Failures of the International Community to Address Climate Migrants

Paul Clements
Professor of Political Science
Director, Master of International Development Administration Program
Director, Graduate Certificate in Climate Change Policy and Management

Climate migrants

Mostly invisible victims of climate change

The largest body of persons most unjustly victimized by climate change

Mostly ignored by the international family of climate change institutions

With 500 million climate migrants possible by 2050, it is critically important to build institutional support to help them rebuild their lives

We know pretty well how to do it, but it will take significant new funds and new and stronger institutions

United Nations Framework Convention on Climate Change (UNFCCC)

Established in 1992

Aim: to stabilize greenhouse gas concentrations in the atmosphere

“at a level that would prevent dangerous anthropogenic interference with the climate system”

Nevertheless, carbon emissions have increased almost every year since then

Much climate change discourse from narrow/scattered perspectives and voluntaristic

Since effects of carbon pollution are global, climate action needs to be considered from a unified global perspective

Given magnitude, interconnectedness, uncertainties, and unprecedented nature of threats, it is hard to see them clearly

Over coming 75 years … an existential threat to civilization as we know it?

Political context: rise of authoritarianism, populist nationalism, declining legitimacy of US-dominated international system formed after World War II

Many individual failures in addressing the climate crisis: collectively a failure of the present organization of the international state system

Established categories of international climate action:

“mitigation” and “adaptation”

Both are failing

Climate migration has been categorized under adaptation

But most international support has come from traditional humanitarian agencies

Climate migration as an issue of climate justice

Mostly caused by developed countries' carbon pollution

Future numbers depend on effectiveness of mitigation and adaptation

Most climate migrants "internally displaced persons" (IDPs)

Climate change not a basis for legal recognition for refugee status

Context

In 1992, UNFCCC envisioned returning to 1990 level of carbon pollution by 2000

But … carbon pollution has increased almost every year since then, 2024 level highest in history

1990 22.5 billion metric tons

2024 37.6 billion metric tons (66% increase)

Central program for global climate action: The Paris Agreement (2015)

Goals: limit global warming to 1.5°C or well below 2°

Nationally determined contributions ~voluntary ➔ 2.7°C

For 2°C, carbon budget = 1000 billion tons carbon dioxide, 27 years at current rate

UNFCCC unable to allocate and punish … not empowered to hold countries responsible for their carbon pollution

Paris Agreement: $100 billion/year from developed countries for climate action in developing countries by 2020

Even division between mitigation and adaptation

Officially achieved in 2022

In 2024, developing countries asked for $1.3 trillion by 2035, developed countries committed $300 billion by 2035

Official foreign aid (non-climate) ~ $150 billion/year
Global military spending ~$2.4 trillion/year

Loss and Damage Fund established 2023, current commitments $700 million

Climate migrants

- Paris Agreement established Task Force on Displacement, but only to give advice
- No system for quantifying climate migration globally
- My recent paper: 500 million by 2050? (~5% global population)

1. Discuss drivers of climate migration, estimate potential numbers by 2050 for each driver with ongoing weak mitigation and adaptation
2. Overview of international climate action for adaptation
3. Humanitarian aid agencies' support for displaced people
4. Institutional reforms needed to strengthen support for climate migrants

Drivers of Climate Migration

Slow-onset

UNFCCC: Sea level rise, temperature increase, ocean acidification, glacial retreat, salinization, land degradation and deforestation, loss of biodiversity, desertification.

Also: drought, changes in weather patterns (for farmers)

Sudden-onset

Storms and floods (+ forest fires …)

Climate change ➔ war and other conflicts

Only rigorous statistical analysis: World Bank's *Groundswell* (2018, 2021)

Analyzes potential internal migration by 2050 from:

a) Reduced yields of maize, wheat, rice & soybeans
b) Reduced river flows
c) Sea level rise: population living up to 2 meters above sea level

Data from 1970 – 2010 applied to three scenarios up to 2050

➔Upper 95% confidence interval for worst scenario: 216 million climate migrants

➔White House, UN, European Union, NPR, Al Jazeera, New York Times, etc. estimate total potential climate migration by 2050 at ~200 million

Data issue with *Groundswell* estimates for sea level rise

Satellite data does not distinguish between tops of trees and houses and ground level

➔True area of low-elevation land much more than estimated

➔ Actual populations up to 2 meters above sea level at least 300% higher

➔ I increase Groundswell estimate by 20%, from 216 to 259 million

Exposure to life-threatening combinations of heat and humidity at least 1 day/year

Temperature above pre-industrial levels (degrees C)	Persons exposed (million)	Estimated persons displaced (million)
~0	97	
1°	279	-
1.5°	508	14 (5% of 279)
2°	789	63 (+ 10% of 494)

Other slow-onset drivers not considered by *Groundswell*

- Loss of pasturage and desertification
  ➔ Swath of Africa from Senegalese Sahel to Somalia, Central Asia
- Losses from other crops
- Ocean acidification and warming bleaching corals, reducing fish yields
- Melting permafrost
- Deforestation, loss of biodiversity, etc.

