. Addendum: Guiding Principles on Internal Displacement*, 11 February 1998, E/CN.4/1998/53/Add.2, .

²⁵⁶ *Idem*, principle 3

²⁵⁷ *Idem*, principle 6.

²⁵⁸ *Idem*, Principle 10

²⁵⁹ *Ibid*, Principle 11

²⁶⁰ *Ibid*, Principle 12

²⁶¹ *Ibid*, Principle 14

²⁶² *Ibid*, Principle 15

²⁶³ *Ibid*, Principle 16

²⁶⁴ *Ibid*, Principle 17

²⁶⁵ *Ibid*, Principle 18

²⁶⁶ *Ibid*, Principle 21

- Freedom of thought, conscience, religion or belief, opinion and expression²⁶⁷;
- To seek freely opportunities for employment and to participate in economic activities²⁶⁸;
- To associate freely and participate equally in community affairs²⁶⁹;
- To vote and to participate in governmental and public affairs, including the right to have access to the means necessary to exercise this right²⁷⁰;
- To communicate in a language they understand²⁷¹;
- To education²⁷²;
- To receive humanitarian assistance;²⁷³

2.2.1.2 Issues with the IDP protection system

Principle 25 of the Guiding Principle affirms that the national authorities have the primary duty and responsibility for providing humanitarian assistance to IDPs²⁷⁴. The ICRC claims that governments are often not in control of zones where people are displaced, and that hinders the free passage of humanitarian assistance for IDPs²⁷⁵. Another issue found by the ICRC is the inadequacy of the security for humanitarian workers and the lack of political will to comply with humanitarian law and other human rights rules also prevent IDPs from receiving assistance and protection²⁷⁶.

Castles affirms that ‘IDPs are often worse off than refugees because they remain in the state where they are or have been oppressed’²⁷⁷. He affirms that, governments are often unable or unwilling to protect IDPs but also generally reject attempts of providing protection and assistance made by international agencies²⁷⁸.

²⁶⁷ *Ibid*, Principle 22 (a)

²⁶⁸ *Ibid*, Principle 22 (b)

²⁶⁹ *Ibid*, Principle 22 (c)

²⁷⁰ *Ibid*, Principle 22 (d)

²⁷¹ *Ibid*, Principle 22 (e)

²⁷² *Ibid*, Principle 23

²⁷³ *Ibid*, principle 24

²⁷⁴ *Ibid*, article 25.

²⁷⁵ ICRC, *Rule 55 Access for Humanitarian Relief to Civilians in Need*.

²⁷⁶ ICRC, *Position on Internally Displaced Persons*, 2006.

²⁷⁷ Castles 2002

²⁷⁸ *Idem*, p. 9.

2.2.2 The Kampala Convention

The OAU, based on the Guiding Principles, created a Convention for the Protection and Assistance of Internally Displaced Persons in Africa, a legally binding document which establishes the rights of IDPs and the obligations of States parties. The Convention explicitly includes climate change and environmental disasters as causes for the displacement of persons. It establishes an obligation of States ‘to protect and assist persons who have been internally displaced due to natural or human made disasters, including climate change’²⁷⁹.

2.3 The Rights of Migrants

Migrants, as previously established, are persons who voluntarily move from their original country in order to pursue a better condition of living in another State. Gregory White states that there are two types of migrants, ‘those who are pushed because of economic calculations and those who move because of political reasons’²⁸⁰. The IOM differentiates economic migrants from labour migrants, stating that labour migrants are persons who move for the purpose of employment, while economic migrants are persons who enter a State to perform an economic activity²⁸¹.

In an international level, the only instrument that provides human rights protection for migrants is the Convention on the Protection of the Rights of All Migrant Workers and Members of their Family. Migrant workers, as established by the Convention, are persons ‘who is to be engaged, is engaged or has been engaged in a remunerated activity in a State of which he or she is not a national’²⁸². The Convention protects the rights to freedom of movement²⁸³, to life²⁸⁴, prohibition of torture or cruel, inhuman or degrading treatment²⁸⁵, prohibition of slavery, servitude and forced labour²⁸⁶,

²⁷⁹ Kampala Convention, article 5 (4)

²⁸⁰ G. White 2011.

²⁸¹ IOM Glossary on Migration

²⁸² UN General Assembly, *International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families*, 18 December 1990, A/RES/45/158, article 2 (1).

²⁸³ *Idem*, article 8

²⁸⁴ *Ibid*, article 9

²⁸⁵ *Ibid*, article 10

²⁸⁶ *Ibid*, article 11

freedom of thought, conscience and religion²⁸⁷, freedom of opinion and expression²⁸⁸, to privacy, family and correspondence²⁸⁹, to property²⁹⁰, liberty and security of person²⁹¹, to equality before the courts²⁹², prohibition of collective expulsion²⁹³, freedom of association and to take part in trade unions²⁹⁴ and the right to form them²⁹⁵, to maintain their cultural identity²⁹⁶, and the right to participate in public affairs and vote according to the domestic legislation²⁹⁷.

Migrant workers also have the right to enjoy:

1. treatment *not less favourable* than that which applies to nationals of the State of employment in respect to²⁹⁸:
 - Remuneration;
 - Conditions of work (hours of work, weekly rest, holidays with pay, safety, health, etc.;
 - Conditions of employment (minimum age of employment, restriction on work and other matters).
2. the *same* treatment granted to nationals of the State of employment in relation to:
 - Social security²⁹⁹;
 - Medical care³⁰⁰;

²⁸⁷ *Ibid*, article 12

²⁸⁸ *Ibid*, article 13

²⁸⁹ *Ibid*, article 14

²⁹⁰ *Ibid*, article 15

²⁹¹ *Ibid*, article 16

²⁹² *Ibid*, article 18

²⁹³ *Ibid*, article 22

²⁹⁴ *Ibid*, article 26

²⁹⁵ *Ibid*, article 40

²⁹⁶ *Ibid*, article 31

²⁹⁷ *Ibid*, article 41

²⁹⁸ *Ibid*, article 25

²⁹⁹ *Ibid*, article 27

³⁰⁰ *Ibid*, article 28

- Access to educational institutions and services³⁰¹;
- Access to vocational guidance and placement services³⁰²;
- Access to vocational training and retraining facilities and institutions³⁰³;
- Access to housing, including social housing³⁰⁴;
- Access to social and health services³⁰⁵;
- Access to co-operatives and self-managed enterprises³⁰⁶;
- Access to and participation in cultural life³⁰⁷;
- Protection against dismissal³⁰⁸;
- Unemployment benefits³⁰⁹;
- Access to public work schemes intended to combat unemployment³¹⁰;
- Access to alternative employment³¹¹;

2.3.1 The Applicability of the Convention to Cases of Persons Displaced due to Environmental Disasters

Some persons displaced due to environmental disasters might qualify as migrant workers as conceptualised by the Convention. Small Islands States have raised their concern over the rising of sea-level and the probability of their disappearance, with Tuvalu raising the possibility of creating new immigration policies with the governments of Australia and New Zealand³¹². New Zealand has an immigration agreement with Fiji,

³⁰¹ *Ibid*, article 43 (a)

³⁰² *Ibid*, article 43 (b)

³⁰³ *Ibid*, article 43 (c)

³⁰⁴ *Ibid*, article 43 (d)

³⁰⁵ *Ibid*, article 43 (e)

³⁰⁶ *Ibid*, article 43 (f)

³⁰⁷ *Ibid*, article 43 (g)

³⁰⁸ *Ibid*, article 54 (a)

³⁰⁹ *Ibid*, article 54 (b)

³¹⁰ *Ibid*, article 54 (c)

³¹¹ *Ibid*, article 54 (d)

³¹² S. Ammassari, *Migration and Development: Factoring Return into the Equation*, Newcastle upon Tyne, Cambridge Scholars Publishing, 2009 , p.13.

Kiribati, Tonga, and Tuvalu, in which the State accepts citizens of ages between 18-45 years through a labour migration programme³¹³, which wasn't implemented with the purpose of mitigating the threaten on sea-level rising.

2.4 Temporary Protection on the Grounds of Humanitarian Protection

A few States, through their own domestic law, may grant temporary protection based on humanitarian or compassionate grounds, including to persons affected by environmental calamities and climate disasters. New Zealand, for example, proposed in 2017 the creation of a humanitarian visa for persons displaced by environmental disasters and climate change³¹⁴.

Finland, through its Alien Act of 2004, may issue residence permits on the basis of humanitarian protection to persons that cannot return to their country of habitual residence as a result of an environmental catastrophe if there are no grounds for granting asylum or subsidiary protection. The residence permits are issued for a maximum of one year at a time³¹⁵ and may last for a maximum of a three years in total³¹⁶.

Sweden's Aliens Act of 2005 consider as persons in need of protection aliens who are unable to return to their country of origin because of an environmental disaster³¹⁷. The Swedish Aliens Act requires that there should be no alternative of relocation to a safe area within the State of origin.

Denmark has granted humanitarian asylum to single women and families with young children from areas affected by famine or droughts, where the livelihood is considered to be extremely difficult³¹⁸. In a proposal for a new Norwegian Aliens Act,

³¹³ New Zealand Government, *Pacific Access Category*, 21 March 2006, available from: <https://www.immigration.govt.nz/opsmanual-archive/7727.HTM> (accessed 20 July 2020)

³¹⁴ The Diplomat, *New Zealand Proposes Humanitarian Visa for Climate Refugees*, 30 November 2017 available from <https://thediplomat.com/2017/11/new-zealand-proposes-humanitarian-visa-for-climate-refugees/> (accessed 20 July 2020)

³¹⁵ Aliens Act, 301/2004, 2004, Section 110 (1), available at: <https://www.finlex.fi/en/laki/kaannokset/2004/en20040301.pdf> (accesses 6 February 2020)

³¹⁶ *Idem*, Section 109 (1).

³¹⁷ Aliens Act 2005:716, 2005, Chapter 4, Section 2 (3) available at: https://www.government.se/contentassets/784b3d7be3a54a0185f284bbb2683055/aliens-act-2005_716.pdf (accessed 6 February 2020)

³¹⁸ McAdam 2012, p.110

the Ministry of Immigration recognised the need to grant temporary residence permits to persons affected by humanitarian crisis, including environmental disasters³¹⁹.

Czech Republic provides temporary protection on the account of natural disasters to aliens who are unable to return to their state of origin³²⁰.

Argentina³²¹ and Uruguay³²² grant temporary residency for persons that enter the country due to humanitarian reasons. The residency permit is issued for a limited period, meaning that as soon as the permit expires, one must voluntarily depart and return to their place of origin.

Brazil issues temporary visas on the grounds of humanitarian shelter for stateless persons or nationals of third countries whose States were affected by an environmental disaster. Brazilian's Migration Law elaborates a roll of rights that migrants³²³ may rely on when under the protection of the State. In addition to protecting civil, social, cultural and economic rights³²⁴, the right to work³²⁵, the right to family reunion³²⁶, the right to a free public education³²⁷, the right to public health and social assistance³²⁸, the rights to freedom of peaceful assembly³²⁹ and freedom of association³³⁰, access to justice and free legal assistance for persons who prove the lack of means to afford a lawyer³³¹, the right to open a bank account³³², and the right to be exempted from any fees during the procedures if the person is economically hypo sufficient are all guaranteed and protected by law³³³.

³¹⁹ *Idem*

³²⁰ Temporary Protection of Act 221/2003, Article 1 (2) (b), available at: <https://kidsempowerment.org/act-no-221-2003-coll-on-the-temporary-protection-of-aliens-of-26-june-2003>

³²¹ Argentina: Reglamentación de la Ley de Migraciones No. 25.871 y sus modificatorias, Decreto 616/2010, available at: <https://www.refworld.org/docid/4be2de512.html> (accessed 6 February 2020)

³²² Foro Constitucional Iberoamericano, Ley de Migración, Ley N° 18.250, available from: https://oig.cepal.org/sites/default/files/2008_ley18.250_ury.pdf (accessed 6 February 2020)

³²³ The Migration Law considers migrants persons who are forcibly moved within the territory of the State or cross -border, including immigrants, emigrants, and stateless persons.

³²⁴ Lei de Imigração, Lei N° 13.445, 24 May 2017, article 4 (I).

³²⁵ Decreto 9.199, 20 November 2017, article 147 (2).

³²⁶ Lei N° 13.445, article 4 (III)

³²⁷ *Idem*, article X

³²⁸ *Ibid*, article VIII

³²⁹ *Ibid*, article 4 VI

³³⁰ *Ibid*, article 4 VII

³³¹ IX id

³³² XIV id

³³³ Decreto n. 9.199, article 312 (4)

Canada³³⁴ may impose a stay order with respect to a country or a place if the circumstances in that country or place pose a generalised risk to the entire civilian population as a result of an environmental disaster resulting in a substantial temporary disruption of living conditions.

The United States³³⁵ may designate countries for the Temporary Protected Status granting temporary protection for nationals of the assigned State in circumstances which the conditions of the origin State prevent persons from returning safely or the country is unable to adequately handle the return of its nationals. A country that is affected by natural disasters, such as droughts, floods, or earthquakes, must formally request the Temporary Protection Status, which allows for a six month stay with the possibility of extension to up to 18 months, to persons who are already in the USA during the time of the environmental disaster.

2.5 International Human Rights Law and International Humanitarian Law

Persons displaced by environmental disasters are – as anybody else – entitled to receive the protection available in general International Human Rights instruments. States Parties must ensure the protection, respect, fulfilment of the rights presented in the core human rights treaties to those persons who are affected by environmental disasters that are within their jurisdiction. Persons affected by environmental disasters are entitled to the rights contained in the ICCPR and its two optional protocols, ICESCR and its protocol, ICERD, CEDAW and its protocol, CAT and its protocol, CRC and its two optional protocols, CPED, CRPD and its protocol. Even though environmentally displaced persons are protected under the core treaties of international human rights law, these treaties were not created having environmentally displaced persons as a specific targeted group for receiving protection and do not envision the possibility of EDPs to relocate to and stay in a receiving country.

³³⁴ Canada: Immigration and Refugee Protection Regulations (2002) SOR/2002-227, available at: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2002-227/section-230.html> (accessed 6 February 2020)

³³⁵ The United States of America: Immigration and Nationality Act (1952) cha 477 66 Stat 163, available at: <https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title8-section1254a&num=0&edition=prelim> (accessed 6 February 2020)

International Humanitarian Law also offers protection to refugees and internally displaced persons in times of armed conflicts. The aim of IHL is to prevent or minimise the impacts of armed conflict. Considered as civilians, refugees³³⁶ and IDPs³³⁷ are protected as such and must not be targeted. During armed conflicts, refugees are protected by the Fourth Geneva Convention and its Additional Protocol I. Article 44, for example, affirms that the Detaining Powers should not treat refugees who do not enjoy the protection of any state as enemy aliens. Rule 131 of customary IHL states that displaced persons during conflicts must receive satisfactory conditions of shelter, hygiene, health, safety and nutrition³³⁸.

The applicability of IHL to cases of persons displaced due to environmental disasters is very limited. According to Walter Kälin, IHL only applies to environmentally displaced persons when an armed conflict is underway in

3. Gaps in the Protection of Persons Displaced by Environmental Disasters

In summary:

→ *Refugee Convention* protects persons who have a well-founded fear of persecution due to race, religion, nationality, membership of a particular social group or political opinion, according to international law, or due to generalised violence or events that seriously disturb public order, according to the Inter-American and the African systems;

→ *The Guiding Principles on Internal Displacement* protect those persons who are forced to displace, within the territory of their country of origin, due to an armed conflict, generalised violence, violations of human rights, or environmental or man-made disaster;

→ *The International Convention on the Rights of Migrant Workers* protects persons who voluntarily move from their habitual place of residence with a view to being employed in another State, including those regularly admitted as a migrant worker;

³³⁶ ICRC, *Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention)*, 12 August 1949, 75 UNTS 287, article 73 API.

³³⁷ ICRC Position on Internally Displaced Persons 2006.

³³⁸ ICRC, *Rule 131 Treatment of Displaced Persons*.

→ *International Human Rights Law* protects all human beings, including refugees, IDPs and migrants who voluntarily or forcibly move from or within their habitual place of residence;

→ *International Humanitarian Law* protects civilians, including refugees and IDPs, during an international armed conflict or a non-international armed conflict.

Considering the various nature of movements created by environmental disasters and the international law framework that protects displaced persons, it is possible to notice that there are protection and operational gaps in international law, which prevents certain persons to receive international protection.

