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## **THE CASE FOR CLIMATE REFUGEES – A HUMAN RIGHTS ISSUE (BASED ON CASE STUDIES OF KIRIBATI AND INDIA)**

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Dr. Samni Singla, Assistant Professor, Department of Laws, Panjab University, Chandigarh

### **ABSTRACT**

This research paper focuses on the latest controversial aspect in the Climate Justice debate i.e., “Climate Refugees”. The paper brings forth the issue of climate refugees with the help of different studies conducted by various international institutions. Along with that, the paper makes special mention of two countries i.e., Kiribati and India to show different types of climate refugee crisis that the world is facing and will face in future. It is shocking to note that the basic human rights of climate refugees are not protected by various international instruments, which are related to the protection of human rights. This research works offers a solution to this problem by suggesting the semblance of maximalist and minimalist approach.

**Keywords-** Climate Refugees, Human Rights, Maximalist Approach, Minimalist Approach.

## INTRODUCTION

The World Migration Report 2020<sup>1</sup> made following observations:

- As on November 2019, 272 million people are recognized as *international migrants*<sup>2</sup> who constitute 3.5% of the world population (a very small percentage). This does not mean that migration as problem needs no global attention. Because on deeper look, it means more people are “internally migrated” so they fail make a mark in the above figures.
- But the scale and pace of international migration has surpassed the past estimates whereby it was estimated that global international migration for 2050 will be 230 million people (2.6% of the world population).
- The prediction for the global international migration cannot be made with precision because of close interlinkage between acute events like severe instability, economic crisis and conflict and long-term events like demographic change, economic development, communications technology advances and transportation access.
- The increase in number of “recognized<sup>3</sup> refugees<sup>4</sup>” (for the reasons of violence and conflict) from 14 million in 2000 report to 25.9 million in 2018 is stark. This number was counted to be 26 million<sup>5</sup> in mid of 2019 out of 79.5 million forced displaced worldwide.<sup>6</sup>
- Human Mobility decisions in the form of planned migration/relocation and displacement<sup>7</sup> are also impacted by climate change and are being recognized in the international

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<sup>1</sup>IOM 2019, *World Migration Report 2020*, UN, New York, available at: [https://www.un.org/sites/un2.un.org/files/wmr\\_2020.pdf](https://www.un.org/sites/un2.un.org/files/wmr_2020.pdf)

<sup>2</sup>Migrants refer to individuals who have changed their place of residence either by crossing an international border (international migration) or by moving within their country of origin to another region, district or municipality (internal migration). People are normally considered 'migrants' if they remain outside their original place of residence for a period of at least three months.

<sup>3</sup>Out of 25.9 million, 20.4 million under UN Refugee Agency United Nations High Commissioner of Refugees (hereinafter UNHCR) mandate and 5.5 million refugees registered by the United Nations Relief and Works Agency for Palestine Refugees (UNRWA) in the Near East.

<sup>4</sup>According to UN Refugee Agency UNHCR, a refugee is someone who has been forced to flee his or her country because of persecution, war or violence. A refugee has a well-founded fear of persecution for reasons of race, religion, nationality, political opinion or membership in a particular social group. Most likely, they cannot return home or are afraid to do so. War and ethnic, tribal and religious violence are leading causes of refugees fleeing their countries.

<sup>5</sup>The increase of 0.1 million under UNRWA was observed.

<sup>6</sup>UNHCR (The UN Refugee Agency), *Global Trends: Forced Displacement in 2019*, available at: <https://www.unhcr.org/5ee200e37.pdf>

<sup>7</sup>Displacement is a particular form of migration, in which individuals are forced to move against their will. Where people are forced to move within their country of origin, this is referred to as internal displacement.

policy mechanism while dealing with broader issue of climate crisis. In 2018 and 2019 large scale of new displacements occurred in countries like India, Philippines, Bangladesh, China, and the U.S.A. (Figure 3)

- New displacements arising from disasters outnumbered new displacements arising from conflicts (Figure 1). This is evident from the fact that 144 disasters triggered by climate change and weather-related events displaced 17.2 million people and 55 conflict related events displaced 10.8 million people globally in 2018. In 2019 the numbers of only disaster related displacements increased (from 17.2 million to 24.9 million) and displacement in relation to conflict and violence showed reverse trend (from 10.8 million to 8.5 million). From figure 2, it is also evident that out of total disaster related displacements weather induced events displaced 95% of the people. Disasters that felt most impact on human displacement were storms, floods and droughts. In 2018, the countries with highest disaster related with disaster were: - Philippines and China (approximately 3.8 million each), as well as India (around 2.7 million) and the United States (around 1.2 million). This finding was supported by the report of Internal Displacement Monitoring Centre<sup>8</sup>. According to this report, the number of new displaced increased exponentially in past one year from 2018-2019 with India being the top most country in the ranking with 5 million new displaced. (Figure 3).
- There is increase in number of “internally displaced<sup>9</sup>” people (for same reasons) from 21 million in 2000 report to 41.3 million in 2018. This is further substantiated by Global Internal Displacement Report of 2020<sup>10</sup> where it was added that in 2019 this number swell to 45.7 million. In this same study a first of its kind estimate was also made for disaster related internal displacements in the year 2019. It was found that out of 50.8 million internally displaced, 5.1 million were displaced due to disasters (Figure 5). Country wise Afghanistan

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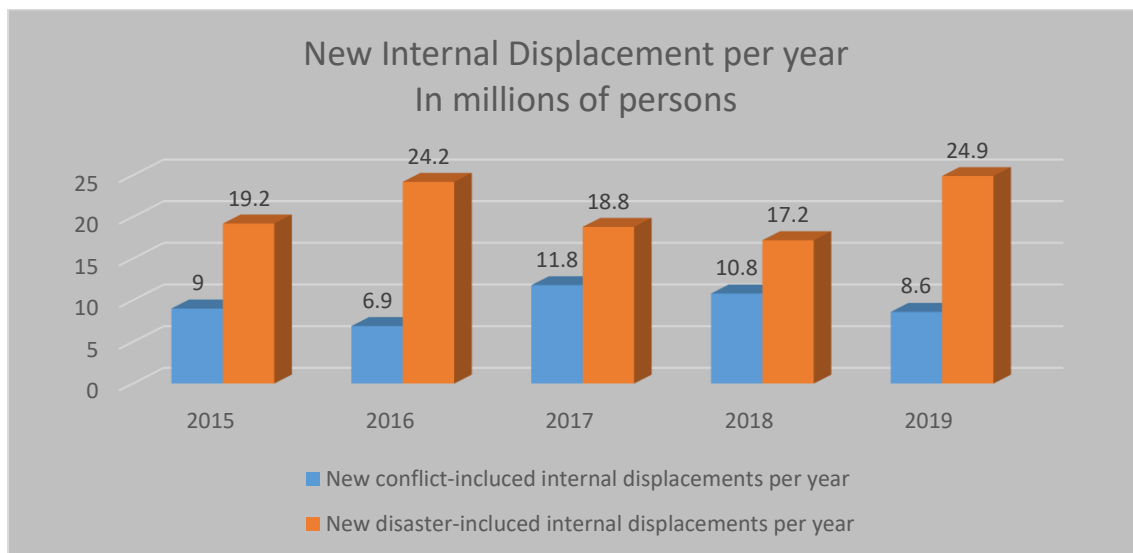
<sup>8</sup>The [Internal Displacement Monitoring Centre \(IDMC\)](#) is the world's authoritative source of data and analysis on [internal displacement](#) based in Geneva, Switzerland. Since its establishment in 1998 as part of the [Norwegian Refugee Council](#) (hereinafter NRC), IDMC has offered a rigorous, independent and trusted service to the international community. The work of IDMC informs policy and operational decisions that improve the lives of the millions of people living in internal displacement, or at risk of becoming displaced in the future.

<sup>9</sup>According to UN Refugee Agency UNHCR, an internally displaced person (hereinafter IDP) is someone who has been forced to flee their home but never cross an international border. These individuals seek safety anywhere they can find it—in nearby towns, schools, settlements, internal camps, even forests and fields. IDPs, which include people displaced by internal strife and natural disasters, are the largest group that UNHCR assists. Unlike refugees, IDPs are not protected by international law or eligible to receive many types of aid because they are legally under the protection of their own government.

<sup>10</sup>IDMC/NRC, *Global Report on Internal Displacement 2020*, April 2020, available at: <https://www.internal-displacement.org/sites/default/files/publications/documents/2020-IDMC-GRID.pdf>

(1.2 million), India (5,90,000), Ethiopia (3,90,000), Philippines (3,64,000), Sudan (2,72,000) and China (2,20,000) were the countries at top in relation disaster related internal displacements.<sup>11</sup> (Figure 6)

**Figure 1: Number of new Displacements per year (in millions)**



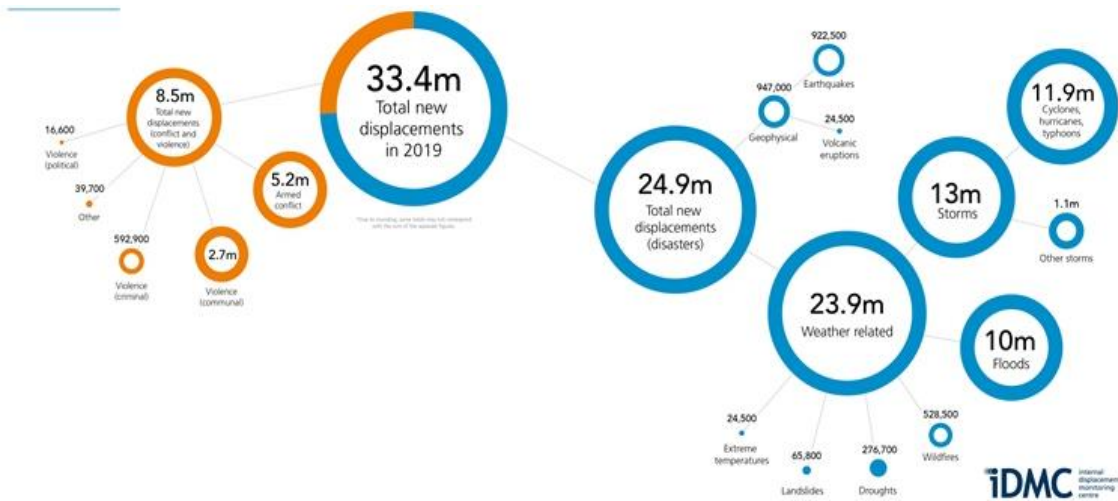
Source – German Institute for International and Security Affairs (SWP Research Paper 2020/RP 05 May, 2020)<sup>12</sup> supported by the findings of Global report on Internal Displacement Summary, April 2020<sup>13</sup>

