

**Forum:** United Nations Environmental Program  
**Issue:** Creating Legal Policies to Ensure the Protection of Worldwide Climate Refugees  
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## Introduction

The IPCC was formed in 1988, to provide governments with a report of climate change and what policies needed to be implemented to reduce the effects. In 1999, the IPCC had said that climate change's severe effects will be one of the biggest effects on the increase of human migration. It is predicted by the UN International Organization for Migration that by 2050, there could be around 200 million climate migrants, which has made this issue an urgency. Climate refugees are people who were forced to migrate because of being affected by climate processes or climate events, which means either gradual or sudden environmental disasters that led these people to flee from where they live.

The reasons are the effects of climate change on them, such as water scarcity or soil salinity, which lead to job losses and starvation, therefore they are forced to flee. When it comes to climate processes, it is not always their first option to migrate; many of the times they would consider opportunities in the same region. However, if they are still affected in the long term they would have to migrate or suffer. Sudden climate events like hurricanes and floods due to sea-level rise force them to flee immediately.

Climate refugees are more likely to appear as climate change increases. Reports show that climate change has been making natural disasters even worse, severe, and appear more often. For example, sea-level rise has increased because of excessive ice cap melting and global sea-level rise is estimated to rise 3.2mm every year. Sea level

rising massively has led to severe floods in places like Bangladesh where the effects are horrible and disastrous due to it being a low-lying area and destroying crops and infrastructure, leading people to migrate in search of urgent security.

It is an urgency to help climate refugees with proper support. But also, keep in mind that climate change is the root cause for this and understanding to implement solutions to not only protect climate refugees but also reduce climate change and the effects.

## Definitions of Key Terms

### IPCC

The Intergovernmental Panel on Climate Change.

### Planned relocation

When people potentially migrate to a new location with the help of the government or projects for a better livelihood and housing.

### Water Scarcity

According to the United Nations, water scarcity is the inability to access proper adequate amounts of freshwater or not have any access to water to meet the need for water demand.

### Coastal Management

Coastal management is used in the attempt to prevent any damage to people and the land, from many processes such as erosion, longshore drift, and wave-cut platforms. This needs to be done in order to protect homes and businesses from being damaged

### Sodic

Contains sodium

### **Deforestation**

The action of humans cutting down trees to make space for other activity to take place in that area.

### **Low-lying areas**

Areas that are close to ground level, near sea level, and can easily be approached by the sea.

### **Climate Processes**

Gradual onset climatic changes that show the effect of the long-term patterns, for example: sea level rise.

### **Climate Events**

Sudden dramatic climatic hazards, that are effective abruptly such as: hurricanes.

### **Sustainable Development**

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” As defined by the UN.

### **Renewable Energy**

Energy sources generated from natural sources that don't deplete, for example: solar energy.

## Key Issues

### Climate processes

#### Sea level rise

The Earth's sea level has risen massively over many years and the Global Sea level has recently been estimated to rise 3.2mm every year. Excessive ice cap melting (mainly from Antarctica and Greenland) and ocean expansion is due to extreme heat, which is caused by climate change and therefore the Global Sea level rises.

Human factors contribute to this largely, such as when deforestation is taking place to build houses; this then causes the interception of water to decrease, soil erosion and run-off to increase and therefore floods increase too. Low-lying areas are prone to flooding as the water can easily reach inland where areas with poor drainage systems cannot handle the flood and lead to major disasters.

Flooding can either be a climate process, that means it would gradually flood or, this could also be a climate event, meaning it could suddenly lead to massive damages, especially in places, such as Bangladesh where there aren't proper coastal management methods, poor drainage systems, or improper methods to handle floods. Thus, it leads to the destruction of properties, transportation, personal belongings, and much more which is a push factor and migrates in the hopes to find better opportunities for a better lifestyle instead of rebuilding their housing.

#### Soil Salinity

Soil salinity is when the concentration of salt increases in soil, this can be good for the arrogation of crops if done in low moderation, however, due to climate change,

the salinity has increased causing it to become a risk. Excessive heat is initiating heat stress and seawater expansion triggering the saltwater to flood into the inland.