Type of Disaster	Nature of the Movement	Protection according to International Law
Sudden onset Events (extreme hazard events: hurricanes, cyclones, earthquakes, tsunamis, wildfires, typhoons, floods, volcanic eruptions, etc.)	1. Temporary forced internal displacement 2. Temporary voluntary internal displacement 3. Temporary forced cross-border displacement 4. Temporary voluntary cross-border displacement	All: IHRL 1. Guiding Principles on Internal Displacement <i>GAP:</i> There is no international provision for the protection of persons who move across international borders due to an environmental disaster.
Slow onset Events/Environmental Degradation (mass droughts, salinisation, desertification, sinking of Small State Islands)	<i>Often mixed, starting with voluntary movement and ending with forced displacement</i> 1. Temporary voluntary internal displacement 2. Temporary voluntary cross-border displacement 3. Permanent forced internal displacement 4. Permanent forced cross-border displacement	All: IHRL 3. Guiding Principles on Internal Displacement <i>GAP:</i> There is a lack of consensus on objective criteria to differentiate between voluntary or forced displacement in the context of environmental disasters.

Rise of Sea-Levels and Permanent Loss of States' Territories	1. Voluntary internal displacement 2. Forced internal displacement 3. Permanent forced cross border displacement, in cases of loss of the entire territory	All: IHRL 2. Guiding Principles on Internal Displacement <i>GAP:</i> If a State is to lose its entire territory, it is not clear if it would still be considered a State by the international community, once one of the elements of Statehood would be absent. There is a risk that the whole population would be rendered stateless.
Armed Conflicts/General Violence over Natural Resources	1. Forced internal displacement 2. Forced cross-border territory	All: IHRL and IHL 1. Guiding Principles on Internal Displacement 2. Refugee Convention; Subsidiary or Temporary Protection

3.1 First Gap: Voluntary or Forced Migration?

During the Nansen Conference, it was stated that the legal status and the level of assistance and protection to be granted to a displaced person depend on the character and nature of the movement, which requires a better understanding and differentiation of the notions of forced and voluntary migration³³⁹. The differentiation between forced and voluntary displacement indicates how and if States will respond to such displacement and what kind of assistance and protection will be received by the displaced persons. As mentioned previously, people who voluntarily move are always protected by international human rights law instruments and, if the requirements are met, may also be protected under the Convention on Migrant Workers. On the other hand, persons who are forced to move, aside from the protection conferred by international human rights instruments, are also offered protection by the Refugee Convention and the Guiding Principles on Internal Displacement.

While voluntary migration happens when a person makes a conscious decision to move and have a choice in the process of their movement, forced displacement happens when a person has to flee their place of origin and have very little freedom to decide where and how to move. Despite the sharp distinction between voluntary and forced displacement, there are still questions about the nature of displacements in relation to the movements of persons due to environmental disasters. According to Black: ‘The key difficulty is to distinguish those who are forcibly displaced from those who move voluntarily, often as a way to adapt to environmental changes’³⁴⁰. The Chairperson of the Nansen Conference on Climate Change and Displacement also observed the complexity of the issue by stating that

the complexity of drawing a sharp distinction between ‘voluntary’ and ‘forced’ migration (displacement) spurred by environmental and development factors must be borne in mind. Motivation is a continuum, with

³³⁹ Nansen Conference, *Climate Change and Displacement*, 5-7 June 2011, Oslo.

³⁴⁰ R. Black, S.R.G. Bennett, S.M. Thomas and J.R. Beddington, *Climate change: Migration as Adaptation*, (2011) 478 *Nature* pp. 447–49

‘voluntary’ at one end of the spectrum, in a gradual transition to ‘forced’ at the other³⁴¹.

The IASFM has defined forced migration as a ‘general term that refers to the movements of refugees and internally displaced people (those displaced by conflicts) as well as people displaced by natural or environmental disasters, chemical or nuclear disasters, famine, or development projects’³⁴². Drawing on a similar conclusion about the nature of displacement due to environmental disasters, Guterres affirms that

a growing number of people are uprooted by natural disasters or lose their livelihoods to desertification, with climate change now found to be the key factor accelerating all other drivers of forced displacement. Most of the people affected will remain in their own countries. They will be internally displaced. But if they cross a border, they will not be considered refugees. Does it mean they *chose* to abandon their homes? No. These persons are not truly migrants, in the sense that they did not move voluntarily³⁴³.

Speare, on the other hand, does not analyse the nature of displacements caused by environmental disasters, however, according to the author, forced displacement in the strictest sense only occurs ‘when a person is physically transported from a country and has no opportunity to escape from those transporting him’ and that ‘as long as there is an option to escape to another part of the country, go into hiding or to remain and hope to avoid persecution’ there is an element of voluntariness in the displacement³⁴⁴.

³⁴¹ Nansen Conference, Chairperson’s Summary, para. 6, available from: <http://pnc.iucnp.org/wp/wp-content/uploads/2011/06/Chairpersons-Summary-Nansen-Conference-on-Climate-Change-and-Displacement.pdf> (accessed 05 July 2020)

³⁴² H. J. Heintze and P. Thielbörger, *International Humanitarian Action: NOHA Textbook*, Springer International Publishing, 2018, p. 372.

³⁴³ A. Guterres, *Statement by Mr. António Guterres, United Nations High Commissioner for Refugees, Intergovernmental Meeting at Ministerial Level to mark the 60th anniversary of the 1951 Convention relating to the Status of Refugees and the 50th anniversary of the 1961 Convention on the Reduction of Statelessness*, 07 December 2011, available from: <https://www.unhcr.org/admin/hcspeeches/4ecd0cde9/statement-mr-antonio-guterres-united-nations-high-commissioner-refugees.html> (accessed 10 July 2020)

³⁴⁴ A. Speare, *The Relevance of Models of Internal Migration for the Study of International Migration*, in *International Migration - Proceedings of a Seminar on Demographic Research in Relation to International Migration*, Paris, 1974, p. 89

Forced displacement, in the context of environmental disasters, is more easily observed as a consequence of sudden-onset events than of slow-onset disasters. In the Chairperson Summary of the Nansen Conference, it is acknowledged that

the displacement dimension is most evident today in the context of sudden-onset disasters. There is, however, a need to further explore the range of issues that could arise as a result of slow-onset disasters and longer-term climate change impacts, such as planned relocation and migration management³⁴⁵.

Concerning the displacement caused by slow-onset disasters, it is still debated whether the movement is forced or voluntary. Kälin and Schrepfer claim that those who decide to move due to the deterioration of the environment are not forced to flee, since life could still be possible at their place of origin, making them internal migrants³⁴⁶. Displacement that occurs as a consequence of gradual erosion or as an adaptation measure to environmental stresses are usually regarded as voluntary migration, as there are still elements of choices to the movement. Aside from the protection provided by general international human rights law instruments, the specific protection of persons who voluntarily and internally displace due to environmental disasters is not foreseen in any other international instruments.

As the environmental degradation becomes worse, with desertification, constant flooding and the submersion of coastal zones rendering an area uninhabitable, the nature of the displacement switches from voluntary to forced. Kälin and Schrepfer have analysed the movements of persons affected by slow-onset disaster and concluded that

the affected population does not necessarily wait until the point of no return to move away from their homes and so it is likely that movements, whether internal or cross border, will initially be of a migratory character and part of an adaptation strategy, before they turn into forced movements³⁴⁷.

There are currently no universally established criteria to determine when a movement caused by environmental disasters can be defined as voluntary or forced. It is easy to observe that sudden onset disasters such as hurricanes, cyclones cause the forced

³⁴⁵ Nansen Conference 2011, p.18

³⁴⁶ Kälin and Schrepfer 2012, p. 24

³⁴⁷ Kälin and Schrepfer 2012, p. 41.

movement of populations, however, the moment when a movement caused by slow onset events turns from voluntary – or as an adaptation response to environmental changes - to forced - as in the place has become uninhabitable - is not clearly and explicitly defined by any international law instruments. The lack of criteria for the differentiation between forced and voluntary displacement may induce the application of different international law instruments and different levels of international protection to similar cases of displacement caused by environmental disasters.

3.2 Second Gap: The Absence of Provisions on Permanent Displacement and Durable Solutions

The right to be admitted and to stay in a State is not protected nor guaranteed for environmentally displaced persons, except for those who qualify for the refugee status³⁴⁸. The protection provided by general human rights law to persons displaced by environmental disasters is minimalist, as it does not regulated admission into third States, nor does it provide a legal status for these persons. Within the international protection framework, current international instruments do not foresee the permanent displacement of persons affected by environmental disasters, focusing exclusively on temporary asylum and protection.

The Nansen Agenda Protection affirms that both sudden and slow onset disasters might trigger the need for temporary protection when the State affected by an environmental disaster is unable to provide protection to its citizens³⁴⁹. The Initiative acknowledged that ‘temporary protection measures can serve as practical ‘tools’ for granting protection to people displaced by humanitarian crises, particularly when a host country is experiencing large-scale influxes of people, or when the situation in a country of origin remains fluid or unclear’³⁵⁰. The temporary protection systems created by States, as seen previously, permits the admission and stay of persons displaced by environmental

³⁴⁸ Nansen Initiative, *Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change*, 2011, available from: https://disasterdisplacement.org/wp-content/uploads/2014/08/EN_Protection_Agenda_Volume_I_-low_res.pdf (accessed 12 July 2020).

³⁴⁹ *idem*

³⁵⁰ *ibid*

disasters for a limited amount of time, which means the person must leave the host State when the permit expires or find another solution for their displacement.

Gradual environmental degradation and sudden onset disasters may render a location permanently uninhabitable, which would mean the populations of said places would need to permanently move either within their own country – if there are places which continue to be inhabitable – or across an internationally recognised border – if their whole country have become uninhabitable or if it is the only option available. For instance, in 2005 Hurricane Katrina caused the displacement of more than a million people from New Orleans and the Gulf Coast, and around 300.000 are expected to remain permanently displaced³⁵¹.

The IPCC has also identified situations in which there is a possibility that displacement due to environmental disasters may become permanent. The organisation emphasises that

if disasters occur more frequently and/or with greater magnitude, some local areas will become increasingly marginal as places to live or in which to maintain livelihoods. In such cases, migration and displacement could become permanent and could introduce new pressures in areas of relocation. For locations such as atolls, in some cases it is possible that many residents will have to relocate³⁵²

The absence of international norms acknowledging the possibility of permanent displacement due to environmental disasters creates a gap concerning the applicability of durable solutions, including of voluntary return and relocation to another State, to situations where persons cannot return to their place of origin due to its permanent uninhabitability. Considering that international law does not foresee the admission and stay in third countries of persons displaced by environmental disasters, and that the only protection available for persons displaced by such disasters is provided temporarily by very few countries, there is a risk that persons affected and displaced by environmental disasters might be denied entry and possibly be requested to return to places that may still

³⁵¹ A. Plyer, *Facts for Features: Katrina Impact*, 26 August 2016, available from: <https://www.datacenterresearch.org/data-resources/katrina/facts-for-impact/> (accessed July 2020)

³⁵² IPCC 2012, p.16

present danger to their life and health. Concerning the lack of provision on durable solution to persons permanently displaced due to environmental disasters, Kälén and Schrepfer affirm that

In the absence of such durable solutions, the displacement will become protracted and entail the risk of people returning spontaneously to these areas, risking their lives and integrity and potentially triggering the responsibility of the state³⁵³.

3.3 Third Gap: The Disappearance of Small Island Developing States and the Status of their Citizens

Climate change and the constant and growing rise of sea-levels will disproportionately affect Small Island Developing States. The rising of sea-levels increases the erosion of sea lines and the chances of regular and severe floods, which might compromise part of their territory or even cause the submersion of the entire State. Citizens of SIDS are also at risk of experiencing water shortages caused by the contamination of national water bodies and of being affected by waterborne diseases. The occurrence of severe and constant hurricanes, cyclones, floods and other weather-related events and environmental disasters can severely affect the State's economy, which for SIDSs is mostly based on agriculture and tourism³⁵⁴. UNDESA has identified 51 SIDSs that are vulnerable to physical, economic, and cultural changes caused by the effects of climate change³⁵⁵. Kiribati, the Maldives, Vanuatu, Tuvalu, Solomon Islands, Samoa, Nauru, Fiji Islands, the Marshall Islands, and other SIDSs are at risk of disappearing completely³⁵⁶.

³⁵³ Kälén and Schrepfer 2012, p. 42

³⁵⁴ E. Harvey, *Linking Farmers & Tourists to Solve Development Challenges in SIDS*, 20 January 2017, available from <https://europa.eu/capacity4dev/article/linking-farmers-tourists-solve-development-challenges-sids> (accessed 20 July 2020)

³⁵⁵ M. Bruckner, *Effectively addressing the vulnerabilities and development needs of small island developing States*, CDP Background Paper No. 17 ST/ESA/2013/CDP/17, available from: <https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/CDP-bp-2013-17.pdf> (accessed 20 July 2020)

³⁵⁶ L. Mettler, *13 Islands That Will Disappear in the Next 80 Years*, Reader's Digest, 17 October 2019, available from: <https://www.rd.com/list/islands-will-disappear-80-years/> (accessed 20 July 2020)

The displacement of persons from SIDSs is initially only internal, but as the flooding and environmental erosion progresses and renders the territory uninhabitable, the population will seek to relocate to another State. A CSIRO's report has affirmed that climate change will affect the Asia-Pacific region as 'inundation of populated areas by rising seas may ultimately displace millions of individuals forcing intra- and interstate migration'³⁵⁷.

Kiribati is one of the countries that are most affected by climate change. Although Kiribati has implemented measures to mitigate and to adapt to the effects of climate change, the nation is set to fully disappear by 2050 due to the constant rise of sea-levels³⁵⁸. Kiribatians affected by the rise of sea-levels usually migrate to Tawara, the capital of the country, in order to adapt and avoid the negative impacts of climate change³⁵⁹. The former President of Kiribati, Anote Tong, has stated that migration is not a choice for Kiribatians, but a necessary measure for the survival of the population³⁶⁰.

Other small islands have also suffered the effects of climate change. The Isle de Jean Charles, in Louisiana, has lost 98% of its territory since 1995 due to the gradual erosion of its soil and the constant rise of sea-levels. As a measure of adaptation, the US government granted the island \$48 million that was used to buy a land on higher ground to relocate its entire population³⁶¹. The Tangier Island, in Virginia, have lost two-thirds of its territories since 1850³⁶². As both islands are part of USA's territory, their population have the possibility of displacing to a safe location within their own country. On the other hand, citizens of Small Nation Islands, might not have the ability of displacing internally as their countries become uninhabitable, having the sole possibility of moving to other States. The Solomon Islands lost five reef islands and entire cities had to be relocated due

³⁵⁷ B. L. Preston, R. Suppiah, I. McAdam and J. Bathols, *Climate Change in the Asia/Pacific Region*, 11 October 2006, p. 4

³⁵⁸ M. Ives, *A Remote Pacific Nation, Threatened by Rising Seas*, The New York Time, 02 July 2016, available from: <https://www.nytimes.com/2016/07/03/world/asia/climate-change-kiribati.html> (accessed 20 July 2020)

³⁵⁹ McAdam 2011

³⁶⁰ UNDRR, *Migration not a matter of choice but survival, says Kiribati President*, 15 March 2012, available from: <https://www.undrr.org/news/migration-not-matter-choice-survival-says-kiribati-president> (accessed 20 July 2020)

³⁶¹ *20 islands that could disappear in your lifetime, from Fiji to Virginia*, USA Today, 19 November 2019, available from: <https://www.usatoday.com/picture-gallery/travel/destinations/2019/11/29/climate-change-endangered-islands-disappearing-fiji-maldives-alaska/40630403/> (accessed 20 July 2020)

³⁶² *Idem*

to the rise of sea levels and soil erosion caused by climate change³⁶³. The Seychelles are at risk of losing 70% of its entire land if sea-level rises only one cm³⁶⁴. In 2018, an island in Hawaii vanished due to hurricane Walaka, scientists confirmed the submersion of a small Arctic islands, and an islet in the coast of Japan sunk due to the rise of sea-levels³⁶⁵. McAdam argues that it is hard to conceptualise the disappearance of SIDSs as a result of the rising of sea-levels within the international law framework³⁶⁶. According to the Montevideo Convention on the Rights and Duties of Man, for a State to be recognised as such it must have 1. a permanent population; 2. a defined territory; 3. a government; and 4. the ability to enter into relations with other states³⁶⁷. When there is a complete submergence of a nation, and by consequence the failure of fulfilling the requirements of statehood, questions of whether its population became stateless and if the Convention on Relating to the Status of Stateless Persons is applicable arise. Kälin and Schrepfer affirm that persons whose nation has submerged completely lose their nationality and enter a situation of *de jure* statelessness, meaning the Convention would be applicable but would only provide minimal protection³⁶⁸. A stateless person is, according to the Convention, a ‘person who is not considered as a national by any state under the operation of its law’³⁶⁹. If persons affected by the disappearance of their nation are indeed considered stateless persons, they have the right to receive a treatment at least as favourable as that accorded to the nationals of the host State in relation to the rights to freedom of religion³⁷⁰, to public education³⁷¹, to rationing of goods³⁷², to the same labour legislation and social security³⁷³,

³⁶³ *ibid*

³⁶⁴ *ibid*

³⁶⁵ D. Chow, *Three islands disappeared in the past year. Is climate change to blame?*, NBC News, 09 June 2019, available from: <https://www.nbcnews.com/mach/science/three-islands-disappeared-past-year-climate-change-blame-ncna1015316> (accessed 20 July 2020)

³⁶⁶ J. McAdam, *Climate change ‘refugees’ and international law*, 2008, available from <http://www.austlii.edu.au/au/journals/NSWBarAssocNews/2008/11.pdf> (accessed 20 July 2020)

³⁶⁷ Montevideo Convention on the Rights and Duties of Man (adopted 26 December 1933, entered into force 26 December 1934), article 1.