<sup>11</sup>*Ibid.*

<sup>12</sup>Anne Koch, “On the Run in Their Own Country: Political and Institutional Challenges in the Context of Internal Displacement” *SWP Research Paper 2020/RP (5 May, 2020)*, available at: <https://www.swp-berlin.org/10.18449/2020RP05/>

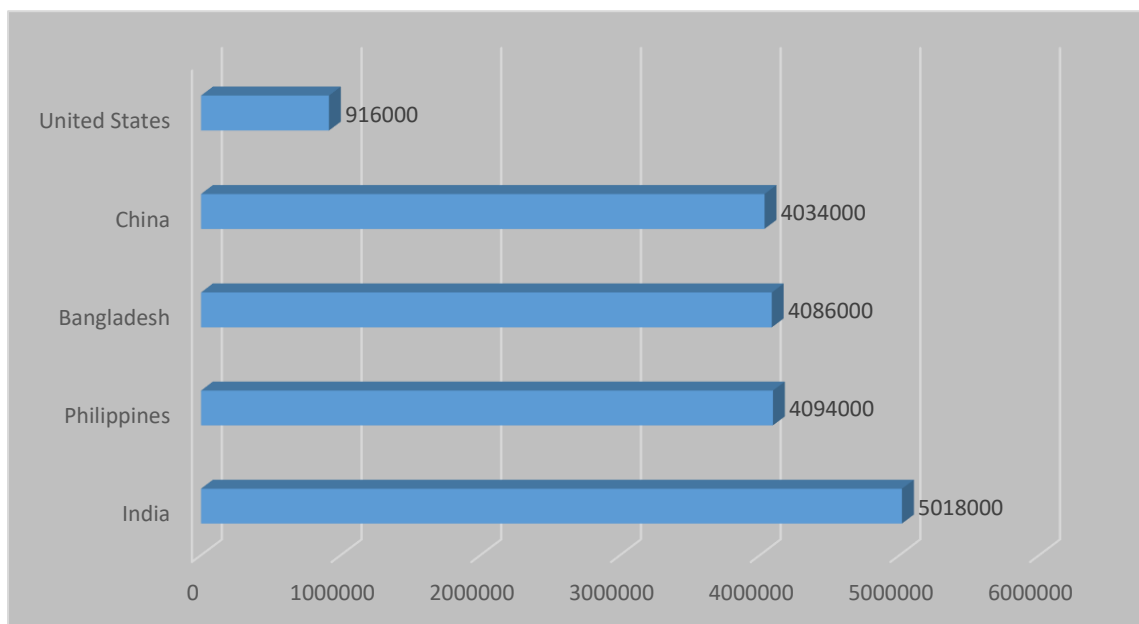
<sup>13</sup>*Supra* note 10.

**Figure 2: Distribution of New displacements in relation to Conflict and violence and Disaster related events**



Source - Global Report on Internal Displacement 2020<sup>14</sup>, Internal Displacement Monitoring Centre (hereinafter IDMC)

**Figure 3: Most new displacements country wise in 2019**

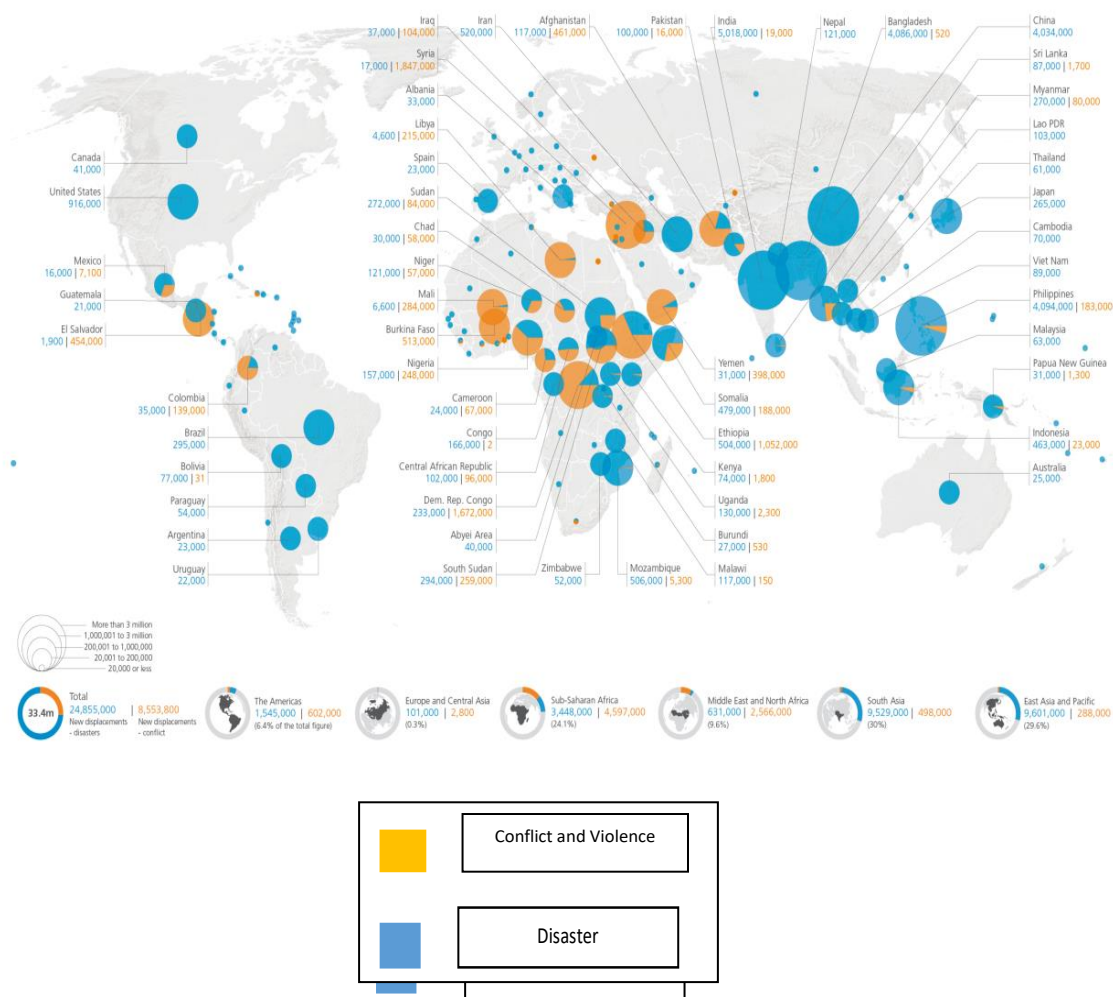


Source- Global Report on Internal Displacement 2020<sup>15</sup>, Internal Displacement Monitoring Centre (hereinafter IDMC)

<sup>14</sup>Ibid at 9-10.

<sup>15</sup>Ibid at 7.

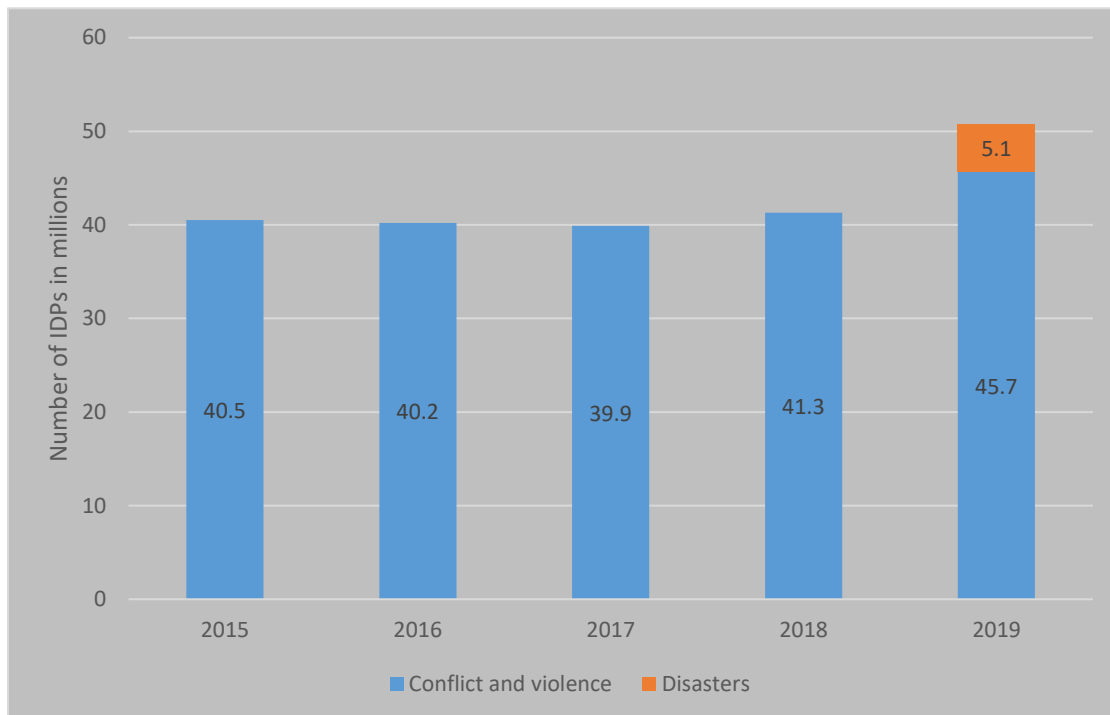
Figure 4- Region based Displacement due to Conflict and Violence and Disaster in 2019