Secondly, in arid or semi-arid regions such as the Sub-Saharan Africa, the extreme heat dries the groundwater resources, which then increases the salt value in the groundwater's soil. The highly sodic soil suppresses plant growth, effecting 20% of farmland soil worldwide.

India and Bangladesh are examples of where soil salinization has increased due to low-lying areas, affecting agriculture farming. This can be a huge risk for farmers as soil contamination reduces the production of crops, especially in LEDCs (Less Economically Developed Countries) as they don't earn an adequate amount and large-scale farmers in developed areas can deal with this better. Hence, farmers in low-lying areas who have been financially affected, need to migrate to better places where farmland cannot be easily disrupted.

### Water Scarcity

2.7 million people are affected by water scarcity at a minimum of once a month throughout the year, which is extremely crucial and needs to be given attention to as water is a basic and vital necessity and right for everyone around the globe. It is important to be given urgent attention to as it is predicted by the year 2025 the world will be facing even worse consequences which will affect the environment majorly and 66.6% of the world's population. This causes, the uncertainty of unsafe water supply for many people who are easily affected by this, which raises the question of climate migrant's safety.

One of the main, common reasons for climate migration has been a water shortage. Especially for people who have water-dependent jobs such as, agriculture industry of which 95% of it is dependent on water, estimated in 2016. Many other jobs like mining, forestry, aquaculture, and much more suffer from high unemployment when

unclean and scarce water sources affect their occupations. This significantly affects the poor by the instability of finance who don't have more options in the job sector that they work in, thus they migrate.

## Famine

Famine is the scarcity of food, which can also be caused by water scarcity for a long period of time and according to the "UN's Food and Agricultural Organization, climate change is one of the leading causes for global hunger." Famine is the shortage of food which causes people to starve or not receive an adequate amount of nutrition. Consequently, many of them -especially in Asia- are forced to migrate to find better food and a better area to grow crops as they have been affected by a natural disaster or drought causing no food security. Food prices will also become expensive in that area and the people who won't be able to afford it, migrate.

Although this is not the only reason for migration, as mentioned before climate change is one of the driving forces of famine causing migration. Heatwaves and warmer temperatures reduce crop growth as the soil becomes less moist and photosynthesis becomes slower which reduces the number of crops grown which affects not only less food but also the farmer's income. One of the emerging reasons for extreme heat has been CO<sub>2</sub> emissions, climate experts say that crop production could decline from 30% to 50% putting food security in major risk.

When extended and severe droughts start to occur, water resources for planting will reduce. On the other hand, floods and heavy rain can destroy crops and reduce soil life, increasing soil erosion. In the areas where rain is limited, glaciers help and due to excessive melting of glaciers, they would be lost easily. With the Ground-Level Ozone layer becoming worse, the use of fossil fuels is increasing which is a harmful pollutant. It affects a plant's photosynthesis by burning the insides of the plant damaging the plant.

## Climate events

### Tropical storms

More violent natural disasters are becoming a risk for many people. These Natural Disasters are becoming harsher as an effect of climate change, tropical storms have become even worse/extreme with climate change effects, the increase in seawater level creates higher tides and at an earlier starting point making it a risk for low-lying areas that will be prone to hurricanes easily. The increase in heat temperatures is causing the storms to become stronger due to more moisture.

Scientists believe that climate change is not the only cause for this to occur but this is a major cause. The more heat there is the higher risk of tropical hurricanes increase. Warmer temperatures do increase hurricane/typhoons.

The sudden events that have occurred, cause people to flee even faster suddenly and are forced. It is estimated that 6% of people migrate by the loss due to tropical storms but this can vary when there are more severe storms. Many climate scientists say that Hurricane Katrina might have been affected a lot by climate change.

### Monsoon rains

The issue of extreme rains has started to arise in places such as South India and Japan, where extreme storms get wetter. It is said by climate scientists that they see more rainfall, held by the moisture due to rising global heat temperatures, making the storms wetter and extreme.

It is predicted that monsoon rains will be more violent with thunderstorms being triggered by climate change causing the process to intensify leading to more rain.