³⁶⁸ Kälin and Schrepfer 2012, p. 37

³⁶⁹ Convention Relating to the Status of Stateless Persons (adopted 28 September 1954, entered into force 06 June 1960), 360 UNTS 117, article 1.

³⁷⁰ *Idem*, article 4

³⁷¹ *Idem*, article 22

³⁷² *Idem*, article 20

³⁷³ *Idem*, article 24

to public relief³⁷⁴, and to artistic rights and intellectual property³⁷⁵. Stateless persons also have the right to receive a treatment not less favourable than that accorded to aliens generally in the same circumstances in relation to the rights of freedom of association³⁷⁶, freedom of movement³⁷⁷, to housing³⁷⁸, to ownership of property³⁷⁹, and to employment³⁸⁰. The protection provided by the Convention does not include the right of stateless persons to admission or stay on a third State but foresees the possibility of their naturalisation³⁸¹. Regarding the permanent submergence of SIDSs and the status of its citizens, Gillespie states that the

traditional human rights claims, when viewed from a SIDS perspective, may invoke key articles from the Universal Declaration of Human Rights, such as article 15, which provides that no one shall be denied their nationality³⁸².

Due to the absence of a nationality, stateless *persons are often seen as having no human rights and granted limited or no protection*. Weissbrodt affirms that

the human right not to be stateless, or the right to a nationality, is important because many states only allow their own nationals to exercise full civil, political, economic, and social rights within their territories. Further, nationality enables individuals to receive their nation's protection both domestically and internationally and allows a state to intercede on behalf of a national under international law³⁸³.

The UNHCR identifies the following situations as giving rise to statelessness: conflict of laws; transfer of territory; laws related to marriage; administrative practices; discrimination; laws related to registration of births; jus sanguinis; denationalization; renunciation of citizenship; and automatic loss of citizenship by operation of law³⁸⁴.

³⁷⁴ *Idem*, article 23

³⁷⁵ *Idem*, article 14

³⁷⁶ *Idem*, article 15

³⁷⁷ *Idem*, article 26

³⁷⁸ *Idem*, article 21

³⁷⁹ *Idem*, article 13

³⁸⁰ *Idem*, articles 17-19

³⁸¹ *Idem*, article 32

³⁸² Alexander Gillespie, *Small Island States in the Face of Climatic Change: The End of the Line in International Environmental Responsibility*, 22 UCLA J. ENVTL. L. & POL'Y 107, 122 (2004).

³⁸³ D. Weissbrodt 28, *The Human Rights of Stateless Persons*, Human Rights Quarterly v. 245, 2006.

³⁸⁴ *Nationality and Statelessness – A Handbook for Parliamentarians*, UNHCR, 2005, p. 3

Nothing is said about the disappearance of nations due to the rise of sea-levels and the advancement of negative impacts of climate change. McAdam and Saul affirm that the notion of statelessness ‘is premised on the denial of nationality through the operation of the law of a particular state, rather than through the disappearance of a State altogether’³⁸⁵. The authors claim that ‘statelessness means being without a nationality, not without a state’ and that States could still have their Statehood recognised by international community if the other requirements for such recognition are still complied with, meaning that citizens from a submerged SIDS could still be recognised as a national of a State. The main issue with citizens of SIDSs is therefore how to guarantee their admission and permanent stay in another State, and not if their will become stateless or not.

The displacement of persons who move from a SIDS that is in danger of disappearing could separate the population into various countries around the globe. It would be very difficult that a sole could admit and permit the permanent stay of a whole population of an endangered state³⁸⁶. This raises the question as to whether the disappearance of a State harms peoples’ right to determine their own political status and to determine its own form of economic, cultural and social development³⁸⁷. As a way of protecting the culture of the country, the Government of Kiribati purchased in 2014 a swath of land in Fiji for more the \$8 million in order relocate the entire Kiribatian population³⁸⁸.

Considering the gradual degradation of SIDSs’ territories due to the rising of sea-levels, the first movements of persons will be voluntary and maybe temporary and as the State becomes uninhabitable the displacement will become forced and permanent.

In both situations, the protection for persons displaced is neither efficient nor sufficient. The admission and stay of persons who voluntarily move from their place of origin to another State is not foreseen in international law and is highly dependent on the

³⁸⁵ J. McAdam and B. Saul, *Displacement with Dignity: Climate Change, Migration and Security in Bangladesh*, 53 German Yearbook of International Law 1, 2010.

³⁸⁶ A. Zellentin, *Climate Justice, Small Island Developing States and Cultural Loss*, Dordrecht, Springer Science+Business Media, 2015

³⁸⁷ ICCPR and ICESCR, article 1.

³⁸⁸ L. Caramel, *Besieged by the Rising Tides of Climate Change, Kiribati Buys Land in Fiji*, 01 July 2014, The Guardian, available from: <https://www.theguardian.com/environment/2014/jul/01/kiribati-climate-change-fiji-vanua-levu> (accessed 20 July 2020)

goodwill of the host State. On the same line, the forced movement of persons from a State that has disappeared due to the rise of sea-levels and its subsequent full submergence is not foreseen within any instruments of international law, which raises questions of whether the State continues to exist, whether the population will become stateless and which international law instruments provide protection of human rights to the persons who are forced to be displaced from submerged SIDSs.

3.4 Fourth Gap: The Absence of Provisions on the Protection of Cross-Border Displaced Persons due to Environmental Disasters

Hugo affirms that most displacements caused by environmental disasters are internal rather than international, and even though internal displacement is overwhelmingly more constant than international displacement, the latter is being increasingly significant, with environmental change increasingly influencing cross-border displacement³⁸⁹. While some persons that are displaced cross-border due to an environmental disaster are granted refugee status, those who do not fulfil the requirements established by the Refugee Convention are not offered international protection other than that offered by general international human rights instruments. The UNHCR has recognised that there is a legal gap for cross-border movers³⁹⁰.

The normative gap concerning the protection of cross-border EDPs was highlighted during the Nansen Conference. It was stressed that

the legal situation and the rights of persons on a foreign territory are only addressed through human rights law, but the specific needs of those migrating as a measure of adaptation or being displaced across borders are not taken into account. A set of status rights for such persons is missing in international law...³⁹¹

Even though general human rights law prohibits the forced return to a place if there is a serious threat to life and health, persons who are displaced across international

³⁸⁹ G. Hugo, Environmental concerns and international migration. *International Migration Review*, 30, 1996, pp.105-131.

³⁹⁰ Dialogue of the High Commissioner on Protection Challenges, *Protection Gaps and Responses*, 8-9 December 2010.

³⁹¹ Nansen Conference 2011

borders and are unable to return due to the negative impacts of climate change and environmental disasters are not provided with adequate protection by any international law instrument³⁹². Except for the provisions of humanitarian visas guaranteed by a few States, international law does not foresee the right to admission nor the right to stay for those persons displaced across international border due to an environmental disaster. Concerning the status of persons who move across borders and the prohibition of refoulment, Kalin and Schrepfer affirm that

Where people move across borders, they – according to present international law - have no right to admission, receive no specific status and can be sent back to the country of origin except where this would appear to be inhuman in light of the serious risks to the life and health of affected persons³⁹³.

Accounts of cross border displacement are becoming more common. Haque notes that environmental disasters in Bangladesh are the cause of long-term displacement to other States³⁹⁴. Piguet states that severe flooding caused the displacement of citizens from Mozambique to neighbouring countries of Zimbabwe and South Africa³⁹⁵. Kolmannskog mentions the displacement of citizens of Somalia to Kenya and Burundi to Rwanda due to severe droughts³⁹⁶. Persons from Honduras, Guatemala and other Central American countries moved temporarily to the USA after hurricane Mitch destroyed vast areas³⁹⁷.

Aside from the protection that certain States provide through temporary stay permits based on humanitarian reasons, and the protection offered by the Refugee Convention to those persons who fulfil every requirement for persons who fit the requisites established in the document, no other international law instrument explicitly

³⁹² *idem*

³⁹³ Kalin and Schrepfer 2012 p. 41

³⁹⁴ C. E. Haque, *Hazards in a fickle environment: Bangladesh* (Kluwer Academic Publisher, Dordrecht 1997)

³⁹⁵ É. Piguet, *Linking climate change, environmental degradation, and migration: a methodological overview*, Wiley Interdisciplinary Reviews: Climate Change, , 2010, pp. 517-524.

³⁹⁶ V. Kolmannskog, *Climate change, human mobility, and protection: initial evidence from Africa*, Refugee Survey Quarterly, 2010, pp. 103-119.

³⁹⁷ VOA, Immigrants From Honduras, Nicaragua Face US Deadline, 01 November 2017, available from: [https://reliefweb.int/report/united-states-america/immigrants-honduras-nicaragua-face-us-deadline#:~:text=Honduras%20and%20Nicaragua%20became%20TPS,Services%20says%20on%20its%20website.\(accessed 20 July 2020\)](https://reliefweb.int/report/united-states-america/immigrants-honduras-nicaragua-face-us-deadline#:~:text=Honduras%20and%20Nicaragua%20became%20TPS,Services%20says%20on%20its%20website.(accessed%2020%20July%202020))

addresses the right to admission and stay of persons forcibly displaced across international borders due to environmental disasters.

3.5 The Fifth Gap: There is no International Protection System for the Specific Needs of Environmentally Displaced Persons

Guterres confirms that national and regional initiatives have attempted to address the normative gaps in protection, but there is no coherent international framework to protect the rights of persons displaced across borders due to environmental disasters or other negative impacts of climate change³⁹⁸. Biermann and Boas affirm that persons displaced due to environmental disasters require a different kind of protection. They claim that it is possible to predict the effects that climate change may have on population centres, including on low-lying coasts and islands, so climate-related displacement can be planned and organised with the support of governments and other agencies³⁹⁹. There are currently no legal nor human rights norms that effectively protect the specific rights and address the protection needs of environmentally displaced persons. Kälin and Schrepfer state that

As climate change and disaster-related movement is likely to become more diverse and new patterns will emerge, the question arises as to whether and how present international law and existing systems of protection already address, or could be used to deal with these new movement patterns⁴⁰⁰.

In the Legal Considerations on Refugee Protection for People Fleeing Conflict and Famine Affected Countries, the UNHCR set out provisions for the international protection of persons and a framework for the application of the Refugee Convention and other regional instruments in cases of people fleeing from countries affected humanitarian crisis. The Considerations affirm that persons who are displaced by humanitarian crisis related to droughts and as a consequence of conflict or public disorder are in need of international protection⁴⁰¹. The ExCom Conclusion 103 also recognised the need for

³⁹⁸ *see* 5

³⁹⁹ Biermann and Boas 2010

⁴⁰⁰ Kälin and Schrepfer 2012, p.24

⁴⁰¹ Legal Considerations on Refugee Protection for People Fleeing Conflict and Famine Affected Countries, UNHCR, 2017.

international protection beyond the refugee status of persons who are forced to flee and unable to return in the context of environmental disasters and climate change⁴⁰².

The lack of consensus and international response may exacerbate the vulnerabilities of the persons affected by environmental disasters. Not only there are gaps in the normative framework, there are also an operational and institutional gap in regard to the protection of environmentally displaced persons. Currently, due to the lack of applicable international legal framework, no institutions are responsible for the protection of EDPs⁴⁰³.

While Refugee Law and general norms of IHRL may protect persons displaced due to environmental disasters, they were not adopted with a focus on the specific needs of environmentally displaced persons, so they do not present an effective measure for the protection of these persons. On the same note, even though the Guiding Principles on the Protection of IDPs explicitly states that persons displaced by environmental disasters that remain within their State are protected under the instrument, it is still a soft law instrument and the international response to the protection of IDPs is significantly different from the international response to the protection of refugees⁴⁰⁴.

In sum, the lack of provision on the protection of EDPs entails the application of the current international human rights framework, including refugee law, the guiding principles, and other general human rights instruments, which treat differently those who voluntarily move to avoid the effects of climate change and environmental disasters and those who are forcibly displaced by a disaster, even though these two groups were displaced due to the same cause and present the same needs. The absence of such provision also creates an operational and institutional gap, once States' have no legal obligations and no organisations have a mandate to protect EDPs.

4. The International Framework on Climate Change, Environmental Disasters, and Human Mobility

Kälin and Schrepfer have identified three obligations States have, according to international law, in the context of climate change and environmental disasters: 1 mitigate

⁴⁰² ExCom Conclusion No 103 LVI, A/AC.96/1021, 2005

⁴⁰³ Kälin and Schrepfer 2012, p.43

⁴⁰⁴ UNHCR 2006 d

the effects of climate change, specifically by reducing the emission of greenhouse gasses; 2. to create measures of adaptation to combat the negative effects of climate change; and 3. to protect and secure the rights and to address their humanitarian needs of persons affected by the negative impacts of climate change and⁴⁰⁵.

Etienne Piguet, when analysing possible solutions to address the gaps in international protection, identified two possibilities the international community can employ to rectify the issues of displacement in the context of environmental disasters. The first possibility is to increase international cooperation with the aim to share the burden of assistance and prevention in countries prone to the occurrence of environmental disasters; and the second possibility is that the international community should recognise that environmental factors have an influence on human migration and open emigration channels by offering mechanisms of subsidiary or temporary protection for persons displaced due to climate change and environmental disasters⁴⁰⁶.

With the increasing international concern over the negative impacts that climate change and environmental disasters have on persons and their human rights, measures of mitigation of climate change and reduction of risks and vulnerabilities related to disasters have been adopted by the international community.

4.1 Measures of the Mitigation of Climate Change Effects: UNFCCC, the Kyoto Protocol, and the Paris Climate Agreement

The United Nations Framework Convention on Climate Change was adopted with the objective of mitigating the effects of climate change by stabilising the emission of greenhouse gases into the atmosphere through proposing a cap in these emissions to the levels recorded in 1990⁴⁰⁷. The Convention adopted the precautionary principle, meaning States Parties have agreed to take measures to anticipate, prevent or minimise the causes of climate change and mitigate its adverse effects⁴⁰⁸. The ultimate goal of the

⁴⁰⁵ Kälin and Schrepfer 2012, pp. 17-21

⁴⁰⁶ E. Piguet, Research Paper No. 153 Climate change and forced migration, UNHCR, January 2008.

⁴⁰⁷ *What is the United Nations Framework Convention on Climate Change?*, UN Climate Change, available from: <https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change> (accessed 20 July 2020)

⁴⁰⁸ UNFCCC, A/RES/48/189, 20 January 1994, article 3 (3)

Convention is to prevent dangerous anthropogenic interference and to ‘allow the ecosystem to adapt naturally to climate change, to ensure that food production is not threatened, and to enable economic development to proceed in a sustainable manner’⁴⁰⁹. The Convention incorporates the principle of common but differential responsibilities, meaning developed countries must provide assistance to developing countries that are facing the adverse effects of climate change⁴¹⁰. States Parties have the obligation of adopting policies and measures of mitigation, reporting periodically their developments, and submitting an annual inventory of their greenhouse gas emissions⁴¹¹.

The Kyoto Protocol was adopted in order to operationalise the UNFCCC by obliging industrialised countries to limit and reduce the emission of greenhouse gases according to individualised targets⁴¹². Like the UNFCCC, the Kyoto Protocol was elaborated to assist countries in adopting measures of adaptation to the diverse effects of climate change and to aid in increasing their resilience to these effects⁴¹³. An amendment was made to the Protocol, called the Doha amendment, which set binding levels of reductions for 36 industrialised States and for the European Union⁴¹⁴ and established a rigorous monitoring, reviewing, and verification mechanism to record the precise amount of emissions and to ensure States’ accountability⁴¹⁵. An Adaptation Fund was created to help finance projects and programmes in developing countries that are parties to the Protocol and that are especially vulnerable to the effects of climate change⁴¹⁶.

The Paris Agreement was created following the adoption of the UNFCCC and aimed to ‘strengthen the global response to the threat climate change by keeping a global temperature rise below 2 degrees Celsius ... and to limit the temperature increase even further to 1.5 degrees Celsius’⁴¹⁷. The Agreement also aims to increase the adaptability of States to the negative impacts of climate change and to enhance support and assistance

⁴⁰⁹ *idem*, article 2

⁴¹⁰ *idem*, article 4 (1)

⁴¹¹ *idem*, article 4 (2)

⁴¹² Kyoto Protocol to the UNFCCC, 2033 UNTS 162, article 2

⁴¹³ *idem*

⁴¹⁴ Article 1 (A) Annex B to the Kyoto Protocol

⁴¹⁵ Kyoto Protocol to the UNFCCC, article 17.