Source- Global Report on Internal Displacement 2020<sup>16</sup>, Internal Displacement Monitoring Centre (hereinafter IDMC)

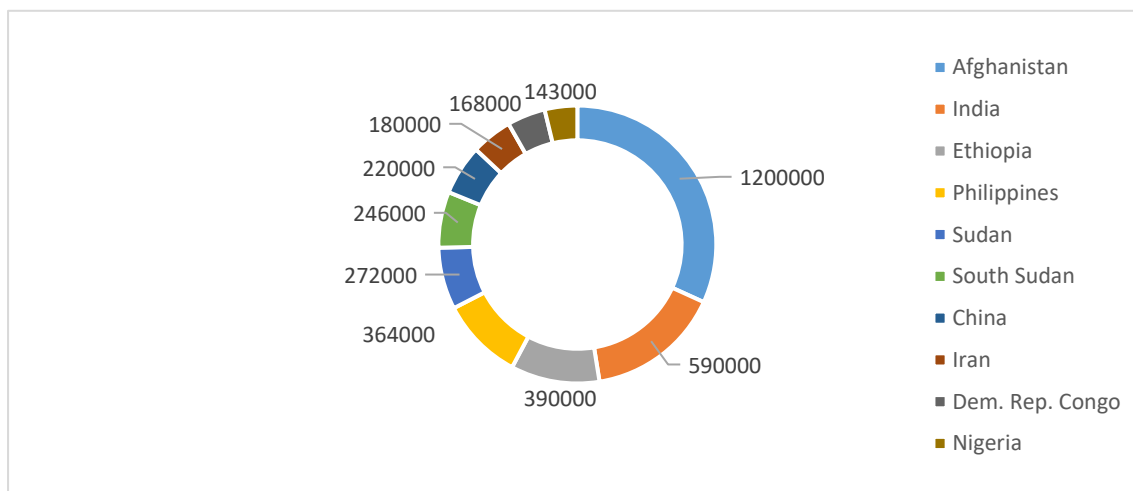
<sup>16</sup>Ibid at 8.

**Figure 5- Internal Displacements due to Conflict and Violence and Disaster in 2019**



Source- Global Report on Internal Displacement 2020<sup>17</sup>, Internal Displacement Monitoring Centre (hereinafter IDMC)

**Figure 6- Country wise Internal Displacements due to Disaster in 2019**



Source- Global Report on Internal Displacement 2020<sup>18</sup>, Internal Displacement Monitoring Centre (hereinafter IDMC)

<sup>17</sup>Ibid at 2.

<sup>18</sup>Ibid.

From above observations, it is clear that migration remains most common adaptive measure in response to climate change and weather-related events. In its 1990 report, IPCC<sup>19</sup> stated that human migration will become one of the single greatest impacts of climate change. In 2014 IPCC in its report on Impacts, Adaptation and Vulnerability<sup>20</sup> reiterated unequivocally that a catch-22 situation will arise for humanity while making choices for their survival in the wake of climate crisis. Some leading authors are worried about the era which will be called as “climate departure”<sup>21</sup>. The biggest impact will be experienced by tropical countries. This does not seem to be distant reality for global south in general and South Asia and East Asia in particular. It is no coincidence that three Asian countries are at the top of list depicting people being displaced due to disasters in 2018 and 2019. (Figure 3 and 4)

Therefore, it become important to make a case for climate change induced displacement and climate refugees more concretely.

## CLIMATE CHANGE-INDUCED DISPLACEMENT IN KIRIBATI AND INDIA

- **Kiribati** – Kiribati is one of four atoll countries in Pacific Islands that is completely threatened by rising sea levels<sup>22</sup>. It has population of 1,10,136. With its majority of land just less than two meters above sea level (1.8 m above sea level on an average), UN reported as early as 1989 that Kiribati will disappear in 21<sup>st</sup> century if business as usual continued. Cyclones like Cyclone Pam (a category 5<sup>23</sup> cyclone occurred in 2015) have wrecked the country destroying all the seawalls built by I-Kiribati as an adaptive strategy. Such events which

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<sup>19</sup>IPCC (1990).

<sup>20</sup>IPCC, *AR5 Climate Change 2014: Impact, Adaptation and Vulnerability 2014, The Working Group II Contribution To The IPCC's Fifth Assessment Report*, available at: <https://www.ipcc.ch/report/ar5/wg2/>

<sup>21</sup>Camilo Mora et al., “The Projected Timing of Climate Departure from Recent Variability” 502 *Nature* 183-87 (10 October, 2013); Also See Diane Toomey, “Where Will the Earth Head after its ‘Climate Departure?’” *Yale Environment* 360 (2 July, 2014), available at: [https://e360.yale.edu/feature/interview\\_camilo\\_mora\\_where\\_will\\_earth\\_head\\_after\\_its\\_climate\\_departure/2783](https://e360.yale.edu/feature/interview_camilo_mora_where_will_earth_head_after_its_climate_departure/2783)

<sup>22</sup>Recent studies in the southern Pacific region show that the annual and seasonal ocean surface and island air temperatures have increased by 0.6°C to 1.0°C since 1910 throughout a large part of the South Pacific. See N.A. Rayner and D.E. Parker, “Global analyses of sea surface temperature, sea ice, and night marine air temperature since the late nineteenth century” 108(14) *Journal of Geophysical Research* (17 July, 2003), available at: <https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2002JD002670> and M.J Salinger, “Trends in New Zealand daily temperature and rainfall extremes” 21(12) *International Journal of Climatology* (31 October, 2001), available at: <https://rmets.onlinelibrary.wiley.com/doi/abs/10.1002/joc.694>

<sup>23</sup>A category 5 cyclone's strongest winds are very destructive winds with typical gusts over open flat land of more than 280 kmph. These winds correspond to the highest category on the Beaufort scale, Beaufort 12 (hurricane).



can wipe out the entire nation in one stroke should be sounding alarms to the international organizations. Relying on reports<sup>24</sup>, which claim less risk of cyclones in Kiribati is a mockery of the gravity of situation. Extreme events such as droughts and floods like the ones in 1988-1989 and 2007-2009 threatens Kiribati the most and that too frequently. Such events not only directly take toll on lives and property of people but affect indirectly by turning groundwater brackish, reducing water supplies in internal parts, affecting copra productions in outer islands (Table 1). Ocean acidification also affects their fishing resources.

A study<sup>25</sup> conducted by United Nations Economic and Social Commission for Asia and Pacific<sup>26</sup> (hereinafter UN ESCAP) shows that 94% of the household surveyed (377 households) are affected by environmental hazards; out of this 81% of the households blamed the sea level rise. Different climate change related events affect the population as are shown in Figure 7.

**Table 1: Households facing Impact of Climate Change**

<b>Main Livelihood Risks and Problems</b>	<b>Direct Impact</b>	<b>Indirect Impact</b>
King Tides	Floods.	Crops, Erosion, Wells, No shelter.
No. of Government help	Unavailability of funding.	Construction of seawalls, tanks for rainwater.

<sup>24</sup>Australian Bureau of Meteorology, Commonwealth Scientific and Industrial Research Organization, *Climate Change in the Pacific: Scientific Assessment and New Research: Volume 2: Country Reports* Under International Climate Change Adaptation Initiative, Pacific Climate Change Science Program, available at: <https://www.pacificclimatechangescience.org/wp-content/uploads/2013/09/Volume-2-country-reports.pdf>

<sup>25</sup>R. Oakes and A. Milan et al., Kiribati: Climate change and migration – Relationships between household vulnerability, human mobility and climate change Report No. 20 (November 2016), United Nations University Institute for Environment and Human Security (UNU-EHS), Bonn, available at: [https://www.unescap.org/sites/default/files/Online\\_No\\_20\\_Kiribati\\_Report\\_161207.pdf](https://www.unescap.org/sites/default/files/Online_No_20_Kiribati_Report_161207.pdf)

<sup>26</sup>The UN ESCAP is one of the five regional commissions under the jurisdiction of the UN ECOSOC. It was established in 1947 in order to increase economic activity in Asia and the Far East, as well as to foster economic relations between the region and other areas of the world. It currently has 53 members and is headquartered at Bangkok.