Due to climate change making warmer weather across the globe, it results in an increase of warm and moist air. When this happens in generally cooler parts of the

world it then results in severe thunderstorms as it is built by intaking warm air from its surroundings as heat has increased due to climate change making the storm wider and stronger.

## Major Parties Involved

### China

South and East Asia are largely a place for forced migration. China being a low-lying area and having an extremely large population is vulnerable to huge forced migration, as the sea level rise has an effect on the population. A lot of urban Chinese are getting displaced and this is a concern due to China having “41 percent of its population, 60 percent of its wealth and 70% of megacities in coastal areas”. Shanghai is an example of a coastal city that has been repeatedly been attacked by typhoons and floods affecting the population. This is also a concern when for the same climatic reasons but from different places are migrating into these urban areas. This has gradually become an issue for China in recent years, especially urban cities, which has mainly been because of the gradual increase in natural disasters forcing them to migrate.

The extreme climate process gave them the opportunity to try and cope with it in the same region but if it kept affecting them, then they would be forced to migrate. Extreme weather events in other areas of China like heat waves caused people to move into cities. Climate change will result in China being affected by climate change such as land degradation leading to negative social and economic changes, forcing them to flee. Many other factors affect their migration as well such as economic stress and in search for employment. However, the environmental factors have increased to become the push factor for a large population and has become the lead factor. This could overall affect China’s political and economic stability.

This shows that the people in China are more likely to migrate internally than externally when sudden environmental disasters come upon. According to The Internal Displacement Monitoring Center around 6 million people were internally displaced in China, 2012. Which would also show that the statement made that millions would migrate externally from developing countries to developed countries due to environmental changes, that this does not apply to China.

China has not yet implemented solutions that directly target on helping climate refugees, however, they are working on the root cause of climate refugees which is climate change. According to Carbon Brief, “China is responsible for 10% of human influence on climate change, study says”, that’s why it is important that China takes quick action and they already have. In the past China has taken many measures to reduce climate change from their behalf, such as: in 2013, the Air Pollution Control Action Plan banned the production of new coal-fired power plants in various coastal provinces. In 2017, China was able to use 12% to 14.3% of non-fossil fuel primary energy and invested \$126.6 billion in renewable energy. When China accepted the Paris Agreement in 2016, it included a set of goals based on climate, which include: Trying to peak CO<sub>2</sub> emissions by the year 2030, increasing 20% use of non-fossil fuel energy in primary sources also by 2030, increasing 4.5 billion cubic meters of forest stock compared to the 2005 levels. Overall, China has been putting efforts to eradicate climate change from their side, which means that this could be beneficial for the future and reduce the chance of increasing climate refugees. However, 20% of global emissions are caused by China nevertheless, if China should keep taking action on reducing climate change.

## India

India is a huge country with a vast coastline of 7500 km which makes it vulnerable to climate change impacts. According to The State of India’s Environment 2020 report, every month there is an extreme weather event in the country for the last few years. The economy of India is affected and today it would have been 30% higher if climate change would not have happened. The migration of fishermen, farmers, and

poor laborers has increased over the years as climate change continues to affect people's lives causing change that isn't easy to adapt to.

Many of them migrate to the megacities such as Mumbai, where there are more chances of opportunities due to what they've lost. In India a large number of people from rural areas move to urban areas due to them being impacted by severe floods, soil salinization and much more as climate change makes them worse. For example, when these people seek refuge in Mumbai, the people from South usually migrate because of desertification or land degradation, which has pushed them to leave. The people from the North would commonly flee as a result of droughts.

India as of now, does not have a policy for climate refugees created by the government and is not a part of the 1951 Refugee Convention or its 1967 Protocol and does not have a national refugee protection framework but, it has had attempts for granting refuge to asylum seekers by implementing The Asylum Bill of 2015. However, it has not directly acted upon making attempts for specifically climate refugees.

India has however taken steps towards fixing the main reason, climate change. In 2008, India had adopted the National Action Plan on Climate Change (NAPCC) which is focused in India domestically, the aim of this was to make more ecologically sustainable development. Certain goals which are a part of the plan, include focusing on agriculture, forests, water, industry and much more. Other than that, India had submitted India's Intended Nationally Determined Commitments (INDC) to the UN Framework Convention on Climate Change (UNFCCC) on October 2, 2015.