⁴¹⁶ UNFCCC, *Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund*, Adaptation Fund Board, 2017.

⁴¹⁷ Paris Agreement, FCCC/CP/2015/10/Add.1, 30 November to 13 December 2015, article 2

for developing states⁴¹⁸. The agreement recognises the link between climate change and migration/displacement and requests the Warsaw International Mechanism in establishing a Task Force on displacement in such contexts⁴¹⁹.

During the 2010 United Nations Climate Change Conference, State Parties adopted the Cancún Agreement, in which they accorded to heavily reduce the emission of greenhouse gases, the creation of a mechanism for the protection of forests and an agreement framework for the reduction of deforestation, and the creation of the Green Climate Fund to help developing countries in the implementation of measures against the effects of climate change⁴²⁰. It was also recognised that there is a need to strengthen international cooperation in order to reduce the negative impacts and damages associated with extreme weather and slow onset events⁴²¹. The Agreement raised the possibility of States creating: 1. a climate risk insurance facility to address the negative impacted of severe weather events; 2. options in risk management, reduction and sharing; 3. approaches for addressing rehabilitation measures in relation to slow onset events; and 4. engagement avenues with stakeholders who possess relevant specialised expertise⁴²². Concerning the displacement of persons with regards to climate change, the agreement invites States to enhance their action on adaptation including by measures to understand climate induced displacement, migration and planned relocation at a national, regional, and international level⁴²³.

Regarding all the international instruments for the mitigation of the effects of climate change, certain points of convergencies are noticeable: 1. the primary responsibility of the State is repeatedly mentioned; 2. there is a request for the strengthening of international cooperation in mitigating the effects of climate change; 3. a call for the reduction of greenhouse gasses emission. Even though, there is a recognition

⁴¹⁸ *Idem*, article 7

⁴¹⁹ Platform on Disaster Displacement, *Recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change*, The Warsaw International Mechanism for Loss and Damage Associated with Climate Change Impacts, July 2018, available from: <https://unfccc.int/sites/default/files/resource/WIM%20TFD%20II.3%20Output.pdf> (accessed 20 July 2020).

⁴²⁰ Cancún Agreement, Report of the Conference of the Parties on its sixteenth session, 29 November to 10 December 2010 FCCC /CP/2010/7/Add.1.

⁴²¹ *Idem* III (A)

⁴²² *Idem*, II (28)

⁴²³ *Idem*, II (14) (f)

and general consensus that climate change and environmental disasters influence human mobility, none of the instruments provide any sort of protection system for those displaced due to environmental disasters and climate change.

The WMO affirms that there is a '20% chance that one of the next five years will be at least 1.5°C warmer than pre-industrial levels, but the chance is increasing with time'⁴²⁴, which increases the risk of potential environmental hazards and extreme weather events. Adopting measures for the mitigation of adverse effects of climate change is a valuable step to prevent an increase in the occurrence of extreme weather hazards and slow onset events, but it does not decrease pre-existing vulnerabilities. According to data generated by Statista, from 2011 to 2018, there was a constant increase in the number of environmental disasters from 352 to 415. In 2019, there was a decrease in this number, with only 409 environmental disasters having occurred⁴²⁵. Even with the reduction of greenhouse gasses emissions, environmental disasters are still bound to happen, and vulnerable persons are still likely to be affected and be forced to be displaced due to these disasters. Other than the assistance in adaptation measures and funds for the development of mitigation projects, there are no other foreseen protection mechanisms for endangered states, such as SIDSs, and for persons most affected by environmental disasters.

4.2 Measures for the Reduction of the Risks of Environmental Disasters: The Hyogo and Sendai Frameworks

The Hyogo Framework, even though it is a non-legally binding instrument, is an important tool for the prevention of displacement caused by environmental disasters and a relevant guideline for States on how to approach the creation of adaptation measures⁴²⁶. It recognises that disaster losses and damages are on the rise and that they have negative effects for the survival, dignity and livelihood of individuals⁴²⁷. The main objective of the

⁴²⁴ WMO Press Release, *New climate predictions assess global temperatures in coming five years*, available from: <https://public.wmo.int/en/media/press-release/new-climate-predictions-assess-global-temperatures-coming-five-years> (accessed 12 July 2020)

⁴²⁵ Statista, *Annual number of natural disaster events globally from 2000 to 2019*, available from: <https://www.statista.com/statistics/510959/number-of-natural-disasters-events-globally/> (accessed 12 July 2020)

⁴²⁶ *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*, World Conference on disaster Reduction, A/CONF.206/6.

⁴²⁷ *Idem*, I (a) (2)

framework is the ‘substantial reduction of disaster losses, in lives and in the social, economic and environmental assets of communities and countries’⁴²⁸. It identifies five key areas for action: 1. governance⁴²⁹; 2. risk identification, assessment, monitoring and early warning⁴³⁰; 3. knowledge management and education⁴³¹; 4. reduction of underlying risk factors⁴³²; and 5. preparedness and recovery⁴³³. The framework aims for disaster prevention, mitigation, and preparedness and reduction of vulnerabilities⁴³⁴; for the development of institutions that can contribute to building resilience⁴³⁵; for the implementation of risk reduction approaches⁴³⁶; for the promotion of food security in areas prone to drought, cyclones, floods, and other hazards⁴³⁷; and the implementation of social security mechanisms to assist the poor, elderly and the disabled and other populations affected by disasters⁴³⁸. The ECtHR has considered measures of reduction of risks and vulnerabilities a human rights obligation, meaning that if a disaster is foreseeable and the State is able to prevent it, the State has the duty to take appropriate measures to prevent ensuing threats to life and property of persons⁴³⁹.

The Sendai Framework, which followed the Hyogo Framework, was adopted with the aim to prevent new and reduce pre-existing disaster risk by reducing global disaster mortality, the number of people affected by environmental disasters, direct disaster economic loss, disaster damage and disruption of basic services, and by increasing the number of countries with risk reduction strategies, enhancing international cooperation, and increasing the availability of and access to multi-hazard early warning systems and disaster risk information⁴⁴⁰. The Sendai Framework is applicable to ‘the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters,

⁴²⁸ *Idem*, II (B) (11)

⁴²⁹ *Idem*, 14 (1)

⁴³⁰ *Idem*, 14 (2)

⁴³¹ *Idem*, 14 (3)

⁴³² *Idem*, 14 (4)

⁴³³ *Idem*, 14 (5)

⁴³⁴ *Idem*, (a)

⁴³⁵ *Idem*, (b)

⁴³⁶ *idem*, (c)

⁴³⁷ *Idem*, (d)

⁴³⁸ *Idem*, (g)

⁴³⁹ ECtHR, *Budayeva and others v. Russia*, App. nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02, Judgment of 20 March 2008

⁴⁴⁰ *Sendai Framework for Disaster Risk Reduction 2015-2030*, Third UN World Conference in Sendai, Japan, on 18 March 2015.

caused by natural or manmade hazards as well as related environmental, technological and biological hazards and risks⁴⁴¹. It is stated in the document that in a 10-year time frame, disasters have affected more than 1.5 billion people, with over 700.000 having lost their lives, 1.4 million being injured, and leaving 23 million people homeless⁴⁴². It is also evidenced that the peoples' exposure to the impacts of environmental disasters has increase faster than the decrease of vulnerability⁴⁴³ and this exposure creates a steady rise of risks and potential losses, with significant impact on economic, social, health and cultural aspects⁴⁴⁴. The instrument recognises that disaster risk reduction aims to 'protecting persons and their property, health, livelihoods and productive assets, as well as cultural and environmental assets, while promoting and protecting all human rights'⁴⁴⁵ and that SIDS are more vulnerable to and are more disproportionately affected by environmental disasters, and for that reason there is a need to strengthen international cooperation⁴⁴⁶ and to build resilience⁴⁴⁷. The Framework focuses on the affects that small-scale and slow onset disasters have on communities, households, and small and medium-sized enterprises and the percentages of losses⁴⁴⁸. Concerning persons displaced by environmental disaster, the Framework affirms that States are responsible for: 1. creating public policies to address issues of prevention or relocation of human settlements in disaster-prone zones⁴⁴⁹; 2. investing in disaster risk reduction including through the identification of areas that are safe for human settlement⁴⁵⁰; and 3. promoting disaster preparedness with the objective of ensuring rapid and effective response to disasters, including access to safe shelter, essential food and non-food relief supplies⁴⁵¹.

Similar to the measures of climate change mitigation, measures for the reduction of risks of and vulnerabilities to environmental disasters call for the primary responsibility of the State to prevent and reduce disaster risk and potential losses, and while they do

⁴⁴¹ *Idem*, item 15

⁴⁴² *Idem*, item 4

⁴⁴³ *idem*

⁴⁴⁴ *idem*

⁴⁴⁵ *Idem*, item III (19) (c)

⁴⁴⁶ *Idem*, item 41

⁴⁴⁷ *Idem*, item 42

⁴⁴⁸ *Idem*, item 4

⁴⁴⁹ *Idem*, Priority 2

⁴⁵⁰ *Idem*, Priority 3

⁴⁵¹ *Idem*, Priority 4 (h)

prevent some impacts of environmental disasters, in some situations people will still be forced to displace. Munich Re states that the overall world losses from environmental disasters totalled \$150 billion in 2019 which represented a drop from the \$186 billion in 2018⁴⁵². The number of fatalities due to environmental disasters also decreased from 15.000 in 2018 to 9.000 in 2019⁴⁵³. On the other hand, according to the IDMC, in 2019 24.855.000 persons were displaced due to environmental disasters, while in 2018 only 17.185.000 were displaced due to the same factors⁴⁵⁴. For those displaced by environmental disasters and for the most vulnerable States, such as SIDSs, there are no provisions on protection mechanisms nor rights in which they might rely on.

4.3 Measures for the Protection of Displaced Persons: The New York Declaration for Refugees and Migrants, the Global Compact for Refugees, and the Global Compact for Migration

The New York Declaration is a non-binding document adopted by the UN General Assembly in 2016. It recognises that natural disasters and climate change have an influence on human mobility⁴⁵⁵ and that migrants represent a positive contribution on growth and sustainable development⁴⁵⁶. The States that have adopted the declaration have acknowledged that large movements of people have political, economic, social, developmental, humanitarian, and human rights impacts, that mostly and disproportionately affect developing countries, and should be solved with a global approach⁴⁵⁷. There is a need for addressing the root causes of displacement in order to prevent mass influx of persons and find long-term and sustainable solutions. In creating the Declaration, States affirm that they will assist migrants in countries that are experiencing natural disasters and will consider developing non-binding guiding principles for the protection of persons who do not qualify for international protection as

⁴⁵² Insurance Information Institute, *Facts + Statistics: Global catastrophes*, available from: <https://www.iii.org/fact-statistic/facts-statistics-global-catastrophes> (accessed 08 July 2020)

⁴⁵³ *idem*

⁴⁵⁴ IDMC, *Total annual new displacements since 2003 (Conflict and violence) and 2008 (Disasters)*, available from: <https://www.internal-displacement.org/database/displacement-data> (accessed 08 July 2020)

⁴⁵⁵ New York Declaration for Refugees and Migrants (adopted 19 September 2016), A/RES/71/1, I (1)

⁴⁵⁶ *Idem*, item I (7)

⁴⁵⁷ *Idem*, item I (12)

refugees and may need assistance⁴⁵⁸. States were also committed in providing humanitarian assistance, such as health care, shelter, food, water and sanitation, as well as promoting tertiary education, training and vocational education for refugees⁴⁵⁹.

The Global Compact for Refugees, created by member states of the UN in 2018, recognises that ‘while not in themselves causes of refugee movements, climate, environmental degradation and natural disasters increasingly interact with the drivers of refugee movements’⁴⁶⁰ and that ‘external forced displacement may result from sudden-onset natural disasters and environmental degradation’⁴⁶¹. The GCR calls for States to share responsibility in cases of large-scale migration situations, through measures to support community hosting refugee populations, and acknowledges that people who are on the move, within and across borders, have basic needs and vulnerabilities that must be addressed. The aim of the Compact is to strengthen solutions for displacement, including in third countries, by creating measures of resettlement and complementary pathways, including by providing schemes on labour migration, student visas, family reunification, and humanitarian visas, as well as seek durable solutions and sustainable returns⁴⁶². In relation to displacement caused by environmental disasters, request for a concrete guidance in the interpretation of legal provision on criteria for refugee status and other forms of international protection was also presented in the Compact, which acknowledges that while persecution, violence, and conflict may interact with climate or disaster related events creating a reason for a claim of refugee status, not all persons displaced by environmental disasters fall within the legal definition of refugee⁴⁶³.

The Global Compact for Safe, Orderly, and Regular Migration, created in 2018, is an intergovernmental non-legally binding agreement created under the supervision of the UN following the adoption of the NY Declaration. The Compact is comprised of 23 objectives with the intention of better managing migration at a national, regional, and international levels and to minimise the drivers of migration⁴⁶⁴. The Compact also aims

⁴⁵⁸ *Idem*, item 51

⁴⁵⁹ *Idem*, item 80

⁴⁶⁰ Global Compact on Refugees (adopted 13 September 2018), A/73/12, item 8

⁴⁶¹ *Idem*, item 12

⁴⁶² *Idem*, item 95

⁴⁶³ *Idem*, item 8

⁴⁶⁴ Global Compact for Safe, Orderly, and Regular Migration (adopted 19 December 2018), A/RES/73/195.

to reduce risk and vulnerability and to enable migrants to enrich societies through their human, economic and social capacities⁴⁶⁵. The GCM also calls for States to provide options in the form of planned relocation and visa channel to cases in which returning to the country of origin is impossible⁴⁶⁶. Concerning persons displaced due to environmental disasters, the GCM mentions measures of mitigation and adaptation in relation to environmental degradation and the need of displaced persons for assistance⁴⁶⁷.

Although these documents confirm that displacement of populations can be caused by environmental disasters exacerbated by climate change and that States should address the challenges of migration and displacement in the context of sudden-onset and slow-onset disasters, there is no provision which addresses the legal gaps and provides legal protection and status for those displaced by environmental disasters that are not included in already existent international law.

4.4 Measures of Protection of Persons Affected by Environmental Disasters: The Draft Articles on the Protection of Persons in the Event of Disasters and the Nansen Initiative Developments

The Draft Articles on the Protection of Persons in the Event of Disasters was created by the International Law Commission, which later recommended the elaboration of a convention based on this specific draft⁴⁶⁸. The Draft Articles cover the rights and obligations of States affected by environmental disasters in relation to the persons within its territory or in a territory under its jurisdiction or control⁴⁶⁹. The purpose of the document is to facilitate the adequate and effective response to disasters and reduction of risks⁴⁷⁰. The document affirms that persons affected by disasters are entitled to the protection of their human rights⁴⁷¹ which must be ensured by the affected State through the provision of relief assistance⁴⁷². According to the Draft Articles, the affected State: 1.

⁴⁶⁵ *Idem*, item 12

⁴⁶⁶ *Idem*, objective 5 (21) (h)

⁴⁶⁷ *Idem*, objective 2, (h to l)

⁴⁶⁸ *Draft Articles on the Protection of Persons in the Event of Disasters*, A/RES/73/209, 14 January 2019.

⁴⁶⁹ *Idem*, article 2

⁴⁷⁰ *idem*

⁴⁷¹ *Idem*, article 5

⁴⁷² *idem*, article 10

shall reduce the risk of disasters, by measures of prevention, mitigation, and preparedness⁴⁷³; 2. has the duty to request external assistance when the national response capacity is not enough⁴⁷⁴; and 3. may consent to the provision of external assistance⁴⁷⁵ offered by third States, the United Nations, and other potential actors⁴⁷⁶. Finally, the document states that cooperation in the response to disasters includes measures of humanitarian assistance, coordination of relief actions and communications, availability of relief personnel, equipment and goods, and scientific, medical and technical resources⁴⁷⁷.

The Nansen Initiative is a State-led process which was envisioned as a short-term intervention to set-off an international discussion on the prioritisation of certain policies. The Initiative aims of building a consensus among States on key principles and elements to protect people displaced across borders in the context of disasters caused by natural hazards, including those linked to climate change⁴⁷⁸. Kälin affirms that the Nansen Initiative does not seek to create soft law but is a policy exercise that could create new obligations and a new framework on the basis of consultations with government representatives⁴⁷⁹. The first Nansen principle affirmed by the Initiative was that responses to climate and environmental displacement need to be guided by principles of human rights and international cooperation⁴⁸⁰. The Nansen Principles also confirms that: 1. States have the primary duty to protect their population, including the displaced or those at risk of displacement⁴⁸¹; 2. when national capacity is limited, regional and international cooperation should support action at national level by preventing displacement or protecting people and communities affected by displacement and finding durable solutions⁴⁸²; 3. States should ensure the adequate implementation and operationalisation

⁴⁷³ *Idem*, article 9

⁴⁷⁴ *Idem*, article 11

⁴⁷⁵ *Idem*, article 13

⁴⁷⁶ *Idem*, article 21

⁴⁷⁷ *Idem*, article 8

⁴⁷⁸ The Nansen Initiative, 'Towards a Protection Agenda for People Displaced Across Borders in the Context of Disasters and the Effects of Climate Change', available from: <https://www.nanseninitiative.org/secretariat/> (accessed 12 July 2020)

⁴⁷⁹ W. Kälin, From the Nansen Principles to the Nansen Initiative, *Forced Migration Review*, 2012, pp. 48–49.