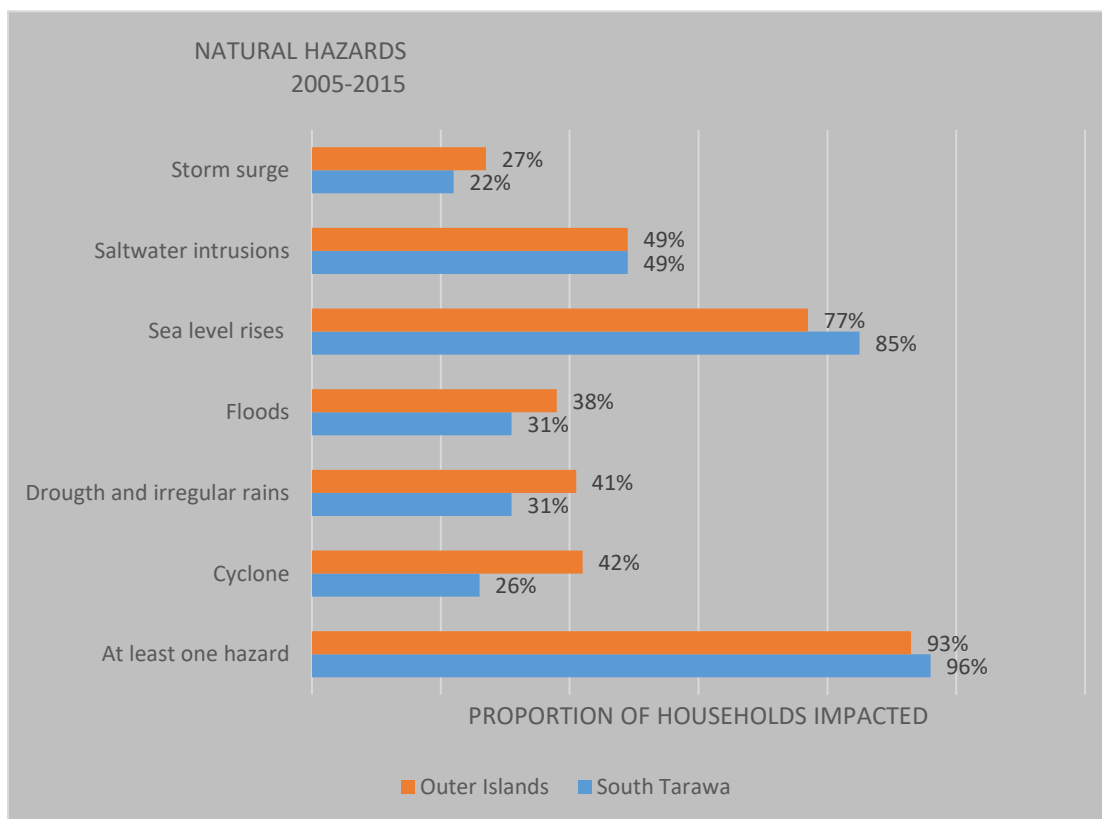
Unemployment	Starvation, high crime rate.	Sickness spreads, insecurity and corruption.
Lack of toilets	Pollution of air and sea.	Unsafe drinking water, contaminated seafood and wells and sickness spreads.
Overcrowded homes	Limited space.	Land conflicts.
Rubbish	Destroyed food crops, dust, pollution.	No domestic or Commercial food.
Domestic fights	Abuse of Women.	Family disputes, insecurity for children, discrimination of women and children.

Source- UN ESCAP 2016<sup>27</sup>

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<sup>27</sup>Supra note 30 at 37.

**Figure 7: Households facing Impact of Climate Change**



Source- Oakes et al., UN ESCAP 2016<sup>28</sup>

However, migration is not the first measure adopted to deal with climate change. Less than 10% I-Kiribati reported mobility (internal as well as international) in 2005-2015. Environmental change (14%) is the third reason for I-Kiribati to move after employment (42%) and work (26%) reasons. The migration pattern also varied from island to island. I-Kiribati from Kiritimati move overseas (31%) than migrants from South Tarawa (19%) and the outer islands (11%); 60% of migrants from outer islands moved mostly to the capital South Tarawa (despite it being overcrowded and environmentally marginal).

I-Kiribati do not show much of international migration is due to the fact that they have strong sense of attachment to the place. As projected by study of UNESCAP that 70% of the households (engaged in agricultural or marine activities for subsistence) will be affected by severe climate change and would send at least one member out of country in future.

<sup>28</sup>*Ibid* at 36.

- **India** – Time and again it has been predicted that India will be worst affected by the climate change and the impact will be felt more due to its rising population. But very few studies have been made on the impact of climate change on migration and displacement patterns in India. The issue of “climate refugees” first came to light regarding India in 2006<sup>29</sup> when it was reported that Lohachara Island<sup>30</sup> which was home to 10,000 at that time, completely submerged and people migrated to nearby Sagar Island. One study in 2009<sup>31</sup> asserted that out of 4.1 million living in Indian parts of Sundarbans Islands 70000 will be rendered homeless. It was also argued that people living in such so-called submerged areas like Lohachara do not think climate change as the reason for their migration. In Lohachara area, the submergence was the result of river current eroding, mangrove destruction and tectonic tilting rather than anthropogenic climate change. So, these were argued to be local and anecdotal incidents not worthy to be taken as empirical evidences of anthropogenic climate change.

A study conducted in 2009<sup>32</sup>, UN University, CARE International, Columbia University, the UN Refugee Agency (UNHCR) and World Bank found that India will face two types of migration and displacement: - one will be internal displacement due to droughts, desertification, sea level rise, water scarcity, melting glaciers and low food productivity; second will be increased inflow of migrants from neighbouring countries when faced by adverse consequences of climate change.

Out of these two, the severest would be the internal migration due to increased intensity and frequency of droughts. Other studies<sup>33</sup> also supported this view by giving region wise consequences of climate change in India. Using India’s first and second communication to

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<sup>29</sup>Disappearing world: Global warming claims tropical island, *The Independent* (28 December, 2006), available at: <https://web.archive.org/web/20061228004107/http://news.independent.co.uk/environment/article2099971.ece>

<sup>30</sup>Lohachara Island was an islet which was permanently flooded in the 1980s. It was located in the [Hooghly River](#) as part of the [Sundarbans delta](#) in the Sundarbans, located near the Indian state of [West Bengal](#).

<sup>31</sup>Editorials “Climate Refugees”, 44 (23) *Economic and Political Weekly* (6 June, 2009), available at: <https://www.epw.in/journal/2009/23/editorials/climate-refugees.html>

<sup>32</sup>UNU-EHS/ CARE International, *In Search of Shelter: Mapping the Effects of Climate Change on Human Migration and Displacement* (May, 2009), available at: [http://www.ciesin.columbia.edu/documents/clim-migr-report-june09\\_media.pdf](http://www.ciesin.columbia.edu/documents/clim-migr-report-june09_media.pdf)

<sup>33</sup>Architesh Panda, “Climate Refugees: Implications for India” 45 (20) *Economic and Political Weekly* 76-79 (15-21 May, 2010), available at: [https://www.jstor.org/stable/27807029?read-now=1&seq=3#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/27807029?read-now=1&seq=3#page_scan_tab_contents); and Aromar Revi, “Climate change risk: an adaptation and mitigation agenda for Indian cities” *International Institute for Environment and Development* (1 April, 2008), available at: <https://journals.sagepub.com/doi/10.1177/0956247808089157>

UNFCCC<sup>34</sup>, these studies stated that western India especially Gujarat and Rajasthan would be adversely affected due to severity of droughts. 25% of Gujarat and 60% of Rajasthan which is drained by river Luni will face worst water scarcity conditions. Similarly, the watershed areas of river Mahi, Pennar, Sabarmati and Tapi will witness severe drought conditions and resultant severe water scarcities. It is these areas which will see forced migration of landless and small marginal farmers. Regarding coastal areas it was found that sea level has risen 2.5 mm per year since and is expected to be 15 cm-38 cm by 2050 and between 46 cm and 59 cm by 2100<sup>35</sup>. India will be impacted adversely with the rise in sea levels. The mega cities along the coast, Mumbai and Kolkata, will face risk of submergence due to storm surges and sea level rise in future.<sup>36</sup> It was projected that 32% of coastal area of India will be inundated and additional 8693 km<sup>2</sup> of land and 3744 km<sup>2</sup> of agricultural area will be at risk impacting 76,40,416 people with 1 meter sea level rise. In 2004, NATCOM<sup>37</sup> also estimated that with 1 meter rise in sea level 5764 km<sup>2</sup> of land will be submerged and 7.1 million people will be displaced. In 2009 Asian Development Bank (hereinafter ADB) in its report<sup>38</sup> estimated that due to sea level rise 37 million will be internally displaced in India by 2050. Apart from that Brahmaputra basin in low-lying areas of Assam, Odisha, Bihar and West Bengal will wreak havoc in near future.<sup>39</sup> Out of 24,00,000 people internally displaced in India, 16,70,000 were displaced due to Bihar floods in 2016. It was found that in last three decades about 1 million people from Assam and Bangladesh were made homeless due to Brahmaputra River Basin erosion. The worst sufferers

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<sup>34</sup>NATCOM 2004, *India's Initial National Communication to UNFCCC*, Ministry of Environment and Forests, Government of India (2004), available at: <https://unfccc.int/resource/docs/natc/indnc1.pdf>; and NATCOM 2008, *India's Second National Communication to UNFCCC*, Ministry of Environment and Forests, Government of India (2008), available at: [http://www.undp.org/content/dam/india/docs/united\\_nations\\_framework\\_convention\\_on\\_climate\\_change.pdf](http://www.undp.org/content/dam/india/docs/united_nations_framework_convention_on_climate_change.pdf)

<sup>35</sup>As per IPCC, sea levels in India are expected to rise at the rate of 2.4 mm a year and in 2050 the total increase will be 38 cm.

<sup>36</sup>Susmita Dasgupta and Benoit Laplante et al., "The Impact of Sea Level Rise on Developing Countries: A Comparative Analysis", *World Bank Policy Research Working Paper 4136* (February 2007), available at: <http://documents1.worldbank.org/curated/en/156401468136816684/pdf/wps4136.pdf>

<sup>37</sup>*Supra* note 34 at 114 (NATCOM, 2004).

<sup>38</sup>ADB, *Climate Change and Migration in Asia and the Pacific: Executive Summary* (2009), available at: [https://www.preventionweb.net/files/11673\\_ClimateChangeMigration.pdf](https://www.preventionweb.net/files/11673_ClimateChangeMigration.pdf)

<sup>39</sup>Manasi Gore, "Climate refugees/migrants in India: A need for policy" *ResearchGate* (15 July, 2019), available at: [https://www.researchgate.net/publication/334459027\\_Climate\\_refugeesmigrants\\_in\\_India\\_A\\_need\\_for\\_policy](https://www.researchgate.net/publication/334459027_Climate_refugeesmigrants_in_India_A_need_for_policy)

were agricultural labourers, small farmers and adivasis. A study<sup>40</sup> by Greenpeace India in 2008 projected that by 2100 three states- West Bengal, Maharashtra and Coastal Tamil Nadu will see largest number of out- migrants under the climate change crisis (Table 2).