## Bangladesh

Bangladesh has been affected by environmental disasters in the past however, it has got more frequent and worse over time. Bangladesh is a low-lying area, where 25% of the land is five feet above sea level while two-thirds is less than 15 feet above sea

level. and the ice melting in the Himalayas comes down through the rivers and results in riverbank erosions in Bangladesh making it an easy target to floods, destroying crops, land, and infrastructure. Many of the impoverished Bangladeshis and Indians who live specifically in the Sundarbans, in the Bay of Bengal where the 13 million people live in a low-lying area.

Over 50% of people living in rural homes are forced to flee after the river bank erosions. The people that were forced to migrate in Bangladesh were due to either climate events or processes. Nearly 80% of the population lives in a flood plain. Many Bangladeshis migrate internally, to Dhaka, the capital city. If we go by the estimates, by 2050 one in seven people in Bangladesh will be displaced which is approximately 13 million people According to the World Bank. This calls for serious concerns as the crisis is approaching for world leaders to pay attention to Bangladesh, an example of a place that is majorly affected by climate change causing climate refugees.

Bangladesh has been recognized internationally for its many steps taken to implement policies in relation to climate change. The government has invested \$10 billion to take actions to cope with climate change, such as: building emergency cyclone shelters, increasing the capacity of government agencies to respond to emergencies, resilient homes, reducing saline water intrusion and a lot more. A lot has been helpful nevertheless, they still continue to be impacted by climate change issues.

Banks in the region have funded to support them in projects for damage caused by climate change as well as preventing climate change and it has resulted in success benefitting many people. These initiatives in support with the banks have resulted in: providing 40,000 families with basic adaptive services, distributing clean, energy-efficient cook stoves 750,000 rural women, built 320 solar irrigation pumps benefiting 8,000 farmers, constructing 224 new cyclone shelters and repair 387 kilometers of embankment and many more range of outcomes.

Impacts of climate change have affected the availability of drinking water, damage to crops, livestock survival, climate turning too hot and much more, are some of the challenges in the hotspots. People are forced to migrate due to these effects of climate change; these effects are gradual or sudden. Not many new refugee laws are being made to handle the situation, UNHCR is working on helping such people by providing them legal advice, protecting their rights, enhancing policies, doing research, analyzing risk for migrants.

UNHCR is raising awareness about climate change in several countries trying to make more governments aware of the situation. They are working on assisting countries with cross border migrants, evaluating risk for migrants and providing guidance, they mainly aim on the human rights of these climate refugees.

### Development of Issue/Timeline

Date	Event	Outcome
1988	The United Nations Environmental Program and the World Meteorological Organization (WMO) launched The Intergovernmental Panel on Climate Change (IPCC).	The IPCC's purpose is to deliver a summary of information to governments at all levels. Many scientists and climate scientists offer to evaluate the many reports issued each year on climate change, to provide these governments with an understanding of what policies they need to

		<p>implement to prevent future impacts of the causes of climate change worsening.</p> <p>“Since 1988, the IPCC has had five assessment cycles and delivered five Assessment Reports” on climate change.</p>
The early 1990s	<p>It is recognized by the IPCC that climate change’s severe effects will be one of the main biggest effects on the increase of human migration.</p>	<p>The IPCC had informed that many reports reasoned that gradually a crisis would form due to the major effects of climate change, such as “shoreline erosion, coastal flooding and agricultural disruption” causing population shift in large numbers.</p>
The mid-1990s	<p>Many reports suggested that “25 million people were forced to migrate because of serious environmental pressures”</p>	<p>After analyzing these reports and the outcomes, it was declared that these were environmental refugees. This was in relation to seeing the effects of natural disasters, droughts, and other environmental pressures</p>