⁴⁸⁰ Nansen Conference, principle I

⁴⁸¹ *Idem*, principle II

⁴⁸² *idem*, principle IV

of the Guiding Principles on Internal Displacement⁴⁸³; 4. there is a need for an approach at the international level in order to meet the needs of peoples displaced by sudden-onset environmental disasters⁴⁸⁴; and 4. national and international policies need to be implemented based on non-discrimination, consent, empowerment, participation and partnership⁴⁸⁵. Measures for prevention⁴⁸⁶ of disasters and preparedness⁴⁸⁷ in disasters response are also cited within the principles. The Principle also explicitly states that existent norms of international law should be fully utilised, and the normative gaps should be addressed⁴⁸⁸. An Agenda for the Protection of Cross-Border Displaced Persons in the Contest of Disasters and Climate Change was proposed by the Nansen Initiative and endorsed by over one hundred nations⁴⁸⁹. The Agenda is a result of global consultations and outlines steps to address in-country and cross-border displacement in the context of environmental disasters and effective practices to reduce vulnerability and build resilience to disaster displacement risk⁴⁹⁰. In spite of the fact that the Agenda outlines steps for the protection of persons that move cross-border due to environmental disasters, it does not aim to create new or expand pre-existent legal obligations under international refugee and human rights law⁴⁹¹, meaning the gaps in international protection are not resolved.

5. Addressing the Protection Gap

As established previously, both States and international organisations have recognised that environmental disasters and the negative impacts of climate change influence on human mobility and can cause the forced displacement of persons. The existence of normative gaps for the protection of persons that are forced to displaced due to disasters has also been acknowledged, with António Guterres confirming that the protection gaps are caused by the nature of the displacement, especially in the context of

⁴⁸³ *Idem*, principle VIII

⁴⁸⁴ *Idem*, principle IX

⁴⁸⁵ *Idem*, principle X

⁴⁸⁶ *Idem*, principle V

⁴⁸⁷ *Idem*, principle VI

⁴⁸⁸ *Idem*, principle VII

⁴⁸⁹ McAdam 2011

⁴⁹⁰ Nansen Protection Agenda, item 12

⁴⁹¹ *Idem*, item 14

large-scale mixed movements related to environmental disasters⁴⁹². The IASC's Operational Guidelines and Field Manual on Human Rights Protection in Situations of Natural Disaster asserts that persons who are displaced by environmental disasters must be provided with international protection and assistance⁴⁹³.

In order to address the protection gaps, it was suggested by experts during the Bellagio Roundtable that States should develop in conjunction with the UNHCR a guiding framework in order to develop a more coherent and consistent global approach to the protection of rights of persons displaced across international border due to sudden-onset disasters⁴⁹⁴. Following the same line, the Nansen Initiative has observed that the normative gaps in the protection of cross border displacement cause by environmental disasters must be addressed, either by creating a guiding framework or instrument that promotes the protection of the rights of EDPs⁴⁹⁵. Hans van Ginkel has also affirmed that, although climate displacement is a highly complex issue, 'we should prepare now, however, to define, accept and accommodate this new breed of refugee within international framework'⁴⁹⁶. The Special Rapporteur on the Human Rights of Internally Displaced Persons also defended that the persons affected by climate change need substantial protection and humanitarian assistance, since displacement due to environmental disasters creates new or exacerbates pre-existing vulnerabilities⁴⁹⁷.

Considering that the international community has already recognised that persons affected by environmental disasters are in need of international protection and that there are legal gaps in international law concerning the status of persons displaced by environmental disasters, a new framework must be created in order to outline the obligations of States and offer an effective protection system for persons displaced due to environmental disasters. Even though various initiatives have been discussed by the international community in order to ensure the protection of environmentally displaced

⁴⁹² See Guterres Statement 2011

⁴⁹³ *Human Rights and Natural Disasters: Operational Guidelines and Field Manual on Human Rights Protection in Situations of Natural Disaster*, Brookings-Bern Project on Internal Displacement, 2008, available from: <https://www.refworld.org/pdfid/49a2b8f72.pdf> (accessed 03 July 2020)

⁴⁹⁴ Summary of Deliberations on Climate Change and Displacement, item 12, available from: <https://www.unhcr.org/4da2b5e19.pdf> (accessed 02 July 2020)

⁴⁹⁵ *Idem*, item 23

⁴⁹⁶ United Nations University 2005

⁴⁹⁷ See 79

persons, there is a lack of consensus in the academic community about which measure would ensure the most effective protection mechanism for EDPs. While some authors have claimed that a new treaty and protection regime for environmentally displaced persons would be the best and most effective measure, others have affirmed that simply extending the definitions of refugees or IDPs or adapting the UNFCCC would suffice.

5.1 First Solution for the Protection Gap: Extend the Concept of Refugees through a new Additional Protocol to the 1951 Convention

The first solution proposed is to expand the concept of refugees to include environmentally displaced persons and provide them with the same protection granted to refugees.

According to Goodwin-Gill, ‘the main purpose of any definition or description of the class of refugees is to facilitate, and to justify, aid and protection’. The UNHCR provides international protection for persons displaced by environmental disasters only in the cases of droughts and famine, where they are linked to situations of persecution or armed conflict rooted in racial, ethnic, religious, or political divides, or disproportionately affect particular groups⁴⁹⁸. According to the UNHCR, the GCR should be analysed contextually, meaning its paragraphs 61 and 63 should be read in conjunction to state that ‘international and regional obligations’ are to be applied ‘in a way which avoids protection gaps and enables all those in need of protection to find and enjoy it’⁴⁹⁹. At the same time, the GCR and the others international documents related to the displacement of populations stress the importance of carefully and correctly applying the international protection criteria in cases of persons displaced due to climate change or environmental disasters.

The expansion of the concept of refugees to include persons forcibly displaced due to environmental disasters and climate change was proposed by the Maldives through

⁴⁹⁸ *The refugee concept under international law*, UNHCR, 2018, available from: <https://www.unhcr.org/events/conferences/5aa290937/refugee-concept-under-international-law.html> (accessed 10 July 2020)

⁴⁹⁹ *Climate change and disaster displacement in the Global Compact on Refugees*, UNHCR, Available from: <https://www.unhcr.org/5c9e13297.pdf> (accessed 10 July 2020)

an amendment to the Convention in 2006⁵⁰⁰. The proposal was opposed by the UNHCR, which argued that an expansion would compromise the existent protection standards⁵⁰¹. Bangladesh also supported amending the convention during the 2009 COP⁵⁰². Following the same line, the Australia's Labour Party has proposed an international coalition to accept environmentally displaced persons from the Pacific as a response to the Government's rejection of the concept of 'climate refugee'⁵⁰³. In 2011, African States received persons fleeing from Somalia's severe droughts based on the expended concept of refugee contained in the OUA Convention⁵⁰⁴. Kenya, for example, has previously received persons fleeing from places affected by environmental disasters as 'refugees on humanitarian grounds'⁵⁰⁵.

António Guterres, a former UN High Commissioner for Refugees, claimed that any initiative to modify the current definition of refugee would risk a renegotiation of the 1951 Convention and that would possibly lower the protection standards and even undermine the international refugee protection regime⁵⁰⁶. McGregor also affirms that the use of the extended definition of refugee seems unfeasible due to the likely opposition of receiving States⁵⁰⁷. According to Halstead, States are largely unwilling to provide protection and refugee status to persons who are displaced due to environmental disasters or climate change, nevertheless Gregory McCue claims that refugee law must evolve in order to provide protection for those in need⁵⁰⁸. Shacknove claims that a narrow concept of refugee contributes to the denial of international protection to persons in dire need of assistance, however an overly inclusive definition of refugee will 'financially exhaust

⁵⁰⁰ F. Gemmene and P. Brücker, From the Guiding Principles on Internal Displacement to the Nansen Initiative: What the Governance of Environmental Migration Can Learn from the Governance of Internal Displacement, *International Journal of Refugee Law*, 2015, Vol. 27, No. 2, pp. 245–263

⁵⁰¹ R. Balesh, *Tuvalu and Kiribati as Case Studies Illustrating the Need for a Climate Refugee Treaty*, available from: <https://lawpublications.barry.edu/cgi/viewcontent.cgi?article=1042&context=ejej> (accessed 02 July 2020)

⁵⁰² See 96

⁵⁰³ F. Renaud, J. J. Bogardi, O. Dun, K. Warner, *Control, Adapt or Flee: How to Face Environmental Migration?*, UNU-EHS, 2007.

⁵⁰⁴ McAdam 2016

⁵⁰⁵ McAdam 2011, p. 1537

⁵⁰⁶ A. Guterres, *Climate change, natural disasters and human displacement: a UNHCR perspective*, available from <https://www.unhcr.org/4901e81a4.pdf> (accessed 02 July 2020)

⁵⁰⁷ McGregor 1993, p. 162

⁵⁰⁸ E. Halstead, Citizens of Sinking Islands: Early Victims of Climate Change *Indiana Journal of Global Legal Studies* Vol. 23, No. 2 (Summer 2016), pp. 819-838

relief programmes and impute the credibility of the refugee's privileged position among host populations, whose support is crucial for the viability of international assistance programmes'⁵⁰⁹.

In sum, whilst there are some proposals to amend the Refugee Convention to allow for EDPs to receive the same protection provided to refugees, there is a concern on whether the amendment would risk a new round of negotiations that could jeopardise the protection already provided by the Convention by adding new States' obligations.

5.2 Second Solution for the Protection Gap: A New Declaration or Convention on the Rights of Environmentally Displaced Persons

In order to address the specific needs of environmentally displaced persons and to provide an effective protection system, the creation of a new convention or declaration is needed. The creation of a legally binding instrument, such as a Convention, or of a non-binding instrument, such as a declaration or a guideline, would not only set the rights of environmentally displaced persons but also would clarify the responsibilities and obligations of States towards the displaced persons.

Some authors have advocated for the creation of a new legally binding international instrument. Docherty and Giannini proposed a stand-alone legally binding convention which clearly defines who are considered 'climate change refugees' and is based on providing assistance and protection for those who fit the proposed concept. The Docherty and Giannini' Convention would rely on shared responsibility and international cooperation for the provision of protection⁵¹⁰. The authors go on to establish nine components which ensure the efficacy of the new convention: i. standards for climate change refugee status determination; ii. human rights protection; iii. humanitarian aid; iv. host state responsibility; v. home state responsibility; vi. International cooperation and assistance; vii. a global fund; viii. a coordinating agency; and ix. a body of scientific experts⁵¹¹. Falstrom has proposed the creation of a Convention on the Protection of

⁵⁰⁹ Shacknove, 'Who is a refugee?'

⁵¹⁰ B. Docherty and T. Giannini, 'Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees' (2009) 33 *Harvard Environmental Law Review* 349, 350, 373.

⁵¹¹ *Idem*

Environmentally Displaced Persons, document which the author claims to provide a ‘balance between affirmative obligations for signatory states and the rights that it grants to individuals’⁵¹². A Draft Convention on the International Status of Environmentally Displaced Persons was also proposed by the Faculty of Law and Economic Science at the University of Limoges, which aims to establish the rights of EDPs and the obligation of States based on the principle of solidarity⁵¹³.

The creation of a legally binding instrument has been a source of discussion and disagreement within the international community. Kälin and Schrepfer, for example, claim that negotiating a legally binding convention would be extremely difficult, mainly due to the incompatible individual interests of States⁵¹⁴. According to McAdam, the discussion over the creation of a convention or another international policy diverts the attention from more immediate responses

that may enable people to remain in their homes for as long as possible (which is the predominant wish among affected communities), or to move safely within their own countries, or to migrate in a planned manner over time⁵¹⁵.

Roberta Cohen, who assisted in the creation of the Guiding Principles, argues that ‘states are more willing to accept expert principles if they are not asked to assume new obligations, but rather to understand better how to apply their existing obligations in new situations’, so for the lack of political will of States in assuming new obligations, the time constraints, and to the overlap with other international law instruments the Guiding Principles were not conferred binding force⁵¹⁶.

In the NY Declaration, States have confirmed the intention and willingness in developing non-binding guiding principles and voluntary guidelines on migrants who do

⁵¹² D.Z. Falstrom, ‘Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment’ (2001) 6 Colorado Journal of International Environmental Law and Policy 2–32

⁵¹³ Draft Convention on the International Status of Environmentally-Displaced Persons, Faculty of Law and Economic Science at the University of Limoges 2013, available from: <https://cidce.org/wp-content/uploads/2016/08/Draft-Convention-on-the-International-Status-on-environmentally-displaced-persons-third-version.pdf> (accessed 20 July 2020)

⁵¹⁴ Kälin and Schrepfer 2012

⁵¹⁵ McAdam 2011, p.5

⁵¹⁶ R Cohen, ‘Lessons Learned from the Development of the Guiding Principles on Internal Displacement’, Institute for the Study of International Migration, ‘The Crisis Migration Project’ Working Paper (Georgetown University 2013), 13.

not qualify for international protection as refugees who need assistance⁵¹⁷. The development of a guiding framework or instrument for the protection of persons displaced due to environmental disasters was also proposed in the Chairperson Summary of the Nansen Conference⁵¹⁸. Kälin and Schrepfer believe a soft law instrument is more appropriate to address the gaps in protection of EDPs. While States have indicated, to some extent, the willingness to negotiate an instrument for the protection of EDPs, the author affirms that a soft law instrument would be flexible enough to allow States to experiment with new ideas and with a human rights-based approach⁵¹⁹. While a soft law instrument is not legally-binding on States, it is able to balance State's international obligations and their own interests. According to Kälin and Schrepfer adopting a soft law instrument 'can maintain a large degree of freedom of action while improving the basis for international co-operation'⁵²⁰.

In sum, although the creation of a new convention on the protection of EDPs would provide the most effective protection based on EDPs specific needs while binding States Parties to comply with its norms, the elaboration of a new binding instrument is contested as the negotiation for the approval of such instrument would be time-consuming and it would be hard to persuade States to assume new obligations. A non-binding instrument would, for those reasons, be advisable, however it would not compel States to comply with its norms, leaving it to the discretionary powers of State to follow or not the instrument.

5.3 Third Solution for the Protection Gap: Amending the UNFCCC Framework

Biermann and Boas suggested the creation of an attachment to the UNFCCC via a protocol on the Recognition, Protection and Resettlement of Climate Refugees. The proposed protocol would be based on five principles: i. Planned Relocation and Resettlement; ii. Resettlement instead of Temporary Asylum; iii. Collective Rights for

⁵¹⁷ NY Declaration, item 52.

⁵¹⁸ Chairperson Summary, item 23

⁵¹⁹ Kälin and Schrepfer 2012, p. 71

⁵²⁰ *Idem*

Local Populations; iv. International Assistance for Domestic Measures; and iv. International Burden Sharing⁵²¹. The idea of the protocol is to shift the framework from emergency response and disaster relief to planned and voluntary relocation and resettlement, thus creating a permanent solution and avoiding temporary asylum⁵²². The authors' preference for an amendment of the UNFCCC legal instrument would not require an amendment to the Refugee Convention, once the definition of refugee provided by the UNFCCC would only serve for the purpose of the protocol and its special regime, not interfering with the protection system established by the Refugee Convention⁵²³.

The authors affirmed that

Integration of the protection of climate refugees into a broader adaptation protocol could allow for a more holistic adaptation planning in regions at risk, which will include in many cases a combination of adaptation and voluntary resettlement programmes⁵²⁴.

The proposed protocol includes a list of populations that are in need of relocation or are threatened by having to relocate due to negative impacts of climate change which would trigger the protection of specific rights and the use of support mechanisms, including financial support and resettlement for persons displaced by environmental disasters, and the possibility of purchasing new lands in the cases of disappearing SIDSs.

The adoption of a new UNFCCC protocol was also defended by the NGO Equity and Justice Working Group of Bangladesh. The organisation affirmed that a new protocol is needed in order to 'ensure social, cultural and economic rehabilitation of the "climate refugees" through recognising them as *Universal Natural Persons*'⁵²⁵.