**Table 2: State wise number of Out-migrants by 2100**

Vulnerable Region	Migrant Levels in 2100
West Bengal	~10 million
Coastal Maharashtra (Around Mumbai)	~10-12 million
Coastal Tamil Nadu	~10 million
Coastal Andhra Pradesh	~6 million
Gujarat	~5.5 million
Coastal Orissa	~4 million
Western Rajasthan	~1.4 million
Northern Karnataka	~1.3 million
Madhya Pradesh	~1.2 million
Interior Maharashtra	~1 million
Northern Andhra Pradesh	~1 million
Southern Bihar	~1 million

Source- Greenpeace Report 2008<sup>41</sup>

On other front, India will witness high rise of migrants from neighbouring countries with biggest flow from Bangladesh. As early as 1994, a study<sup>42</sup> stated that in past 40 years 12 million

<sup>40</sup>Sudhir Chella Rajan, Climate Migrants in South Asia: Estimates and Solutions Greenpeace India (March 2008), available at: <https://wayback.archive-it.org/9650/20200429073925/http://p3-raw.greenpeace.org/india/Global/india/report/2008/3/blue-alert-report.pdf>

<sup>41</sup>*Ibid* at 11.

<sup>42</sup>Thomas Homer Dixon, "Environmental Scarcities and Violent Conflict: Evidence from Cases" 19 (1) *International Security* 5-40 (Summer 1994), available at: <https://homerdixon.com/environmental-scarcities-and-violent-conflict-evidence-from-cases/>

to 17 million Bangladeshis migrated on account of environmental reasons and swelled the India's population. In 2002, a study<sup>43</sup> projected that 26 million refugees will alone be from Bangladesh by 2100 (the highest number in the world).

The actual estimates after one or two-decade of above studies showed that out of total new disaster related displacement in South Asia (9.5 million), 90% took place in India and Bangladesh (8,587,520).<sup>44</sup> India had the highest share of disaster related new displacements in the world in 2019.<sup>45</sup> As expected the largest contributor was made by disasters like droughts, floods, tropical cyclones and desertification.

Another study<sup>46</sup> in 2019 focused on Ganges delta area which lies below 5m elevation both in Kolkata and Bangladesh i.e., mostly coastal areas in South 24 and North 24 Pargana. This study covered 51,500 km<sup>2</sup> of area accommodating with 57 million people. The study found that in these coastal areas the land use shifted from mangroves to agriculture and human settlements and lately with the increase in salinity and lack of leaching activities, the shift is observed to aquaculture and brickfields. As the agricultural income decreased, large scale migration is taking place especially for economic reasons. It is no shock for the same periods (1961-2011) the population of urban areas was found be increasing substantially. The ill-planned or ill-executed infrastructure projects such internal road system and water control systems have contributed to water logging in urban areas nearby these coastal areas. The reports of West Bengal flooding and water logging are visible quite often in the news.

The Sundarbans area common to both India and Bangladesh is paper- flat and is criss-crossed by rivers swollen by melting Himalayan Glaciers. Sea is advancing in this area 200 yards per year. If this was not enough cyclones and high tides are added weapons used by nature in killing people. But nature being kindest mother provided this area with natural guardian in the form on mangroves (stretch over 4000 km<sup>2</sup> in both the countries). But it was found that this natural

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<sup>43</sup>Norman Myers, "Environmental Refugees: A Growing Phenomenon of 21<sup>st</sup> Century" 357(1420) *Philos Trans R Soc Lond B Biol Sci.* 609-613 (29 April 2002), available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1692964/>

<sup>44</sup>*Supra* note 10 at 48.

<sup>45</sup>*Ibid* at 47.

<sup>46</sup>Md. Munsur Rahman and Tuhin Ghosh et al., *Ganges-Brahmaputra-Meghna Delta, Bangladesh and India: A Transnational Mega-Delta Deltas in Anthropocene* (Palgrave Macmillan, 2019), available at: [https://link.springer.com/chapter/10.1007/978-3-030-23517-8\\_2](https://link.springer.com/chapter/10.1007/978-3-030-23517-8_2)

guardian is dying fast due to the exploitation of man and nature combined over the years.<sup>47</sup> In a study<sup>48</sup> it was projected with 6 feet rise in sea level 800 sq. miles of mangroves will be lost completely by 2100. In the best-case scenario this loss is projected to be 80 sq. miles. Land is anyway disappearing and with the loss of green wall there is more threat of displacements in these areas. Advanced stages of decay are already observed in the islands in Hugli River.<sup>49</sup> Three islands- Lohachahara, Suparibhanga, and Bedford have already vanished. Sagar Island which has so far observed most in- migration not only from died/dying islands of India but also from Bangladesh is expected to shrink by 20 sq. miles by 2050. With deterioration of crop-growing conditions in Sagar Island, people mostly resort to seasonal labour for survival. Thus, this adds to rural-urban migration, adding more pressure on mega cities nearby.<sup>50</sup> In 2018, the residents on the Bangladesh side (East Dhangmari village) of Sundarbans realized what they witness is not ordinary. The embankments to control River Chunar collapsed for third time in a year swaying nearby houses like pieces of dominos. The rice yields in the dry season were way down and vegetables didn't grow due to brackish water. All this contributed to inflationary trends. In spring of 2018, these areas were hit by cholera. Thereby several dozen families decided to migrate to Dhaka, adding to already 1 million to 1.5 million relocated in the capital. But this picture has a silver lining. It was seen in parts of these areas where government sent volunteers for help, the local people showed impressive capabilities of *adaptation*. But not much concrete steps have been seen in preservation of mangrove cover. It is striking to note that India has got approval to set up coal fired-power station at Rampal in Bangladesh. China bid to have more dams in Brahmaputra basin will have adverse impact on freshwater supply in mangroves.

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<sup>47</sup>Illicit logging, mostly for building materials to house the region's booming population, has thinned out the periphery of the forest. At the same time, increasing water salinity caused by the encroaching sea is killing off much higher value, storm-stopping tree species, such as the Sundari that gives the forest its name. The salinity assault comes from both land and sea: Upstream dams on rivers in India have reduced freshwater flow into the Sundarbans, while [sea-level rise](#) caused by climate change is flushing more salt water into the mangroves.

<sup>48</sup>Peter Schwartzstein "This vanishing forest protects the coast-and lives-of two countries: Rising waters and illicit logging are killing the trees in the Sundarbans, the natural wall that protects the India-Bangladesh coast" *National Geographic Magazine* (July 2019), available at: <https://www.nationalgeographic.com/magazine/2019/07/sundarbans-mangrove-forest-in-bangladesh-india-threatened-by-rising-waters-illegal-logging/>

<sup>49</sup>*Ibid.*

<sup>50</sup>S.A. Selim and B.T. Furlong et al., "Adaptation in the Coastal Regions of Bangladesh" in *Resilience in Action: Challenges and Solutions to Climate Change in Bangladesh* (2019), available at: <http://www.uplbooks.com/book/resilience-action-challenges-and-solutions-climate-change-bangladesh>



## CLIMATE CHANGE INDUCED DISPLACEMENTS AND CLIMATE REFUGEES: A NORMATIVE DEBATE

The present scholarly works on climate change induced displacements and climate refugees remain sporadic and scattered. Even different estimates by different researchers add to already existing complexity. The Stern Review<sup>51</sup> made an estimate of permanent displacement of 150 million to 200 million by 2050. Norman Myers<sup>52</sup> also estimated this number to be 50 million by 2010 and 200 million by 2050.<sup>53</sup> His predictions got the support of other researchers like Biermann and Boas<sup>54</sup> and Faist and Schade<sup>55</sup>. The main information agency IPCC<sup>56</sup> has recognized that climate change induced displacements will take place.<sup>57</sup> Even the Paris Agreement<sup>58</sup> and the New York Declaration on Refugees and Migrants reiterate the same statements but none of them establish a concrete link between the two. But some researchers<sup>59</sup> believe that environmental degradation associated with climate change cannot be the sole factor for migration rather it because of the socio-economic-political conditions that people decide to migrate. Such contrasting viewpoints leave the scope for the deniers to claim that climate change induced displacements or climate refugees are mere myths. Apart from that different narratives are present on the climate change induced displacements across the globe. It is

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<sup>51</sup>Nicholas Stern, *The Economics of Climate Change: The Stern Review* (Cambridge University Press, 2007), available at: [http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview\\_report\\_complete.pdf](http://mudancasclimaticas.cptec.inpe.br/~rmclima/pdfs/destaques/sternreview_report_complete.pdf)

<sup>52</sup>Norman Myers (born 24 August 1934 – 20 October 2019) was a British environmentalist specializing in [biodiversity](#) and also noted for his work on [environmental refugees](#).

<sup>53</sup>Norman Myers “Environmental Refugees: An Emergent Security Issue” *13<sup>th</sup> Economic Forum, Prague* (23-27 May, 2005), available at: [http://www.osce.org/documents/eea/2005/05/14488\\_en.pdf](http://www.osce.org/documents/eea/2005/05/14488_en.pdf)

<sup>54</sup>Frank Biermann and Ingrid Boas, “Preparing for a Warmer World: Towards a Global Governance System to Protect Climate Refugees” 10(1) *Glob. Environ. Politics* 60-88 (2010), available at: [https://www.researchgate.net/publication/227627225\\_Preparing\\_for\\_a\\_Warmer\\_World\\_Towards\\_a\\_Global\\_Governance\\_System\\_to\\_Protect\\_Climate\\_Refugees](https://www.researchgate.net/publication/227627225_Preparing_for_a_Warmer_World_Towards_a_Global_Governance_System_to_Protect_Climate_Refugees)

<sup>55</sup>Thomas Faist and Jeanette Schade, “The Climate-Migration Nexus: A Reorientation’ *Disentangling Migration and Climate Change* 3-25 (Springer Netherlands, 2013).