		that forced people to migrate.
1930	<p>During this time period, in the United States, severe dust storms and droughts had struck upon them. Strong winds destroyed crops and livestock from Texas to Nebraska. This was called the Dust Bowl</p>	<p>It was said that the droughts were extreme and frequent because of the ocean temperatures rising and the Dust Bowl was the outcome of the climatic conditions. These conditions led to migrations as many people were affected by the economic depression because of the large number of crops lost per day during the Dust Bowl, millions fled to the west or California from the southern Plain states mainly places like Texas, Oklahoma, and Arkansas, as they were forced to migrate or to suffer.</p>
2000	<p>The 2001 World Disasters Report of the Red Cross and Red Crescent Societies repeated the estimate of 25 million</p>	<p>256 million people was an increase from the average 211 million per year, said the Red Cross.</p>

	current “environmental refugees”.	
August 2005	Hurricane Katrina hit the gulf coast of the United states leaving around 2 million people homeless.	Hurricane Katrina hit on August 23, The hurricane Katrina is often shown as an example of climate change creating more weather events to become severe and regular, causing an immense amount of damage just like the Hurricane Katrina. However, a lot of the damage was also related to improper plans to handle disasters like these.
October 2005	-- It was predicted that 50 million environmental refugees would appear in 2010.	The international community were warned by the Environmental and Human Security section in the UN University’s Institute that, they would have to take precautions as they predicted that 50 million

		environmental refugees would appear in 2010.
2009	A study concluded that in the year 2009, 36 million people were dislocated by natural disasters out of which 20 million people migrated due to climate change-related effects.	After the UNHCR had confirmed this, they later predicted that by 2050 the amount would increase to 50 million people.

## Previous Attempts to Solve the Issue

### Planned Relocation

UNHCR has taken action on implementing Planned Relocation along with Georgetown University and others, in order to protect populations who are at risk of extreme climate disasters and the impacts, while helping them sustain their human rights. This is to help them successfully and peacefully migrate to a safer and secure place permanently.

Executing planned relocation would be beneficial, as mentioned before, to help many displaced climate migrants who are hopeless, even though this can be a bit complex it can be a solution beneficial in the long run if conducted properly. This is a solution that should be very popularly considered, for example: a country called Vanuatu, in Oceania has implemented a policy which provides planned relocation that has protections and basic help for disaster-induced displacement.

Planned relocation overall, is a very good way to help climate migrants, it is also being considered in many places in the Caribbean and “an island nation of Fiji in the

South Pacific has developed a set of Planned Relocation Guidelines to undertake climate-change related relocation.”

### **Creating environmental and social protection**

Along with putting efforts into combating climate change, The Environmental Justice Foundation aims to take various actions to create secure international protection for the world's growing population of climate refugees, in the environmental and social aspects. As climate change has become a growing threat to many, EJF creates and conducts innovative plans to reduce carbon footprint. As this issue has not been given enough attention to for a very long time, they aim to spread awareness and reach out to countries/governments to make them aware of the urgency of this issue.

They have called the attention of all countries to implement and pledge to the Paris Agreement which aims to keep the global temperatures on pre-industrialize level temperatures under 1.5°C by reducing man-made CO<sub>2</sub> emissions. They have brought many government's attention to climate refugees and given them an understanding of why they need to be supported as climate refugees have no support under existing legislation. EJF has requested for a Special Rapporteur by the UN for more attention on human rights in relation to specific climate change.

Overall, the Environmental Justice Foundation has tried to call the attention of countries worldwide to pay more attention to climate refugees and implement the Paris Agreement. The aim of this foundation has been planned properly with aiming towards the main cause being climate change and encouraging countries to make environmental changes, which is a positive as they have made it clear to governments that making necessary changes can help prevent the increase of climate refugees and climate change.

Alongside that they have also given attention to the social security of these climate refugees, which is majorly needed to be given consideration to. EJF has been able to launch climate refugee campaigns and projects that focus on these things, which

shows that the method of encouraging countries, creating campaigns etc. could make it successful.

### **Advocating for Climate Refugee's Human Rights**

This independent project, aims to bring attention to people around the globe so that they can help take action for people displaced across borders as a result of climate change. Their mission is to help climate change refugees gain their rights, they document their cases worldwide by portraying the evidence that has gone unseen or hasn't been given enough attention to.