5.4 Fourth Solution for the Protection Gap: Creation of Regional Protection Systems

⁵²¹ Biermann and Boas 2010

⁵²² *idem*

⁵²³ *ibid*

⁵²⁴ *ibid*

⁵²⁵ EquityBD, *Climate Change Induced Forced Migrants: in need of dignified recognition under a new Protocol*, 2009, available from: https://seors.unfccc.int/applications/seors/attachments/get_attachment?code=FTUOSD04NT7HQ2I89W W5QNR2OLXC2DQ9 (accessed 20 July 2020)

Finally, the normative gaps in the protection of environmentally displaced persons may be amended by the creation of bilateral/multilateral agreements, regional instruments. During the Global Consultations by the Nansen Initiative, a few countries noted that a global approach is needed to address the current challenges in displacement. Brazil, for example, noted that the protection of persons displaced by frequent natural hazards must be ensured based on a strong sense of international solidarity⁵²⁶. Yet, the Global Commission on International Migration has stated in its 2005 Report that:

the reality is that most states have been unwilling to commit fully to the principle of international cooperation in the area of international migration, because migration policy is still mainly formulated at the national level⁵²⁷.

The Nansen Protection Agenda has observed that the existing national mechanisms for the protection of cross-border environmentally displaced are largely unpredictable because ‘they rely on the discretionary power of the relevant authorities as opposed to a legal obligation to admit or permit the stay of disaster displaced persons’⁵²⁸ and that States should consider harmonising measures at a sub-regional and regional levels, which would facilitate international cooperation and solidarity⁵²⁹. The Agenda also identifies four effective practices that States should consider concerning the cross-border displacement of persons in the context of disasters: 1. include cross-border displacement scenarios in bilateral or regional instruments; 2. review and harmonise existing legal frameworks at the regional and national level with respect to receiving cross-border disaster displaced persons; 3. consider developing new legislation, in case norms are non-existing or inadequate; and 4. amend existing policies to clearly identify cross-border disaster-displaced persons and permit their travel, admission, and stay⁵³⁰.

⁵²⁶ Nansen Initiative, *Global Consultation Conference Report*, available from <https://www.nanseninitiative.org/wp-content/uploads/2015/02/GLOBAL-CONSULTATION-REPORT.pdf> (accessed 20 July 2020)

⁵²⁷ *Migration in an Interconnected World: New Directions for Action*, Report of the Global Commission on International Migration, October 2005, p. 66, available from: https://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/policy_and_research/gcim/GCI_M_Report_Complete.pdf (accessed 02 July 2020)

⁵²⁸ *Idem*, Item 58

⁵²⁹ *Ibid*, Item 59

⁵³⁰ Nansen Protection Agenda, Item 43.

By the means of international and regional documents, States have demonstrated willingness to create regional and sub regional mechanisms for the protection of EDPS. The EU's Treaty of Lisbon affirm that the European Union shall define common policies and actions in order to 'assist populations, countries and regions confronting natural or man-made disasters'⁵³¹. Although, the treaty explicitly asserts that EU States shall create mechanisms of assistance of persons and States affected by disasters, it does not envision the admission into and stay of environmentally displaces persons in the country. The European Commission's white paper on 'Adapting to Climate Change: A Framework for EU Action' recognises that the effects of climate change influence migratory flows, which should be considered in the EU policies on security, development and migration⁵³². The Brazil Declaration and Plan of Action recognised the 'challenges posed by climate change and natural disasters, as well as by the displacement of persons across borders that these phenomena may cause in the region'⁵³³. States that participated in the creation of the declaration requested the UNHCR to 'prepare a study on the subject with the aim of supporting the adoption of appropriate national and regional measures, tools and guidelines, including response strategies for countries in the region, contingency plans, integrated responses for disaster risk management and humanitarian visa programmes, within the framework of its mandate'⁵³⁴.

In the GCR, States recognised the importance of disaster preparedness measures and that they should be created to include 'global, regional, sub regional and national early warning and early action mechanisms'⁵³⁵. The GCM proposed the creation of a harmonised approach at sub regional and regional level to address the vulnerabilities of persons affected by environmental disasters and to ensure they receive humanitarian assistance that meet their essential needs and that their rights are fully respected and

⁵³¹ Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community (adoption 13 December 2007, entered into force on 1 December 2009), 2007/C 306/01, Article 10 A (g).

⁵³² *White Paper - Adapting to climate change: Towards a European framework for action*, Commission of the European Communities, COM(2009) 147, Brussels, 01 April 2009, Available from: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0147&from=EN>

⁵³³ *Brazil Declaration and Plan of Action*, 3 December 2014, p. 3, available at: <https://www.refworld.org/docid/5487065b4.html> (accessed 22 July 2020)

⁵³⁴ *Idem*, p. 18

⁵³⁵ GCR, item 52

protected⁵³⁶. During the Bellagio Seminar, even though States recognised that the impacts of environmental disasters might exceed the capacity of one single national jurisdiction and that organisations such as the UNHCR, IOM and ILO can play key roles⁵³⁷, they showed preference for the creation of domestic⁵³⁸ and regional⁵³⁹ approaches and protection mechanisms. In the Dialogue of the High Commissioner on Protection Challenge, States again acknowledged their preference for ‘regional arrangements and regional preparedness, particularly with regard to sudden onset disasters’, by arguing that normative gaps should be resolved based on existing national and regional practices⁵⁴⁰.

Not only States have addressed their willingness to create regional mechanisms, but international organisations have asseverated the necessity of States in elaborating these mechanisms as well. The UN One Humanity Declaration highlights the need of States to ‘prepare for cross-border displacement owing to disasters and climate change’, stating that national legislation and regional cooperation frameworks must be put in place to provide admission and protection for persons who are displaced in the context of climate change and environmental disasters, with a particular focus on ensuring the citizens of SIDSs the protection of their cultural identity and legal citizenship⁵⁴¹. The UN Agenda for Humanity also recommends States to prepare for cross-border displacement due to disasters and climate change by adopting an ‘appropriate international framework, national legislation and regional cooperation frameworks by 2025 to ensure countries in disaster-prone regions are prepared to receive and protect those displaced across borders without refugee status’⁵⁴².

⁵³⁶ GCM, objective 2

⁵³⁷ *Summary of Deliberations on Climate Change and Displacement*, UNHCR Bellagio Seminar, para. 34 and 38, available online at: <http://www.unhcr.org/refworld/docid/4d9f22b32.html> (Accessed 20 July 2020).

⁵³⁸ *Idem*, para 17

⁵³⁹ *Idem*, para 16

⁵⁴⁰ High Commissioner’s Dialogue on Protection Challenges, *Protection Gaps and Responses* (8-9 December 2010), Breakout Session 1: Gaps in the International Protection Framework, and in Its Implementation, Report by the Co-Chairs: H.E. Ambassador Darlington Mwape, Permanent Representative, Zambia, Mr. Volker Türk, Director, Division of International Protection, UNHCR, 4, available online at <http://www.unhcr.org/4d09e47a9.pdf> (accessed 20 July 2020).

⁵⁴¹ One Humanity: Shared Responsibility - Report of the Secretary-General for the World Humanitarian Summit (A/70/709), 09 February 2016, available from: <https://reliefweb.int/report/world/one-humanity-shared-responsibility-report-secretary-general-world-humanitarian-summit> (accessed 20 July 2020)

⁵⁴² UN SG Agenda for Humanity, p. 7.

McAdam notes that the creation of bilateral and regional economic migration systems would not only provide durable solutions for EDPs and address environmental degradation but would also help to address underlying problems relating to scarce resources, overcrowding, and rapid urbanization⁵⁴³.

Although there is a recognition that persons displaced due to environmental disasters are in need of international protection and that States are willing to create national and regional mechanisms and legal frameworks concerning disaster and climate change displacement, very few countries and regions have created harmonising legislation and policies creating protection mechanisms for EDPs and recognising their admission and stay permits into the country.

Conclusion

International human rights law instruments were not created envisioning the effects that climate change and environmental disasters have on human mobility. The lack of provisions on the protection of persons who are displaced due to environmental disasters causes the application of different legal instruments that provide different levels of protection and secure different rights for persons displaced due to the same reason. Refugee law is applicable to persons who are forcibly displaced cross-border due to environmental disasters who fit the requirements of the Refugee Convention; the Guiding Principles on Internal Displacement is applicable to environmentally displaced persons who remain within the territory of their country of origin; and the Convention on Migrant Workers may be applicable once the requirements are met. EDPs who are displaced across international borders and do not meet the requirements of the Refugee Convention, who are permanently displaced, or who are from a SIDS that are in danger of disappearing are not offered any type of international protection. After ascertaining that there are gaps in international law that leave out persons displaced due to environmental disasters from obtaining international protection, it becomes clear that there is a need for the creation of a new international legal framework that establishes an effective mechanism for the protection of these persons. Even though there is a recognition that EDPs are in need of protection and that resolving the issue of displacement requires international cooperation,

⁵⁴³ McAdam 2011.

States have yet to adopt a measure of protection for those who fall into the protection gaps within the international framework. A new Convention would provide an effective protection system to EDPs based on their specific needs, but States are unwilling to bear more obligations. As a regional approach is more accepted by the international communities, it is of vital importance that the international community provide assistance in the protection of EDPs, once climate change and environmental disasters have more negative impacts in certain regions of the world and since displacement occurs more often to neighbouring countries, which create a bigger burden on very few States.

Bibliography

AALCO, *Bangkok Principles on the Status and Treatment of Refugees ("Bangkok Principles")*, 31 December 1966.

Albala-Bertrand, J.M., *Natural disaster situations and growth: A macroeconomic model for sudden disaster impacts*, 1993.

Albert, S., et al, *Interactions between sea-level rise and wave exposure on reef island dynamics in the Solomon Islands*, 2016, available from: <https://iopscience.iop.org/article/10.1088/1748-9326/11/5/054011/pdf> (accessed 11 May 2020)

African Union, *African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa ("Kampala Convention")*, 23 October 2009, available at: <https://www.refworld.org/docid/4ae572d82.html> (accessed 6 July 2020)

Aliens Act, 301/2004, 2004, available at: <https://www.finlex.fi/en/laki/kaannokset/2004/en20040301.pdf> (accesses 6 February 2020)

Aliens Act 2005:716, 2005, available at: https://www.government.se/contentassets/784b3d7be3a54a0185f284bbb2683055/aliens-act-2005_716.pdf (accessed 6 February 2020)

Almaty Declaration, Almaty, Kazakhstan, 16 March 2011

Ammassari, S., *Migration and Development: Factoring Return into the Equation*, Newcastle upon Tyne, Cambridge Scholars Publishing, 2009.

Argentina: *Reglamentación de la Ley de Migraciones No. 25.871 y sus modificatorias*, Decreto 616/2010, available at: <https://www.refworld.org/docid/4be2de512.html> (accessed 6 February 2020)

Asthana, V., *The Potential Impacts of Sea-Level Rise on India*, 1993.

Balesh, R., *Tuvalu and Kiribati as Case Studies Illustrating the Need for a Climate Refugee Treaty*, available from: <https://lawpublications.barry.edu/cgi/viewcontent.cgi?article=1042&context=ejej> (accessed 02 July 2020)

Bates, D., *Environmental Refugees? Classifying Human Migrations Caused by Environmental Change*, 2002.

Black, R., *Refugees, Environment and Development*, New York, Routledge, 1998.

Black R., Bennett S.R.G., Thomas S.M, and J.R. Beddington, *Climate change: Migration as Adaptation*, Nature, 2011, available from: <https://www.nature.com/articles/478477a.pdf> (accessed 20 July 2020)

Brazil Declaration and Plan of Action, 3 December 2014, available at: <https://www.refworld.org/docid/5487065b4.html> (accessed 22 July 2020)

Brazil: Lei de Imigração, Lei N° 13.445, 24 May 2017.
Decreto 9.199, 20 November 2017

Brookings-Bern Project on Internal Displacement, *Human Rights and Natural Disasters: Operational Guidelines and Field Manual on Human Rights Protection in Situations of Natural Disaster*, 2008, available from: <https://www.refworld.org/pdfid/49a2b8f72.pdf> (accessed 03 July 2020).

Bruckner, M., *Effectively addressing the vulnerabilities and development needs of small island developing States*, CDP Background Paper No. 17 ST/ESA/2013/CDP/17, available from: <https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/CDP-bp-2013-17.pdf> (accessed 20 July 2020)

Canada: Immigration and Refugee Protection Regulations (2002) SOR/2002-227, available at: <https://laws-lois.justice.gc.ca/eng/regulations/SOR-2002-227/section-230.html> (accessed 6 February 2020)

Cancún Agreement, Report of the Conference of the Parties on its sixteenth session, 29 November to 10 December 2010 FCCC /CP/2010/7/Add.1.

Caramel, L., *Besieged by the Rising Tides of Climate Change, Kiribati Buys Land in Fiji*, 01 July 2014, The Guardian, available from: <https://www.theguardian.com/environment/2014/jul/01/kiribati-climate-change-fiji-vanua-levu> (accessed 20 July 2020)

Cardy, W. F. G., *Environment and Forced Migration a Review*, 2018.

Castles, S., New Issues in Refugee Research, Working Paper No. 70 Environmental Change and Forced Migration: Making Sense of the Debate, UNHCR, 2002.

Chow, D., *Three islands disappeared in the past year. Is climate change to blame?*, NBC News, 09 June 2019, available from: <https://www.nbcnews.com/mach/science/three-islands-disappeared-past-year-climate-change-blame-ncna1015316> (accessed 20 July 2020)

CIREFCA, *Principles and Criteria for the Protection of and Assistance to Central American Refugees, Returnees and Displaced Persons in Latin America*, January 1990.

Cohen, R., *Lessons Learned from the Development of the Guiding Principles on Internal Displacement*, Institute for the Study of International Migration, The Crisis Migration Project Working Paper, Georgetown University, 2013.

Collins, M. et al, Long-term Climate Change: Projections, Commitments and Irreversibility, in *Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate*, Cambridge, Cambridge University Press, 2013.

Commission of the European Communities, *White Paper - Adapting to climate change: Towards a European framework for action*, , COM(2009) 147, Brussels, 01 April 2009, Available from: <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009DC0147&from=EN>

Convention Relating to the Status of Refugees (adopted 28 July 1951, entered into force 22 April 1954), 189 UNTS 137.

Cooper, J. B., Environmental Refugees: Meeting the Requirements of the Refugee Definition, *New York University Environmental Law Journal*, v. 6, 1998.

Council of the European Union, *Directive 2011/95/EU of the European Parliament and of the Council of 13 December 2011 on standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for refugees or for persons eligible for subsidiary protection, and for the content of the protection granted (recast)*, 20 December 2011, OJ L. 337/9-337/26; 20.12.2011, 2011/95/EU

On minimum standards for giving temporary protection in the event of a mass influx of displaced persons and on measures promoting a balance of efforts between Member States in receiving such persons and bearing the consequences thereof, 2001/55/EC of 20 July 2001.

The Diplomat, *New Zealand Proposes Humanitarian Visa for Climate Refugees*, 30 November 2017 available from <https://thediplomat.com/2017/11/new-zealand-proposes-humanitarian-visa-for-climate-refugees/> (accessed 20 July 2020)

Docherty B., and T. Giannini, Confronting a Rising Tide: A Proposal for a Convention on Climate Change Refugees, *Harvard Environmental Law Review* v. 33, 2009.

Draft Articles on the Protection of Persons in the Event of Disasters, A/RES/73/209, 14 January 2019.

Draft Convention on the International Status of Environmentally-Displaced Persons, Faculty of Law and Economic Science at the University of Limoges 2013, available from: <https://cidce.org/wp-content/uploads/2016/08/Draft-Convention-on-the-International-Status-on-environmentally-displaced-persons-third-version.pdf> (accessed 20 July 2020)

Dialogue of the High Commissioner on Protection Challenges, *Protection Gaps and Responses*, 8-9 December 2010.

Dunn, P., Kohler, A., and Kumar R., Identifying and assessing evidence for recent shoreline change attributable to uncommonly rapid sea-level rise in Pohnpei, Federated States of Micronesia, Northwest Pacific Ocean, *Journal of Coastal Conservation* volume 21, pp 719–730, 2017 (accessed 12 May 2020).

El-Hinnawi, E., *Environmental Refugees*, United Nations Environment Programme, 1985.

EquityBD, *Climate Change Induced Forced Migrants: in need of dignified recognition under a new Protocol*, 2009, available from: https://seors.unfccc.int/applications/seors/attachments/get_attachment?code=FTUOSD04NT7HQ2I89WW5QNR2OLXC2DQ9 (accessed 20 July 2020).

European Union, *Charter of Fundamental Rights of the European Union*, 26 October 2012, 2012/C 326/02.

Falstrom, D.Z., Stemming the Flow of Environmental Displacement: Creating a Convention to Protect Persons and Preserve the Environment, *Colorado Journal of International Environmental Law and Policy*, v. 6, pp. 2–32, 2001.

Fiddian-Qasmiyeh, E., Loescher, G., Long, K., and N. Sigona, *The Oxford Handbook of Refugee and Forced Migration Studies*, Oxford University Press, 2014.