<sup>56</sup>Robert T Watson et al., *IPCC Special Report 1997: The Regional Impact on Climate Change: An Assessment on Vulnerability: Summary for Policymakers* (1997), available at: <https://www.ipcc.ch/report/the-regional-impacts-of-climate-change-an-assessment-of-vulnerability/>

<sup>57</sup>In the 1990s, the IPCC mentioned migration as one of the major effects of climate change.

<sup>58</sup>The Paris Agreement proclaims that mitigating the effects of climate change must be prioritized to diminish climate related displacements.

<sup>59</sup>E. Piguet, ‘Climate change and forced migration’, *New Issues in Refugee Research, Research Paper No. 153*, 3 (UNHCR, Geneva, January 2008).

because climate change hides behinds myriad of causes that makes difficult not only in establishing linear but non-linear link with migration. So presently there are two schools of thoughts- *Maximalist* and *Minimalist* based on the magnitude, scenarios and trends of climate induced displacements. Maximalist believes that there is direct link between global warming and disaster related displacements. Therefore, such school gives maximum magnitude of the climate change induced displacements (Myers and Stern Review). It is because maximalist takes broader approach and includes every migration that is somehow related to climate change ignoring the multi-causality of the decision and whether the mobility is internal or international, whether short term or long term. On the other hand, Minimalist believes that migration and displacement is complex and multi-causal process and climate change can be one of the push factors. Such school gives fewer predictions on the magnitude of climate change induced displacements (E. Piguet). It is because minimalist sees only migrations that have clear link with impacts of climate change. They completely ignore internal migrations and even short-term migrations to neighbouring countries. These schools have different impacts on policymakers abroad. For example, due to maximalist school of thought the Global North will be afraid about magnitude of problem and would take strict policy measures to keep the migrants out of their countries. The US-Mexico border wall is one such example of such alarmist stance. This forces Global North to adopt *migration management perspective* whereby for their legitimate state interest they would try to regulate and control the mobility. On the other hand, minimalist school downplays the entire problem and no sound policy will be developed. Because of the skewed numbers they will think that no measure is currently needed.

Two schools also differ on the point that why any action is needed for addressing climate change induced migration. Maximalist believes that at one of the extreme ends of climate injustice spectrum, it is believed that vulnerable population of Global South is the *major victims* owing to the already existing climate induced socio-political discriminations. Thus, Global North should take up the responsibility for the protection and assistance of such migrants by making dedicated efforts towards *mitigation*.<sup>60</sup> Minimalist believes that climate induced migration will be best available *adaptive* strategy ignoring the oppressor-victim relation.

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<sup>60</sup>Julie-Anne Richards and Simon Bradshaw, "Uprooted by Climate Change: Responding to the Growing Risk of Displacement" *Oxfam International Briefing Paper* (2017), available at: [https://www.oxfam.org/sites/www.oxfam.org/files/file\\_attachments/bp-uprooted-climate-change-displacement-021117-en.pdf](https://www.oxfam.org/sites/www.oxfam.org/files/file_attachments/bp-uprooted-climate-change-displacement-021117-en.pdf)

From the above, it is clear that greater focus should be made on locating climate change as driver of migration. But this could be possible only if definition of term “climate refugees” is clearly laid down. In the academic discourse, different terms as well as different concepts are used. The terms like “climate or environmental refugees”, “climate or environmental migrants”, “climate or environmental induced migration”, “climate or environmental induced displacements”, “disaster refugees”, “eco-refugee or ecologically displaced person” and the extreme version “climate exiles” (those climate migrants who may be in the danger of becoming stateless) are used interchangeably; even these terms are defined by any international framework. Different researchers<sup>61</sup> concluded that isolating climate change from other reasons while locating correct number of migrants is difficult. With different definitions, different typologies about climate refugees came up. This created another challenge of finding whether climate induced migration is voluntary or forced. Since 1970s the field of research is divided into alarmists and skeptics.<sup>62</sup> The term “environment refugees” was first used by Lester Brown<sup>63</sup> in 1976 for the displaced people due to climate change. Then in a 1985 report<sup>64</sup> for the United Nations Environment Programme, El-Hinnawi<sup>65</sup> had employed the term as a means of describing people as: -

*“those who are forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) which jeopardized their existence and/ or seriously affected the quality of their life.”<sup>66</sup>*

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<sup>61</sup>Richard Black, “Environmental Refugees: Myth or Reality?” *New Issues in Refugee Research Working Paper No. 34* (March 2001), available at: <https://www.unhcr.org/research/working/3ae6a0d00/environmental-refugees-myth-reality-richard-black.html>; Olivia Dun and Francois Gemenne, “Defining Environmental Migration” 31 *Forced Migration Review* 10-11 (1 October, 2008), available at: [https://www.researchgate.net/publication/279549031\\_Defining\\_'Environmental\\_Migration'](https://www.researchgate.net/publication/279549031_Defining_'Environmental_Migration')

<sup>62</sup>Generally speaking, the alarmists tend to isolate environmental factors as a major driving force of migration and the skeptics tend to insist on the complexity of the migration process. Interestingly, alarmists usually come from disciplines such as environmental, disaster and conflict studies, while skeptics belong almost exclusively to the field of forced migration and refugee studies.

<sup>63</sup>Lester Russel Brown is a United States environmental analyst. He is author and co-author of 50 books on global environmental issues.

<sup>64</sup>Essam El-Hinnawi, “Environmental Refugees” *UNEP(02)/E52* (UNEP, Nairobi, 1985), available at: <https://digitallibrary.un.org/record/121267?ln=en>

<sup>65</sup>Essam El-Hinnawi is a UNEP researcher. He is author of books such as “Environment Refugees” and “Environmental impacts of Production and use of energy”.

<sup>66</sup>Essam El-Hinnawi, *Environmental Refugees* (Oxford University Press 1st ed., 1985).

Although he used the language of refugee protection, his aim was to draw attention to the damaging effects of anthropogenic climate change on human settlement, rather than to advocate for the extension of the international protection regime to people displaced by it. It was his definition that was most quoted by the environmentalists<sup>67</sup> while defining “climate refugees”.

Norman Myers defined “environmental refugees” as:

“... persons who can no longer gain secure livelihood in their traditional homelands because of environmental factors of unusual scope, notably drought, desertification, deforestation, soil erosion, water shortage, climate change and also natural disasters.”<sup>68</sup>

These environmentalists categorized ‘environmental or climate refugees’ into three categories:

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- Temporarily displaced due to temporary environmental stress;
- Permanently displaced due to permanent environmental changes; and
- Temporarily or permanently displaced due to progressive destruction of resource base.

The above two definitions do not make distinction between “climate refugees” and “environmental refugees” or between “internal and cross border” migration. But few environmentalists<sup>69</sup> distinguished the “climate refugees” from “environmental refugees” by stating that environment involves both man-made and non-man-made activities whilst the usage of change in the term climate change makes it only include man made activities. This means climate refugees is a subset of environmental refugees. Another scholar<sup>70</sup> denies completely about the existence of ‘climate change refugees.’

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<sup>67</sup>Camillo Boano and Roger Zetter et al., “Environmentally displaced people: Understanding the Linkages between Environmental Change, Livelihoods and Forced Migration” *Forced Migration Policy Briefing 1* (Refugee Study Centre, Oxford Department of International Development, University of Oxford, London, November, 2008), available at: [https://www.researchgate.net/publication/237203771\\_Environmentally\\_displaced\\_people\\_Understanding\\_the\\_Linkages\\_between\\_Environmental\\_Change\\_Livelihoods\\_and\\_Forced\\_Migration](https://www.researchgate.net/publication/237203771_Environmentally_displaced_people_Understanding_the_Linkages_between_Environmental_Change_Livelihoods_and_Forced_Migration)

<sup>68</sup>Norman Myers and Jennifer Kent, *Environmental Exodus: An Emergent Crisis in the Global Arena* 17-19 (Climate Institute, Washington D.C., 1995).

<sup>69</sup>Catherine Amelie Chassin, “Dealing with International Vulnerability: European Law and Climate-Induced Migrants’ in Francesca Ippolito and Sara Iglesias Sanchez (eds.) *Protecting Vulnerable Groups: The European Human Rights Framework* 271-290 (Hart Publishing, 2015).

<sup>70</sup>Jane McAdams, *Climate Change, Forced Migration and International Law* (Oxford University Press, 1<sup>st</sup> ed., 2013).

In 1996, the term ‘environmental refugee’ had been used in international bureaucratic discourse<sup>71</sup> for the first time by International Organization for Migration (hereinafter IOM)<sup>72</sup>. Initially IOM while distinguishing between natural and man-made causes of migration gave five categories of man-made environmental induced migration: -

- Predictable environmental causes of displacement (reservoir construction, nuclear testing, hazardous waste site construction, megaprojects, etc.) causing medium to long term displacement
- Depletion of resources causing medium to long term displacement;
- Localized problems (degradation of agric. base; soil, water, wildlife resources) causing medium to long term displacement;
- Environmental degradation causing long term displacement; and
- Irreversible problems (severe soil erosion and desertification) causing long-term displacement.