The former UN High Commissioner for Refugees had said in response "I am convinced that climate change will increasingly be a driver in worsening the displacement crisis in the world", which shows that they were able to get their information across and convince people at high positions that this issue needs more attention.

They advocate in coordination with the UN, civil society, governments, corporate partners, legal and environmental experts for legal policies being created and implemented to secure climate refugees who have been impacted and displaced. They are able to do this due to their years of experience in researching and understanding information, to portray it to documented research, and create stronger support for policy making.

The Climate Refugee's project has been able to collect information from the many different aspects over many years of experience and have been able to be in coordination with the UN, governments, environmental experts which helps them with their research and therefore they are able to advocate for climate refugees around the world. Advocating for the human rights of climate refugees has been successful for them as they were able to bring the attention to important people and so, working on portraying the issues in relation to climate refugees has been a progressive initiative.

## **Possible Solutions**

### **Reducing climate change and its impacts**

Firstly, focusing on the root cause of climate change refugees is vital which is climate change itself and climate pressure causing climate events/processes. Reducing the causes and consequences of climate change by many different ways.

Reducing carbon emissions by implementing many renewable energy sources and making them more accessible to areas where these sources aren't affordable. Making more sustainable decisions such as increasing the promotion of less meat consumption, planting more trees and many more ways on helping prevent climate change from affecting people to find refuge.

Along, with taking measures for the prevention of climate change, it is important to take precautions for climate change effects. Building coastal defenses and having coastal management methods is a good way to prevent flooding especially in low-lying areas. Providing safe water sources to people at closer and easily accessible distance.

### **Planned Relocation**

Many of the people that are affected by climate processes or climate events, eventually need to find a safe environment to live in and so they migrate. However, there are people who cannot find refuge in their own country and instead have to cross borders. In HICs (High Income Countries) these situations might be handled better as they are able to take measures to prevent these situations, by for example constructing coastal protection.

Although, MEDCs (More Economically Developed Countries) and LEDCs (Less Economically Developed Countries) can have a bigger impact and aren't able to

manage or recruit adaptation plans for them and therefore, migration might be the only option for many. So planned relocation with the help from international and national communities would help climate-induced migrants to find refuge in places more safely.

Nevertheless, this is only considered safe if done in the correct situation, it is only best used when the situation they are living in is completely unsafe for them or other options are not possible. This method can become complex and there are many factors to carefully think about when proceeding with it, like: when implementing, human rights and safety guidelines should be followed, giving desired outcomes with basic security. Legal framework based on human rights should be created to direct the planned relocation process lawfully and supervising and monitoring the process at all stages with evaluations, are vital to do.

### **Climate migration policy development**

The UNHCR has been working on encouraging the implementation of a policy specifically made for climate refugees in many places which is extremely vital. This includes the safety and human rights of climate refugees. Many places need to start considering developing national climate change-related migration that pertain various amounts of aspects that are taken into consideration, this is important to be made as they can then act upon and support climate refugees in appropriate situations internally and internationally.

The sectors that would need be looked into would be, economic planning, land management, agriculture, urban planning, land management, local/foreign affairs, immigration, health, education and more. It would be important to encourage countries to focus on climate refugees and construct policies that assure a plan for accommodating climate refugees' movement within and from internationally. This should be seen as a national development and have a proper attention given to it along with focusing on taking measures towards only climate change.

## Accepting climate refugees

Most climate change displacements happen within their region; however, the impacts of climate change might cause cross-border displacement for reasons such as: if the state is not able to handle responsive capacity or the place closest to them may be the safest. That is why, accepting climate refugees is vital and important for human safety and security.

Countries around the world will have to start welcoming climate refugees as the world continues to be affected by climate change. Creating a space to welcome climate refugees will not only be beneficial to the refugees but as well as the place they flee to, as they will then be able to help the place also grow and be beneficial with the skills that they bring along with them, economically, socially and environmentally they will be able to contribute to them.

However, when welcoming climate refugees it will still be very important to pay attention to the human rights that they are given. When providing climate refugees with education, health facilities and work they are able to start a productive life in that host country.

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