Foro Constitucional Iberoamericano, Ley de Migración, Ley N° 18.250, available from: https://oig.cepal.org/sites/default/files/2008_ley18.250_ury.pdf (accessed 6 February 2020)

Forum Désertif Actions, *Rapport Final*, 2006, available from: https://desertif-actions.org/wp-content/uploads/2019/05/rapport_final_DA_CARI_fr.pdf (accessed 12 May 2020).

Foster, M., *International Refugee Law and Socio-economic Rights: Refuge from Deprivation*, Cambridge: Cambridge University Press, 2007.

Gebremedhin, N., *The Environmental Dimension of Security in the Horn of Africa: The Case of Somalia* cited in Cardy, W. F. G., *Environment and Forced Migration*, United Nations Environment Programme, Nairobi, 1994.

Gemmene F., and P. Brückner, From the Guiding Principles on Internal Displacement to the Nansen Initiative: What the Governance of Environmental Migration Can Learn from the Governance of Internal Displacement, *International Journal of Refugee Law*, 2015, Vol. 27, No. 2, pp. 245–263

Gillespie, A., *Small Island States in the Face of Climatic Change: The End of the Line in International Environmental Responsibility*, 22 UCLA Journal of Environmental Law, v. 107, p. 122, 2004.

Global Compact on Refugees (adopted 13 September 2018), A/73/12.

Global Compact for Safe, Orderly, and Regular Migration (adopted 19 December 2018), A/RES/73/195.

Goodwin-Gill G. S., and J. McAdam, *The Refugee in International Law*, Oxford University Press, 2007.

Grier, P., *The Great Katrina Migration*, CS Monitor, 12 September 2005, available from: <https://www.csmonitor.com/2005/0912/p01s01-ussc.html> (accessed 26 June 2020).

Grote, U., Engel, S., and Schraven, B., *Migration due to the tsunami in Sri Lanka – Analyzing vulnerability and migration at the household level*, Bonn, 2006.

Guterres, A., *Climate change, natural disasters and human displacement: a UNHCR perspective*, available from <https://www.unhcr.org/4901e81a4.pdf> (accessed 02 July 2020).

Statement by Mr. António Guterres, United Nations High Commissioner for Refugees, Intergovernmental Meeting at Ministerial Level to mark the 60th anniversary of the 1951 Convention relating to the Status of Refugees and the 50th anniversary of the 1961 Convention on the Reduction of Statelessness, 07 December 2011, available from:

<https://www.unhcr.org/admin/hcspeeches/4ecd0cde9/statement-mr-antonio-guterres-united-nations-high-commissioner-refugees.html> (accessed 10 July 2020)

Hagmann, T., *Confronting the Concept of Environmentally Induced Conflict Peace*, Conflict and Development, 2005.

Halstead, E., *Citizens of Sinking Islands: Early Victims of Climate Change* *Indiana Journal of Global Legal Studies* Vol. 23, No. 2, 2016, pp. 819-838.

Han, M., Hu J., and Wu, L., *Adverse Impacts of Projected One-Metre Sea-Level Rise on China's Coastal Environment and Cities: A National Assessment*, Centre for Global Change, 1990.

Haque, C. E., *Hazards in a fickle environment: Bangladesh*, Dordrecht, Kluwer Academic Publisher, 1997.

Harvey, E., *Linking Farmers & Tourists to Solve Development Challenges in SIDS*, 20 January 2017, available from <https://europa.eu/capacity4dev/article/linking-farmers-tourists-solve-development-challenges-sids> (accessed 20 July 2020)

Hathaway, J., *The Law of Refugee Status*, Toronto, Butterworths, 1991.

Heintze, H. J., and P. Thielbörger, *International Humanitarian Action: NOHA Textbook*, Springer International Publishing, 2018

High Commissioner's Dialogue on Protection Challenges, *Protection Gaps and Responses* (8-9 December 2010), Breakout Session 1: Gaps in the International Protection Framework, and in Its Implementation, Report by the Co-Chairs: H.E. Ambassador Darlington Mwape, Permanent Representative, Zambia, Mr. Volker Türk, Director, Division of International Protection, UNHCR, 4, available online at <http://www.unhcr.org/4d09e47a9.pdf> (accessed 20 July 2020).

Hugo, G., Environmental concerns and international migration. *International Migration Review*, v. 30, 1996, pp.105-131.

ICRC, *Geneva Convention Relative to the Protection of Civilian Persons in Time of War (Fourth Geneva Convention)*, 12 August 1949, 75 UNTS 287.

Position on Internally Displaced Persons 2006

Rule 131 Treatment of Displaced Persons.

Rule 55 Access for Humanitarian Relief to Civilians in Need.

IDMC, *Global Report on Internal Displacement 2019*, available from: <https://www.internal-displacement.org/sites/default/files/publications/documents/2020-IDMC-GRID.pdf> (accessed 12 May 2020).

Mid-Year Figures: Internal Displacement from January to June 2019, 12 September 2019.

Number of IDPs and refugees, available from <https://www.internal-displacement.org/database/displacement-data> (accessed 07 July 2020)

Total annual new displacements since 2003 (Conflict and violence) and 2008 (Disasters), available from: <https://www.internal-displacement.org/database/displacement-data> (accessed 08 July 2020)

IFRC, *Emergency Plan of Action*, 24 April 2015, available from: <https://reliefweb.int/sites/reliefweb.int/files/resources/Russia%20MDRRU019do.pdf> (accessed 26 June 2020)

Inderfurth, K. F., Fabrycky, D., and Cohen S., *The 2004 Indian Ocean Tsunami: One Year Report*, December 2005, available from: <https://www2.gwu.edu/~sigur/assets/docs/scap/SCAP25-Tsunami2.pdf> (accessed 07 May 2020)

Insurance Information Institute, *Facts + Statistics: Global catastrophes*, available from: <https://www.iii.org/fact-statistic/facts-statistics-global-catastrophes> (accessed 08 July 2020)

IOM, Glossary on Migration, Available from: https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf (accessed 12 May 2020)

Human Mobility and Adaptation to Environmental Change, World Migration Report 2020.

Migration, Development and Environment: Migration Processes, 2008.

Migration in an Interconnected World: New Directions for Action, Report of the Global Commission on International Migration, October 2005, available from: https://www.iom.int/jahia/webdav/site/myjahiasite/shared/shared/mainsite/policy_and_research/gcim/GCIM_Report_Complete.pdf (accessed 02 July 2020)

Mozambique: Tropical Cyclone Kenneth Baseline Assessment – Round 3, 27 September 2019, available from: https://reliefweb.int/sites/reliefweb.int/files/resources/Baseline_Assessment_Kenneth_Round_3_Final.pdf (accessed 07 May 2020)

Outlook on Migration, Environment and Climate Change, 2014, available from: https://publications.iom.int/system/files/pdf/mecc_outlook.pdf (accessed 12 May 2020)

IOM and UNFPA, *International Dialogue on Migration N°10 - Expert Seminar: Migration and the Environment*, 2008.

IPCC, 2018 Report Global Warming of 1.5°C, available from: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf (accessed 06 May 2020)

Climate Change Synthesis Report, 2014, p. 73 available from: https://www.ipcc.ch/site/assets/uploads/2018/05/SYR_AR5_FINAL_full_wcover.pdf (accessed 07 May 2020)

M. R. Islam and M. J. H. Bhuiyan, *An Introduction to International Refugee Law*, 2013, Brill Nijhoff.

Ivanov, D. V., and D. K. Bekyashev, *Environmental Migration in International Law*, Newcastle upon Tyne, Cambridge Scholars Publishing, 2016.

Ives, M., *A Remote Pacific Nation, Threatened by Rising Seas*, The New York Times, 02 July 2016, available from: <https://www.nytimes.com/2016/07/03/world/asia/climate-change-kiribati.html> (accessed 20 July 2020)

Jacobson, J.L., *Environmental Refugees: A Yardstick of Habitability*, Worldwatch Institution, Washington, 1990.

Jambor, P., *The Vietnamese Boat People and the Comprehensive Plan of Action: An Innovative Solution for an Enduring Problem*, Paper prepared for the Joint ILO-UNHCR Meeting on International Aid as a Means to Reduce the Need for Emigration. Geneva: United Nations High Commissioner for Refugees, 1992.

Kälin, W., *Displacement Caused by the Effects of Climate Change: Who Will Be Affected and What Are the Gaps in the Normative Framework for Their Protection?*, Brookings, 10 October 2008, available from: <https://www.brookings.edu/research/displacement->

caused-by-the-effects-of-climate-change-who-will-be-affected-and-what-are-the-gaps-in-the-normative-framework-for-their-protection/ (accessed 6 July 2020).

From the Nansen Principles to the Nansen Initiative, *Forced Migration Review*, 2012, pp. 48–49.

How Hard Is Soft Law?, Brookings/CUNY Project, 19 December 2001.

Kälin, W., and Schrepfer N., *Protecting People Crossing Borders in the Context of Climate Change Normative Gaps and Possible Approaches*, UNHCR, February 2012.

Keane, D. *Environmental Causes and Consequences of Migration: A search for the Meaning of Environmental refugees*, 2004.

Kelley, N., The Internal Flight/Relocation/Protection Alternative: Is It Reasonable?, *International Journal of Refugee Law*, v. 14, issue 1, 2002.

Carlier, J.Y., *Droit d'asile et des refuges : De la protection aux droits*, Recueil des cours de l'academie de droit international de La Haye, Leiden: Martinus Nijhoff, 2008

Kolmannskog, V., *Climate change, human mobility, and protection: initial evidence from Africa*, *Refugee Survey Quarterly*, 2010, pp. 103-119.

The Point of No Return - Exploring Law on Cross-Border Displacement in the Context of Climate Change', *Refugee Watch* No. 34, December 2009. Laczko F., and Collett E., *Assessing the Tsunami's Effects on Migration*, 01 April 2005, available from: <https://www.migrationpolicy.org/article/assessing-tsunamis-effects-migration> (accessed 26 June 2020).

League of Arab States, *Arab Charter on Human Rights*, 15 September 1994.

Arab Convention on Regulating Status of Refugees in the Arab Countries, 1994, available at: <https://www.refworld.org/docid/4dd5123f2.html> (accessed 6 July 2020)

Le Treut, H., Somerville, R., et al., 'Historical Overview of Climate Change', in S. Solomon, D. Qin, et al (eds), *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge, Cambridge University Press, 2007, pp. 95-122.

Lonergan, S., *The Role of Environmental Degradation in Population Displacement*, GECHS Project Research Report 1, 1998.

Lonergan S., and Swain A., *Environmental Degradation and Population Displacement*, 1999

Lynch, P., and Weeman K., 'New study finds sea level rise accelerating', 13 February 2018, available at: <https://climate.nasa.gov/news/2680/new-study-finds-sea-level-rise-accelerating/> (accessed 05 May 2020).

McAdam, J., *Climate change 'refugees' and international law*, 2008, available from <http://www.austlii.edu.au/au/journals/NSWBarAssocNews/2008/11.pdf> (accessed 20 July 2020)

McAdam, J., and B. Saul, *Displacement with Dignity: Climate Change, Migration and Security in Bangladesh*, German Yearbook of International Law, v. 53, 2010.

McGregor, J., Refugees and the Environment, in Black, R. and Robinson V. (eds.) *Geography and Refugees: Patterns and Processes of Change*, London, Belhaven, 1993.

The Mercosur Declaration of Principles on International Refugee Protection, 23 November 2012.

Mercy Corps, *After the storm: How the Bahamas continues to rebuild after Hurricane Dorian*, 26 March 2020, available at: <https://www.mercycorps.org/blog/six-months-after-hurricane-dorian> (accessed 12 May 2020)

Mettler, L., *13 Islands That Will Disappear in the Next 80 Years*, Reader's Digest, 17 October 2019, available from: <https://www.rd.com/list/islands-will-disappear-80-years/> (accessed 20 July 2020)

Mexico Declaration and Plan of Action to Strengthen International Protection of Refugees in Latin America, 16 November 2004.

Monastersky, R., *The Call of Catastrophes*, Science News, Vol.151, 1997.

Montevideo Convention on the Rights and Duties of Man (adopted 26 December 1933, entered into force 26 December 1934).

Morrissey, J., *Environmental Change and Forced Migration*, Oxford, University of Oxford, 2009.

Munich Re Report, 1999.

Myers, N., *Environmental Refugees in a Globally Warmed World*, Oxford, Oxford University Press, 1993.

Myers N., and Kent J., *Environmental Exodus an Emergent Crisis in the Global Arena*, Climate Institute, 1995.

Nace T., *New Study Finds 8 Islands Swallowed by Rising Sea Level*, 09 September 2017, Forbes, available from: <https://www.forbes.com/sites/trevornace/2017/09/09/new-study-finds-8-islands-swallowed-by-rising-sea-level/#67a9432e5283> (accessed 12 May 2020)

Nansen Conference, *Climate Change and Displacement*, 5-7 June 2011, Oslo.

Nansen Conference, Chairperson's Summary, para. 6, available from: <http://pnc.iucnp.org/wp/wp-content/uploads/2011/06/Chairpersons-Summary-Nansen-Conference-on-Climate-Change-and-Displacement.pdf> (accessed 05 July 2020)

National Geographic, '*The effects of global warming*', available from: <https://www.nationalgeographic.com/environment/global-warming/global-warming-effects/> (accessed 12 May 2020).

Rising seas give island nation a stark choice: relocate or elevate. Climate change means the low-lying Marshall Islands must consider drastic measures, including building new artificial islands, 19 November 2018 available at: <https://www.nationalgeographic.com/environment/2018/11/rising-seas-force-marshall-islands-relocate-elevate-artificial-islands/> (accessed 12 May 2020)

Nansen Initiative, Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change, 2011, available from: https://disasterdisplacement.org/wp-content/uploads/2014/08/EN_Protection_Agenda_Volume_I_-low_res.pdf (accessed 12 July 2020).

Global Consultation Conference Report, available from <https://www.nanseninitiative.org/wp-content/uploads/2015/02/GLOBAL-CONSULTATION-REPORT.pdf> (accessed 20 July 2020).

Towards a Protection Agenda for People Displaced Across Borders in the Context of Disasters and the Effects of Climate Change, available from: <https://www.nanseninitiative.org/secretariat/> (accessed 12 July 2020).

New York Declaration for Refugees and Migrants (adopted 19 September 2016), A/RES/71/1.

New Zealand Government, *Pacific Access Category*, 21 March 2006, available from: <https://www.immigration.govt.nz/opsmanual-archive/7727.HTM> (accessed 20 July 2020)

NRC Annual Report 2016, NRC, 23 June 2017, available from: https://www.nrc.no/globalassets/pdf/annual-reports/2017/nrc_annualreport2016_230616.pdf (accessed 19 June 2020)

Nunez, C., '*Oceans are rising around the world, causing dangerous flooding. Why is this happening, and what can we do to stem the tide?*', 19 February 2019, National Geographic, available at: <https://www.nationalgeographic.com/environment/global-warming/sea-level-rise/> (accessed 05 May 2020).

OCHA, *Humanitarian Bulletin Afghanistan*, 1-30 April 2018, available at: https://reliefweb.int/sites/reliefweb.int/files/resources/20180525_ocha_afghanistan_monthly_humanitarian_bulletin_april_2018_en_final.pdf (accessed 26 June 2019)

Flash Update n 3, 24 December 2019, available at: <https://reliefweb.int/sites/reliefweb.int/files/resources/20191224%20Flash%20Update%20no.%203%206.9-magnitude%20earthquake%20Davao%20del%20Sur%20final.pdf>

(accessed 26 June 2020)

Southern Africa: Tropical Cyclone Kenneth Flash Update No. 2, 25 April 2019, available from: <https://reliefweb.int/report/mozambique/southern-africa-tropical-cyclone-kenneth-flash-update-no-2-25-april-2019> (accessed 26 June 2019)

OHCHR, *Understanding Human Rights and Climate Change*, available from: <https://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf> (accessed 12 May 2020)

Olson, M.E., Refugees as a Special Case of Population Redistribution, in L.A.P. Gosling and L.Y.C. Lim (eds) *Population Redistribution: Patterns Policies and Prospects*. New York: United Nations Fund for Population Activities, 1979.

One Humanity: Shared Responsibility - Report of the Secretary-General for the World Humanitarian Summit (A/70/709), 09 February 2016, available from: <https://reliefweb.int/report/world/one-humanity-shared-responsibility-report-secretary-general-world-humanitarian-summit> (accessed 20 July 2020)

OAS, *American Convention on Human Rights, "Pact of San Jose"*, Costa Rica (adopted 22 November 1969, entered into force 18 July 1978).

OAU, *African Charter on Human and Peoples' Rights ("Banjul Charter")*, 27 June 1981, CAB/LEG/67/3.

