“WHEN HOME WON’T LET YOU STAY:”

How Climate Change is Driving Central American Migration

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Introduction

Thousands of migrant caravans are coming from Guatemala, Honduras, and El Salvador – countries that face systemic corruption, violence, and poverty. However, the focus on violence overlooks problems that have become amplified by climate change. As the impacts of climate change become more severe, it is likely that the Global South – those countries least responsible for greenhouse gas emissions – will have the greatest number of environmental migrants, and amongst these countries, the most vulnerable will be those with limited financial and social resources.[1] Climate change hotspots, like Central America, will be impacted by rising sea levels and increasing frequency and intensity of extreme weather events (such as hurricanes, droughts, and floods) that will impact agriculture, crop yields, fish stocks, and public health. Without financial and political backing from highly resourced countries, it will be challenging for the Global South to adapt to climate change while maintaining their basic needs and way of life.

Motivated by the growing hostility towards immigrants coming into the United States, this research serves as a platform to raise the voices of those at the frontlines of the climate crisis. Specifically, narratives from communities in El Salvador and Honduras were collected during a fact-finding mission in 2019. These narratives offer a perspective on migrants that is not present in the mainstream discourse on "climate refugees." This paper employs the term **environmental migrant** to challenge the fear-based associations that come with the term "climate refugees." This research seeks to answer the questions: To what extent does climate change influence human migration in Central America? What can be done to increase the adaptive capacity of Central American in the face of the climate crisis?

[1] Oli Brown, "Migration and Climate Change," in *IOM Migration Research Series*(Geneva, Switzerland2008), 9.

Background

The scientific community has assessed and warned us about the impacts on human and natural systems associated with a 1.5°C increase in temperature (that we are rapidly approaching). Generally, climate models demonstrate an increase in the intensity and frequency of some extreme weather events including droughts, floods, and heavy precipitation – and with it an increase in poverty and inequality, especially in high-risk areas in the Global South.[2] Small island nations and agriculture-dependent communities have already experienced deepening poverty with recent warming and are threatened by displacement as global temperatures increase.[3] The global average temperature has already increased 0.87°C above pre-industrial levels and we can expect to reach the 1.5°C threshold between 2030 and 2050 if we continue business-as-usual global greenhouse gas emittance.[4]

> Additionally, an extra half-degree Celsius (about 1°F) from 1.5°C to 2°C would magnify impacts: Doubling the number of people affected by water scarcity; Doubling the losses of corn yields in the tropics; Losing 30 percent more coral reefs (meaning a total of 99 percent of coral reefs will disappear); Losing an additional 50 percent of global fisheries; Adding 10 million people to those affected by sea level rise.[5]

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[2] O. Hoegh-Guldberg et al., "Impacts of 1.5ºc Global Warming on Natural and Human Systems," in *Global Warming of 1.5°C*(IPCC, 2018).

[3] O. Hoegh-Guldberg, D. Jacob, M. Taylor, M. Bindi, S. Brown, I. Camilloni, A. Diedhiou, R. Djalante, K. Ebi, F. Engelbrecht, J. Guiot, Y. Hijioka, S. Mehrotra, A. Payne, S. I. Seneviratne, A. Thomas, R. Warren, G. Zhou, 2018, Impacts of 1.5ºC global warming on natural and human systems. In: *Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty* [V. Masson-Delmotte, P. Zhai, H. O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J. B. R. Matthews, Y. Chen, X. Zhou, M. I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, T. Waterfield (eds.)]. In Press.

[4] Hoegh-Guldberg et al., "Impacts of 1.5ºc Global Warming on Natural and Human Systems."

[5] Climate Central, "The Globe Is Already above 1°C, on Its Way to 1.5°C,"(Climate Central, 2018).

As the impacts are already being manifested, it is critical to limit the increase further. The window is closing to reduce global emissions enough to stay below the more-dangerous limits.

A notable dimension of this climate crisis is the disproportionate contribution and impact. The Global North – consisting of those countries that have benefitted the most from industrialization – has **contributed** most of the global CO_2 emissions (Figure 1); yet, the Global South – those countries subjugated by the externalities of capitalist globalization – will experience the **worst impacts** of climate change. When distributed by income, the richest half of the world's countries emit 86% of global CO_2 emissions, while "the very poorest countries (home to 9 percent of the global population) are responsible for just 0.5 percent."[6] Those countries with fewer resources will face greater barriers in climate adaptation.