➔ Up to ~37 million displaced by 2050
➔ Gives ~100 million additional slow-onset [rough estimate]
➔ + *Groundswell* 259 million = up to 359 million total slow-onset by 2050

Sudden-onset displacements

Internal Displacement Monitoring Center (IDMC, from 2008)

Does not track people who leave their home country

Does not distinguish displaced people who return to their former homes from those who have to find new homes (permanent climate migrants)

~2000 unique sources:

- Governments
- UN agencies
- Disaster relief organizations
- Media

But …

- Many governments under-report displacements
- Many small-scale weather events are not reported
- Many displaced people do not go to official sites

➔ IDMC estimates are below true numbers

Estimating permanent migrants from sudden-onset displacements

IDMC: 280 million people displaced by weather disasters from 2008 to 2020
21.5 million/year on average

58% attributed to floods 40.7% attributed to storms

To correct for IDMC undercount, increase to 24 million/year

Assuming 10% unable to return home ➔ 31 million permanent displacements by 2020.

Assuming 40% increase each decade through 2050 ➔ 180 million displaced persons

Total potential climate migrants by 2050

Slow-onset	359 million
Sudden-onset	180 million
	=========
	539 million
Double counting for sea level rise	- 39 million
	=========
	500 million

➔ With ongoing weak mitigation and adaptation, 500 million is a better estimate than 200 million … 200 million more likely minimum than maximum

Why little support for climate migrants from adaptation funds?

Most adaptation aid channeled through established development aid infrastructure

E.g., World Bank, Global Environment Facility, European aid, UN agencies, USAID, Japanese aid

Reduction of future harm very hard to estimate ➔ many opportunistic proposals, weak accountability

Climate migrants have no political power and no bureaucratic constituency supporting their interests

From databases with 3,201 adaptation projects, I did not find a single project with a name indicating support for people displaced by climate change

Developing countries' adaptation actions reported to UNFCCC

Cross-cutting	31%
Agriculture and livestock	19%
Biodiversity and ecosystems	19%
Transport and infrastructure	12%
Water security	7%
Human health and well-being	6%
Fisheries	2%
Energy	1%
Multiple	1%

Humanitarian aid community

E.g. UNHCR, International Organization for Migration, Red Cross, CARE International

Evolved to keep people displaced by war and weather disasters alive and to provide minimal services … expects people displaced by weather disasters to return home

Legal definition of “refugee” from Geneva Accords excludes climate migrants

2000 – 2010 ~40 million forcibly displaced persons, mostly in refugee and IDP camps

2024 ~120 million forcibly displaced persons (from all causes)

Funded on an annual basis, current funding inadequate for camp residents’ basic nutritional needs

Neglect of climate migrants: e.g., Somalia

Population 18 million

- Economy based on pastoralism (main exports livestock, bananas, skins, fish, charcoal, and scrap iron)
- 2021-2023 worst drought in history, most livestock dead, + conflict ➔
- 2024 ~4 million people living in IDP camps

How to build a foundation for a new economy based on population with limited education and training and culture based on pastoralism?

Neglect of climate migrants: e.g., Bangladesh

Population 173 million

- Expanding economy based on textiles, strong NGO sector
- Vulnerable to river floods, storms, and sea level rise
- 7 million people displaced by weather-related events in 2022
- Stock of climate migrants (permanently displaced) ~ > 6 million
- Strong systems for disaster relief; little for climate migrants

Development community ~knows how to help climate migrants in Bangladesh to rebuild their lives but little is being done

A fundamental problem with global climate action

Since UNFCCC's establishment in 1992, developed countries have refused to take legal responsibility for effects of their carbon pollution

Nationally, we insist on holding polluters accountable

System of anarchic nation states is inadequate to collective action problems inherent in challenges of climate justice

Much of the recent international discussion about climate action is about funding

We know how to build infrastructure for mitigation and ~ for climate migrants

A lingering question: how to build institutional infrastructure for adaptation (besides climate migrants)?

Institutional infrastructure for mitigation is inadequate

Institutional infrastructure for supporting climate migrants is ~nonexistent

Conclusions

To address the climate crisis the international community will need stronger institutions of global governance

With greater powers to implement programs

With powers to impose sanctions on recalcitrant governments

For climate justice, institutions for supporting climate migrants should be a first priority (as well as mitigation)

Thank you. Questions/Comments?