Convention Governing the Specific Aspects of Refugee Problems in Africa ("OAU Convention"), 10 September 1969, 1001 U.N.T.S. 45, available at: <https://www.refworld.org/docid/3ae6b36018.html> (accessed 19 June 2020)

Paris Agreement, FCCC/CP/2015/10/Add.1, 30 November to 13 December 2015

Pesaresi, M., et al, *Atlas of the Human Planet Global Exposure to Natural Hazards 2017*, available at: <https://ec.europa.eu/jrc/en/publication/eur-scientific-and-technical-research-reports/atlas-human-planet-2017-global-exposure-natural-hazards> (accessed 06 May 2020).

Phuong, C., Persecution by Third Parties and European Harmonization of Asylum Policies, *Georgetown Immigration Law Journal*, v. 16, 2001.

Piguet, É., Linking climate change, environmental degradation, and migration: a methodological overview, *Wiley Interdisciplinary Reviews: Climate Change*, 2010, pp. 517-524.

Research Paper No. 153: Climate change and forced migration, UNHCR, January 2008.

Platform on Disaster Displacement, *Recommendations for integrated approaches to avert, minimize and address displacement related to the adverse impacts of climate change*, The Warsaw International Mechanism for Loss and Damage Associated with Climate Change

Impacts, July 2018, available from: <https://unfccc.int/sites/default/files/resource/WIM%20TFD%20II.3%20Output.pdf> (accessed 20 July 2020).

Plyer, A., *Facts for Features: Katrina Impact*, 26 August 2016, available from: <https://www.datacenterresearch.org/data-resources/katrina/facts-for-impact/> (accessed July 2020).

Preston, B. L., Suppiah R., McAdam, I. and J. Bathols, *Climate Change in the Asia/Pacific Region*, CSIRO Marine and Atmospheric Research, 11 October 2006.

ReliefWeb, *Burkina Faso – Floods*, 11 June 2020, available from: <https://reliefweb.int/report/burkina-faso/burkina-faso-floods-un-ocha-anam-reliefweb-echo-daily-flash-11-june-2020> (accessed 26 June 2020).

China earthquake affects over 243,000 people, 20 June 2019, available from: <https://reliefweb.int/report/china/china-earthquake-affects-over-243000-people> (accessed 26 June 2020).

Philippines: Taal Volcano, January 2020, available from: <https://reliefweb.int/disaster/vo-2020-000002-phl> (accessed 26 June 2020).

Papua New Guinea: Mt. Ulawun Volcano, June 2019, available from: <https://reliefweb.int/disaster/vo-2019-000118-png> (accessed 26 June 2020).

Renaud, F.G., Bogardi, J. J., Dun, O., and K. Warner, *Control, Adapt or Flee: How to Face Environmental Migration?*, UNU-EHS, 2007.

Report of the Representative of the Secretary-General, Mr. Francis M. Deng, submitted pursuant to Commission resolution 1997/39. Addendum: Guiding Principles on Internal Displacement, 11 February 1998, E/CN.4/1998/53/Add.2.

Robinson, N., *Convention Relating to the Status of Refugees: Its History, Contents and Interpretation, A Commentary*, Geneva, 1953.

Ruqiu, Y., 'An assessment of the impact of climate change caused by human activities on China's Environment', National Environmental Protection Agency, 1990.

San José Declaration on Refugees and Displaced Persons, 7 December 1994.

Scott, M. *Climate Change, Disasters, and the Refugee Convention*, Cambridge, Cambridge University Press, 2020.

Sendai Framework for Disaster Risk Reduction 2015-2030, Third UN World Conference in Sendai, Japan, on 18 March 2015.

Shacknove, A. E., *Who is a Refugee?*, Ethics, Vol. 95, No. 2, 1985, University Chicago Press.

Statista, *Annual number of natural disaster events globally from 2000 to 2019*, available from: <https://www.statista.com/statistics/510959/number-of-natural-disasters-events-globally/> (accessed 12 July 2020)

Speare, A., *The Relevance of Models of Internal Migration for the Study of International Migration*, in *International Migration - Proceedings of a Seminar on Demographic Research in Relation to International Migration*, Paris, 1974

Specia, M., *Flooding Displaces Tens of Thousands in Iran. And More Rain Is Forecast*, The New York Times, 06 April 2019, available from: <https://www.nytimes.com/2019/04/06/world/middleeast/iran-floods-evacuations.html> (accessed 12 May 2020)

Suhrke, A., *Pressure Points: Environmental Degradation, Migration and Conflict*, American Academy of Arts and Sciences, 1991.

Temporary Protection of Act 221/2003, available at: <https://kidsempowerment.org/act-no-221-2003-coll-on-the-temporary-protection-of-aliens-of-26-june-2003>

Thornton, F., *Climate Change and People on the Move: International Law and Justice*, Oxford, Oxford Scholarship Online, 2018.

Titus, J.G., *Changing Climate and the Coast*, Environmental Protection Agency, Washington, 1990.

Topping, J.C., *Global Warming: Impact on Developing Countries*, Overseas Development Council, Washington, 1990.

Treaty of Lisbon Amending the Treaty on European Union and the Treaty Establishing the European Community (adoption 13 December 2007, entered into force on 1 December 2009), 2007/C 306/01.

United Nations, *Decade ending 2019 likely to be hottest on record*, 3 December 2019, available at: <https://news.un.org/en/story/2019/12/1052661> (accessed 06 May 2020).

UN Climate Change, *What is the United Nations Framework Convention on Climate Change?*, available from: <https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change> (accessed 20 July 2020)

UNDRR, *Migration not a matter of choice but survival, says Kiribati President*, 15 March 2012, available from: <https://www.undrr.org/news/migration-not-matter-choice-survival-says-kiribati-president> (accessed 20 July 2020).

United Nations Executive Committee Comprehensive and Regional Approaches within a Protection Framework no. 80 (1996) A/AC.96/878, available at:

<https://www.unhcr.org/excom/exconc/3ae68c6e24/comprehensive-regional-approaches-protection-framework.html> (accessed 12 May 2020)

United Nation Framework Convention on Climate Change (adopted 9 May 1992) A/RES/48/189.

Operational Policies and Guidelines for Parties to Access Resources from the Adaptation Fund, Adaptation Fund Board, 2017.
Kyoto Protocol, 2033 UNTS 162

United Nations Human Rights Council, *Council discusses measures that can be adopted by States in addressing the effects of climate change on Human Rights*, 6 March 2015, available from:
<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=15658&LangID=E> (accessed 12 May 2020)

UN General Assembly, *International Convention on the Protection of the Rights of All Migrant Workers and Members of their Families*, 18 December 1990, A/RES/45/158.
Universal Declaration of Human Rights, 10 December 1948, 217 A (III).

UN Security Council, *Addressing the Impacts of Climate-Related Disasters on International Peace and Security*, 2019.

UNICEF, *Hurricane Dorian - Bahamas: Humanitarian Situation Report No. 3*, 24 September 2019, available from: <https://reliefweb.int/report/bahamas/hurricane-dorian-bahamas-humanitarian-situation-report-no-3-24-september-2019> (accessed 12 May 2020)

UNHCR, *Annotated Comments on the EC Council Directive 2004/83/EC of 29 April 2004 on Minimum Standards for the Qualification and Status of Third Country Nationals or Stateless Persons as Refugees or as Persons who otherwise need International Protection and the Content of the Protection granted*, OJ L 304/12, 30 September 2004.

Bellagio Seminar, *Summary of Deliberations on Climate Change and Displacement*, available online at: <http://www.unhcr.org/refworld/docid/4d9f22b32.html> (Accessed 20 July 2020).

Brasilia Declaration on the Protection of Refugees and Stateless Persons in the Americas, 11 November 2010.

Climate change and disaster displacement in the Global Compact on Refugees, available from: <https://www.unhcr.org/5c9e13297.pdf> (accessed 10 July 2020)

Guidelines on International Protection: Membership of a particular social group within the context of Article 1A (2) of the 1951 Convention and/or its 1967 Protocol relating to the Status of Refugees, HCR/GIP/02/02, available from: <https://www.unhcr.org/3d58de2da.pdf> (accessed 06 July 2020).

Handbook on Procedures and Criteria for Determining Refugee Status under the 1951 Convention and the 1967 Protocol relating to the Status of Refugees, HCR/IP/4/Eng/REV.1, 1979, available from: <https://www.unhcr.org/4d93528a9.pdf>

Initiative on Internal Displacement 2020 – 2021, Geneva, available from:

<http://reporting.unhcr.org/sites/default/files/UNHCR%20Initiative%20on%20Internal%20Displacement%20202021.pdf#ga=2.122721611.1111271430.1590079208-609364649.1589758701> (accessed 07 July 2020).

Introductory Note, p. 2, available at <https://www.unhcr.org/3b66c2aa10.html> (accessed 05 July 2020).

Legal Considerations on Refugee Protection for People Fleeing Conflict and Famine Affected Countries, 2017.

Nationality and Statelessness – A Handbook for Parliamentarians, 2005.

The Refugee concept under international law, 2018, available from: <https://www.unhcr.org/events/conferences/5aa290937/refugee-concept-under-international-law.html> (accessed 10 July 2020)

The State of the World's Refugees, 2006.

States Parties to the 1951 Convention relating to the Status of Refugees and the 1967 Protocol, available from: <https://www.unhcr.org/protection/basic/3b73b0d63/states-parties-1951-convention-its-1967-protocol.html> (accessed 06 July 2020)

Summary of Deliberations on Climate Change and Displacement, available from: <https://www.unhcr.org/4da2b5e19.pdf> (accessed 02 July 2020)

UNHCR Environment, *Disasters and Climate Change*, available from <https://www.unhcr.org/environment-disasters-and-climate-change.htm>.

The United States of America: Immigration and Nationality Act (1952) cha 477 66 Stat 163, available at: <https://uscode.house.gov/view.xhtml?req=granuleid:USC-prelim-title8-section1254a&num=0&edition=prelim> (accessed 6 February 2020)

USA Today, *20 islands that could disappear in your lifetime, from Fiji to Virginia*, 19 November 2019, available from: <https://www.usatoday.com/picture-gallery/travel/destinations/2019/11/29/climate-change-endangered-islands-disappearing-fiji-maldives-alaska/40630403/> (accessed 20 July 2020).

VOA, *Immigrants From Honduras, Nicaragua Face US Deadline*, 01 November 2017, available from: <https://reliefweb.int/report/united-states-america/immigrants-honduras-nicaragua-face-us-deadline#:~:text=Honduras%20and%20Nicaragua%20became%20TPS,Services%20say%20on%20its%20website.> (accessed 20 July 2020).

Wachiaya, C., *'One year on, people displaced by Cyclone Idai struggle to rebuild. Survivors in Mozambique are still trying to rebuild their lives. More assistance is needed to help them recover, and to support other countries affected by climate change.'*, 13 March 2020, available from: <https://www.unhcr.org/news/stories/2020/3/5e6a6e50b/year-people-displaced-cyclone-idai-struggle-rebuild.html> (accessed 07 May 2020)

Warner K., Afifi T., Henry K., Rawe, T., et al., *Where the Rain Falls: Climate Change, Food and Livelihood Security, and Migration* (UNU-EHS, 2012)

Wax, E. In *Flood-Prone Bangladesh, a Future That Floats*, the Washington Post, 27 September 2007, available from: <https://www.washingtonpost.com/wp-dyn/content/article/2007/09/26/AR2007092602582.html> (accessed 12 May 2020)

Weissbrodt D., *The Human Rights of Stateless Persons*, Human Rights Quarterly, v. 245, 2006.

Weerasinghe, S., *In Harm's Way: International protection in the context of nexus dynamics between conflict or violence and disaster or climate change*, UNHCR, 2018.

White, G., *Climate Change and Migration: Security and Borders in a Warming World*, Oxford, Oxford Press, 2011.

World Bank, *World Development Report 1989*, available from <http://documents1.worldbank.org/curated/en/667381468339905228/pdf/PUB76820REPLACEMENT0WDR01989.pdf> (accessed 12 May 2020)

World Commission on Environment and Development, Brundtland Report, 1987, available from: https://www.are.admin.ch/are/en/home/sustainable-development/international-cooperation/2030agenda/un-_milestones-in-sustainable-development/1987--brundtland-report.html (accessed 12 May 2020)

World Conference on Disaster Reduction, *Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters*, A/CONF.206/6.

World Meteorological Organisation, *Provisional WMO Statement on the Status of the Global Climate in 2016*, 14 November 2016, available from: <https://public.wmo.int/en/media/press-release/provisional-wmo-statement-status-of-global-climate-2016> (accessed 07 May 2020).

Press Release, *New climate predictions assess global temperatures in coming five years*, available from: <https://public.wmo.int/en/media/press-release/new-climate-predictions-assess-global-temperatures-coming-five-years> (accessed 12 July 2020).

WMO *Statement on the State of Global Climate in 2019*, available from: https://library.wmo.int/doc_num.php?explnum_id=10211 (accessed 06 May 2020).

WMO *2019 Concludes a Decade of Exceptional Global Heat and High-Impact Weather*, 3 December 2019, available from: <https://public.wmo.int/en/media/press-release/2019-concludes-decade-of-exceptional-global-heat-and-high-impact-weather> (accessed 07 May 2020).

Zellentin, A., *Climate Justice, Small Island Developing States and Cultural Loss*, Dordrecht, Springer Science+Business Media, 2015.

Zimmerman, A., and C. Mahler, *The 1951 Convention Relating to the Status of Refugees and Its 1967 Protocol: A Commentary*, Oxford: Oxford University Press, 2011.

Zolberg A., and Benda, P. M., *Global Migrants, Global Refugees: Problems and Solutions*, Cambridge, Berghahn Books, 2001.

Resolutions and Case Law

AC (Tuvalu), [2014] NZIPT 800517-520, New Zealand: Immigration and Protection Tribunal, 4 June 2014.

AD (Tuvalu) [2014] NZIPT 501370–371, 4 June 2014.

ECtHR, *Budayeva and others v. Russia*, App. nos. 15339/02, 21166/02, 20058/02, 11673/02 and 15343/02, Judgment of 20 March 2008

UN Human Rights Committee, *Ioane Teitiota v. New Zealand*), CCPR/C/127/D/2728/2016, 7 January 2020.

United Nations Human Rights Council Res 16/11, 12 April 2011.
Res 19/10, 19 April 2012.
Res 25/21, 22 January 2014.
Res 28/11, 06 April 2015.

UNFCCC, A/RES/48/189, 20 January 1994

UNHCR ExCom Conclusion No 103 LVI, A/AC.96/1021, 2005

UNHCR Special Rapporteur on Internally Displaced Persons, A/64/214, 03 August 2009.

Summary

Environmental disasters have become more frequent and powerful with the advancement of climate change. In this context, people may choose to move in order to avoid disasters or the degradation of their environment or they are forced to displace as a consequence of the complete destruction of their place of origin. Instruments of International Human Rights Law were not elaborated taking into account the effects that climate change may have on human mobility, and for that reason didn't consider the characteristics and needs of persons displaced by environmental disasters during the creation of documents for the protection of displaced persons. Considering that there is no specific international law protecting the right of persons displaced due to environmental disasters different international laws become applicable depending on the nature of the displacement, which leaves out certain persons from the scope of

international protection therefore creating a gap in international law. To address the gap in international protection, there is a need for the creation of a new international law instrument in order to provide persons who are displaced because of environmental disasters with effective protection measures.

Key word: Rights of Refugees; Rights of Internally Displaced Persons; Human Rights and Environment; Climate Change; International Human Rights Law

Zusammenfassung

Umweltkatastrophen sind mit dem Fortschreiten des Klimawandels häufiger und schwerwiegender geworden. In diesem Zusammenhang können sich Menschen für einen Umzug entscheiden, um Katastrophen oder die Verschlechterung ihrer Umwelt zu vermeiden, oder sie müssen aufgrund der vollständigen Zerstörung ihres Herkunftsortes umziehen. Die Instrumente des internationalen Menschenrechtsgesetzes wurden nicht unter Berücksichtigung der Auswirkungen des Klimawandels auf die Mobilität des Menschen ausgearbeitet und berücksichtigten aus diesem Grund bei der Erstellung von Dokumenten zum Schutz von Menschen nicht die Merkmale und Bedürfnisse von Personen, die durch Umweltkatastrophen vertrieben werden. In Anbetracht der Tatsache, dass es kein spezifisches internationales Recht zum Schutz des Rechts von Personen gibt, die aufgrund von Umweltkatastrophen vertrieben wurden, gelten je nach Art der Vertreibung unterschiedliche internationale Gesetze, wodurch bestimmte Personen aus dem Bereich des internationalen Schutzes ausgeschlossen werden und somit eine Lücke im Völkerrecht entsteht. Um die Lücke im internationalen Schutz zu schließen, muss ein neues internationales Rechtsinstrument geschaffen werden, um Personen, die aufgrund von Umweltkatastrophen vertrieben werden, wirksame Schutzmaßnahmen zu bieten.

Schlüsselwort: Flüchtlingsgesetz; Rechte von Binnenvertriebenen; Menschenrechte und Umwelt; Klimawandel; Internationales Menschenrechtsgesetz.