Finally, IOM proposed the following definition for environment migrants in 2007:

*“Environment Migrants are 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.”*<sup>73</sup>

The above definition categories “environmental refugees” under four heads: -

- Sudden v. Slow Onset movements;
- Temporary, Extended or Permanent movements;
- Internal or Cross border movements; and
- Forced or Voluntary movements

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<sup>71</sup>IOM/ Refugee Policy Group (hereinafter RPG), “Environmentally-Induced Population Displacements and Environmental Impacts Resulting from Mass Migrations” *UNHCR International Symposium* (Geneva, 1996), available at: [https://publications.iom.int/system/files/pdf/environmentally\\_induced.pdf](https://publications.iom.int/system/files/pdf/environmentally_induced.pdf)

<sup>72</sup>The IOM was initially established in 1951 as Intergovernmental Committee for European Migration to help resettle people displaced by World War II. IOM was born in 1989. It provides services and advice concerning migration to governments and migrants, including internally displaced persons, refugees and migrant workers. As of September 2016, it became related organization of United Nations.

<sup>73</sup>IOM, “Migration and the Environment” *MC/INF/288* (1 November, 2007), available at: [https://www.iom.int/jahia/webdav/shared/shared/mainsite/about\\_iom/en/council/94/MC\\_INF\\_288.pdf](https://www.iom.int/jahia/webdav/shared/shared/mainsite/about_iom/en/council/94/MC_INF_288.pdf)

Apart from this international platform, rest other platforms<sup>74</sup> use the term “climate refugees” in their day to day discourse.

Walter Kälin<sup>75</sup> made an effort to link the climate change and displacements which is given below: -

- **Migration and Sudden Onset Disasters-** This includes disasters like flooding, windstorms (hurricanes/typhoons/cyclones) or mudslides caused by heavy rain falls. Such events cause large number of displacements as people have to be evacuated before or after the disasters. Generally, such displacements are short term (as homeland remains habitable) but sometime due to lack of timely and effective actions by the government, people remain displaced for longer periods, sometime for decades. Mostly internal displacements happen during such events but cross border migrations are also not unknown. The climate refugee crisis in Bangladesh and Sundarbans part of India is an example of sudden onset disaster related migration. Today due to recurrent nature of such events, the migrations are more reported on this front. Form the IDMC report of 2020<sup>76</sup> it is clear that in 2019 out of 33.4 million new displacements, 13 million were caused by storms and 11.9 million were caused due to Hurricanes, cyclones and typhoons. South Asia and East Asia were the two worst suffered regions.
- **Migration and Slow Onset Environmental Degradation** – This includes negative long-term impacts of climate change such as rising sea levels, increased salinization of groundwater and soil, long-term effects of recurrent flooding, thawing of permafrost, as well as droughts and desertification or other forms of reduced water resources. These events affect economic opportunities and thereby deteriorate living conditions. Such events do not cause prompt displacement like sudden onset events. Decision relating to migration in these scenarios dependent upon combination and permutation of push factors like political, economic and

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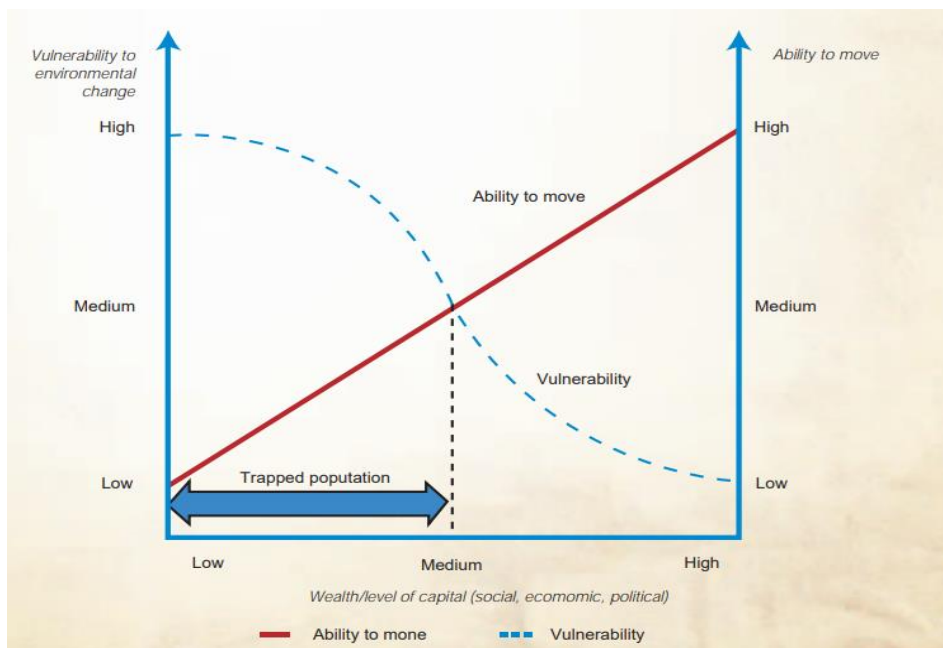
<sup>74</sup>Whether it is UNDP, EU, European Environment Agency (hereinafter EEA), Norwegian Refugee Council or Swedish International Development Cooperation Agency (hereinafter SIDA) all prefer the term “climate refugees”. At the Green Climate Fund Pledging Conference in 2014, Sweden’s Minister for SIDA used this term while addressing the people.

<sup>75</sup>Walter Kälin, ‘Conceptualizing Climate-Induced Displacement’ in Jane McAdam, *Climate Change and Displacement, Multidisciplinary Perspectives* 81-103 (Oxford/Portland 2010); Walter Kälin and Nina Schrepfer, “Protecting People Crossing Borders in the Context of Climate Change Normative Gaps and Possible Approaches” *Legal and Protection Policy Research Series PPLA/2012/01* (Division of International Protection, UNHCR, Geneva, February, 2012), available at: <https://www.unhcr.org/4f33f1729.pdf>

<sup>76</sup>*Supra* note 10.

social elements. Otherwise migration for them is a valid adaptive measure but due to lack of resources they are trapped (Figure 11) in their areas. Some household make planned relocations by sending one of individual family member to urban areas or even abroad on the pretext of work or education. Such planned relocation helps the household members back home to improve their living conditions and later also migrate. For example, large number of people in Sahel region were forced to leave their homes when hit by droughts whereas in Mali the movement of people moving abroad reduced as households were not having sufficient funds to pay for travel due to prolonged droughts.<sup>77</sup> Form the IDMC report of 2020<sup>78</sup> it is clear that in 2019 out of 33.4 million new displacements, 10 million were displaced due to floods; 2,76,700 due to droughts; and 24,500 due to extreme temperature conditions. These figures may be shy as they fail to include the food scarcity and water scarcity faced by the world due to slow onset conditions.

**Figure 11: Trapped Population**



<sup>77</sup>T. Hammer, “Desertification and Migration”, in J. D. Unruh, M. S. Krol, and N. Kliot (eds.), *Environmental Change and Its Implications for Population Migration* (Kluwer, Dordrecht 2004); and S.E. Findley, “Does drought increase migration? A study of migration from rural Mali during the 1983-85 drought”, 28(3) *International Migration Review* 539-553 (1994).

<sup>78</sup>*Supra* note 10.

Source- Md. Shamsuddoha et al., Displacement and Migration from Climate Hot-Spots in Bangladesh: Causes and Consequences.<sup>79</sup>

- **Migration and low-lying small island states-** This classification includes special sub set of slow onset disasters. Low lying topography and rising sea levels will lead to slow onset environmental degradation. These slow processes include ‘loss of coastal land and infrastructure due to erosion, inundation, sea level rise and storm surges; an increase in the frequency and severity of cyclones, creating risks to life, health and homes; loss of coral reefs, with attendant implications for the ecosystems on which many islanders’ livelihoods depend; changing rainfall patterns, leading to flooding in some areas, drought in others, and threats to fresh water supplies; salt-water intrusion into agricultural land; and extreme temperatures.’ The fourth assessment report of IPCC<sup>80</sup> also took note of low-lying islands by calling them most vulnerable group. In the most extreme scenarios, there is possibility that entire island may disappear. Before this happens, these islands will call the international community for help. Such types of circumstances are largely visible in Kiribati, Tuvalu, Nauru and Maldives. Kiribati has already begun with efforts of planned relocation as it has bought land worth US \$ 8 million in Fiji for accommodating 1,02,000 I-Kiribati
- **Government and Displacement-** This type includes the human displacement as result of Government decisions. This type includes two sub types: - a) some areas may be declared as high-risk zones due to continuous flooding near river and coastal plains and mudslides in mountainous regions. Thus, due to government action once evacuated from these areas people cannot return back and are displaced permanently; b) sometimes government may need large tracts of land for mitigation and adaptation measures such as afforestation, water reservoirs, solar plants and bio-fuel plants. People would be obliged to leave their land and homes for such measures.
- **Climate Change, Unrest and Migration-** Due to climate change the essential resources such as water, arable land and grazing grounds may decrease. Water scarcity can present a probable cause of conflicts. As early as 2500 B.C. E. the water has been the cause of conflicts. In the areas with water scarcity, there is less possibility of equitable distribution of scarce resources. There will be competition for control over resource. People already living in poverty will find it difficult to adapt and mitigate and would not agree to follow peace

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<sup>79</sup>Supra note 46.

<sup>80</sup>Supra note 20.



arrangements. This may trigger unrest seriously disturbing public order, violence or even armed conflict. Even the IPCC report agrees that due to shortages in food and water, poor health and poor economic conditions, conflict as a result of climate change cannot be ruled out.<sup>81</sup> But to trace the link between climate change, unrest and migration is difficult. This can be explained by looking at conflicts in Syria. Regarding Syria, many scholars<sup>82</sup> tried to find the link between climate change, conflicts and migration. According to their study, from 2007 to 2010 Syria suffered worst droughts leading to widespread crop failures and mass migration of rural farming households to urban areas. According to UN Special Rapporteur on the Right to Food<sup>83</sup>, 80-85% of livestock has been lost, 8,00,000 lost their livelihood and 1.3 million people affected by droughts. Alongside, the liberalization of economy and withdrawal of state subsidies lead to exasperation of poverty levels. Thus, all the factors (growing rural-urban divide, unemployment, severe droughts and lack of political freedom) contributed to Syrian unrest. Further the failure of government in enforcing environmental laws and rationalizing water use is responsible element for growing scarcity of natural resources. From above it is clear that this sub type is very complex to be put in numbers. Lack of analytical researches on this topic further creates gap in addressing this issue.

Apart from the above debate upon the technical aspect of climate refugees, different narratives run across the climate change debate. First narrative perceives climate induced migration as type of sounding alarm to world to take action on mitigation. Second narrative depicts climate refugees as possible terrorist and creates fear and threat in the minds of states regarding the security of their country. Such host countries are presently high on this state-centric argument to deny the entry of climate refugees. Third narrative, promotes the migration as an adaptive strategy and demands cooperation among states for this. The last two narratives treat migration as an adaptive strategy. But to treat migration as sole option is big threat in itself. Because the recipient country would also argue on the ground of lack of natural resources and creating more pressure on available resources will harm the human rights of recipient countries population.

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<sup>81</sup>*Supra* note 20.

<sup>82</sup>Collin Kelley and Shahrzad Mohtadi et al., "Commentary on the Syria case: Climate as a contributing factor" *Political Geography* 1-3 (2017), available at: <http://ocp.ldeo.columbia.edu/res/div/ocp/pub/seager/KelleyEtAl2017Commentary.pdf> and Collin Kelley and Shahrzad Mohtadi et al., "Climate change in the Fertile Crescent and implications of the recent Syrian drought" 112 (11) *PNAS* 3241-3246 (17 March, 2015), available at: <https://www.pnas.org/content/112/11/3241>

<sup>83</sup>Olivier De Schutter, "UN Special Rapporteur on the right to food: Mission to Syria from 29 August to 7 September 2010" *UN/ Office of the U N High Commissioner for Human Rights*, available at: [https://www2.ohchr.org/english/issues/food/docs/SyriaMissionPreliminaryConclusions\\_07092010.pdf](https://www2.ohchr.org/english/issues/food/docs/SyriaMissionPreliminaryConclusions_07092010.pdf)

This is evident in the stance of New Zealand and Australia. They refuse the admission of climate refugees on the arguments like floodgate reasoning<sup>84</sup>, the self-defense reasoning and the sovereignty reasoning<sup>85</sup>.

## CONCLUSION AND SUGGESTION

So, from the above it is clear that current debate is more of techno-legal debate rather than a social debate. Whether the migration is forced or voluntary, an adaptive measure, internal or international should not be matter of concern as these questions miss on the important point – Human rights aspect of climate refugees. Here one needs to ask two questions: - What are the rights of climate refugees that are deemed to be violated? How can the human rights approach be helpful in addressing the ongoing and anticipated climate displacement catastrophe? These questions can be answered by establishing the following linkages: -

- The trapped population which is not able to move suffers at their home countries as they are no more inhabitable. At their home country their basic human rights like right to life, right to food, right to health, right to shelter, right to clean water and sanitation, right to livelihood, right to education are adversely affected.
- The climate refugees because of non-recognition also suffer in the host countries. The rights affected includes right to life, right to cultural identity, right to livelihood, right to food, clothing and housing, right to self-determination and right to territory. These rights are recognized in one or more international agreements (Table 3).
- Within climate refugee certain groups like women (especially rural), children, indigenous people, ethnic minorities, scheduled castes, persons with disabilities and Small Island Groups as a whole are most marginalized and face greater threat in wake of climate change.

**Table 3: Rights of Climate Refugees and their Recognition in relevant Agreements**

Rights	Instruments
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<sup>84</sup>The nation-states contend that acknowledging one person as an ‘environmental or climate refugee’ would open Pandora box for millions who are placed in similar situations of deprivation and recognizing whom would not be financially viable for the state. See Jessica Rodger, “Defining the Parameters of the Non-Refoulment Principle” *LLM Research Paper* (Victoria University Wellington, 2001).

<sup>85</sup>The nation-states have reasoned that the sole discretion to decide whether a foreigner should be given entry to their territories rest upon them. See also *Nishimura Ekiu v. US, 142 US 651*; Catherine Phoung, “Identifying State’s Responsibilities towards Refugees and Asylum Seekers” *ESIL Research Forum* 1-12 (2005), available at: <http://www.esil-sedi.eu/sites/default/files/Phuong.PDF>

1. Right to life	Article 3 of UDHR <sup>86</sup> Article 6 of ICCPR <sup>87</sup> Article 24 of CRC <sup>88</sup>  Article 4 of Indigenous and Tribal Convention <sup>89</sup>  Article 7 of Indigenous and Tribal Convention <sup>90</sup>  Article 15 of Indigenous and Tribal Convention <sup>91</sup>
2. Right to Cultural Identity	Article 15 (1) of ICESCR <sup>92</sup>

<sup>86</sup>Article 3 of UDHR: - “Everyone has the right to life, liberty and security of person”.

<sup>87</sup>Article 6 of ICCPR: - “Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life”.

<sup>88</sup>Article 24 of CRC: - “States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services”.

<sup>89</sup>Article 4 of Indigenous and Tribal Convention: - “Special measures shall be adopted as appropriate for safeguarding the persons, institutions, property, labour, cultures and environment of the peoples concerned. Such special measures shall not be contrary to the freely-expressed wishes of the peoples concerned. Enjoyment of the general rights of citizenship, without discrimination, shall not be prejudiced in any way by such special measures.”

<sup>90</sup>Article 7 of Indigenous and Tribal Convention: - “The peoples concerned shall have the right to decide their own priorities for the process of development as it affects their lives, beliefs, institutions and spiritual well-being and the lands they occupy or otherwise use, and to exercise control, to the extent possible, over their own economic, social and cultural development. In addition, they shall participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly. The improvement of the conditions of life and work and levels of health and education of the peoples concerned, with their participation and co-operation, shall be a matter of priority in plans for the overall economic development of areas they inhabit. Special projects for development of the areas in question shall also be so designed as to promote such improvement.”

<sup>91</sup>Article 15 of Indigenous and Tribal Convention: - “The rights of the peoples concerned to the natural resources pertaining to their lands shall be specially safeguarded. These rights include the right of these peoples to participate in the use, management and conservation of these resources. In cases in which the State retains the ownership of mineral or sub-surface resources or rights to other resources pertaining to lands, governments shall establish or maintain procedures through which they shall consult these peoples, with a view to ascertaining whether and to what degree their interests would be prejudiced, before undertaking or permitting any programmes for the exploration or exploitation of such resources pertaining to their lands. The peoples concerned shall wherever possible participate in the benefits of such activities, and shall receive fair compensation for any damages which they may sustain as a result of such activities”.

<sup>92</sup>Article 15 of ICESCR: - “1. The States Parties to the present Covenant recognize the right of everyone:  
 (a) To take part in cultural life;  
 (b) To enjoy the benefits of scientific progress and its applications;  
 (c) To benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is author.”

3. Right to Livelihood	Article 7 of ICESCR <sup>93</sup>
4. Right to Food, Clothing and Housing	Article 11 of ICESCR <sup>94</sup>
5. Right to Self-Determination	Article 1 of UNHRC <sup>95</sup> Article 1 (1) of ICCPR <sup>96</sup> Article 1 of ICESCR <sup>97</sup>

The violation of these rights acts as a major push factor influencing migrations. Although these rights are embedded in various agreements yet their non-recognition as climate refugees or even refugees did not let them under any protective umbrella. The norm that human rights are embedded in the dignity of human beings and not in any instruments is the idea that researcher seeks to promote. Thus, climate refugees should be able to have minimum standard of protection irrespective of any recognition. Such approach is in sync with the entire climate justice debate, would enhance cooperation within countries, non-state actors, will help in fixing

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<sup>93</sup>Article 7 of ICESCR: - “The States Parties to the present Covenant recognize the right of everyone to the enjoyment of just and favourable conditions of work which ensure, in particular:

(a) Remuneration which provides all workers, as a minimum, with:

(i) Fair wages and equal remuneration for work of equal value without distinction of any kind, in particular women being guaranteed conditions of work not inferior to those enjoyed by men, with equal pay for equal work;

(ii) A decent living for themselves and their families in accordance with the provisions of the present Covenant;

(b) Safe and healthy working conditions;

(c) Equal opportunity for everyone to be promoted in his employment to an appropriate higher level, subject to no considerations other than those of seniority and competence;

(d) Rest, leisure and reasonable limitation of working hours and periodic holidays with pay, as well as remuneration for public holidays.”

<sup>94</sup>Article 11 of ICESCR: - “The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international co-operation based on free consent.”

<sup>95</sup>Article 1 of UNHRC: - “The purpose of UN is: to develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace.”

<sup>96</sup>Article 1(1) of ICCPR: - “All peoples have the right of self-determination. By virtue of that right they freely determine their political status and freely pursue their economic, social and cultural development.”

<sup>97</sup>Article 1 of ICESCR: - “All peoples have the right of self-determination, including the right to determine their political status and freely pursue their economic, social and cultural development.”

the responsibility of sending and recipient country to provide protection to these people in all possible ways, failing which they would be made liable.

So apart from maximalist and minimalist approach, the third approach which entails human rights would have demanded *protection perspective* from policymakers i.e., address the climate change induced displacement and migration on the need basis and not number basis. The vulnerabilities they face during and after mobility are glaring and these calls for action. It is this approach that researcher wants to recommend as a solution. This approach calls for integrating the rule of law into the substantive and procedural aspect of bodies (municipal, regional and global) when dealing with climate change in general and climate refugees in particular. Thus, there is multifarious interconnection between environment, climate change and migration. This calls for holistic approach and also to assess other attributing causes like human security, human rights, livelihood avenues, human development, economic growth and conflict resolution.