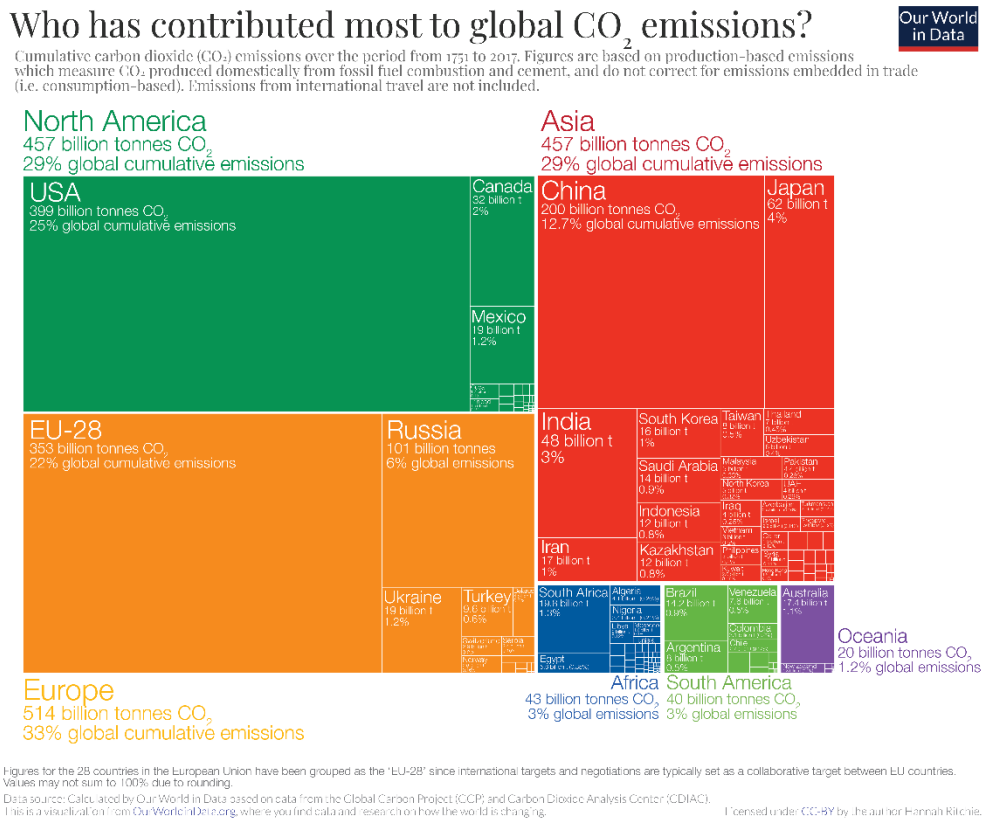

Figure 1. Tree map of cumulative global CO_2 emissions from 2017 Our World in Data journal research.[7]

[6] Hannah Ritchie and Max Roser, "Co_2 and Greenhouse Gas Emissions " *Our World in Data* (2017).
[7] Ibid.

An important framing of climate change is that it is a **threat multiplier**, meaning, it will exacerbate (or amplify) "existing vulnerabilities and threats to stability and thus be an indirect impetus to conflict."[8] For example, the loss of arable land due to severe drought can create or worsen socioeconomic stress, especially in countries with widespread financial and natural resource scarcity. The impacts are also a concern for *human security* which is conceptualized as a way "to capture the broad range of factors that determine people's livelihoods and their ability to exercise their human rights and fulfill their potential."[9] In this way, climate change is a threat to human security because it disrupts those least able to adapt and has the potential to create sociopolitical insecurities.

Climate conditions have the potential to displace people. Between 2008 and 2013, an average of 27 million people were displaced each year by major natural disasters, plus "the risk of displacement is estimated to have more than doubled in four decades (since the 1970s)."[10] However, cities don't need to experience a Category 5 hurricane for people to become displaced. Many are impacted by slower and gradual changes in climate; "It is not difficult to imagine how land degradation, chronic droughts, and repeated crop failure will erode agricultural production and threaten livelihoods."[11] While it is difficult to isolate climate as a sole driver of migration, projections of intensified disasters and climate stressors will accelerate displacement rates.

[8] Patrick Huntjens and Katharina Nachbar, "Climate Change as a Threat Multiplier for Human Disaster and Conflict,"(The Hague Institute for Global Justice, 2015); Oli Brown, Anne Hammill, and Robert McLeman, "Climate Change as the 'New' Security Threat: Implications for Africa," *International Affairs* 83, no. 6 (2007).
[9] Huntjens and Nachbar, "Climate Change as a Threat Multiplier for Human Disaster and Conflict."
[10] Michelle Yonetani, "Global Estimates 2014: People Displaced by Disasters,"(Geneva: Internal Displacement Monitoring Centre (IDMC), 2015).
[11] Huntjens and Nachbar, "Climate Change as a Threat Multiplier for Human Disaster and Conflict."

Climate Change in Central America

Central America has been identified as one of the most prominent tropical hotspots for climate change, meaning the region will be one of the most impacted by climate changes.[12] A group of tropical dry forest ecosystems along the Pacific side of Central America mark the '**dry corridor**' that produces cyclical droughts and hurricane seasons that are correlated to periods of the El Niño period of the Southern Oscillation (ENSO). The region (mainly Guatemala, El Salvador, Honduras, and Nicaragua) is highly susceptible to climate change, as it is characterized by irregular rainfall and an extended four-to-six-month dry season (Figure 2).[13] Additionally, Honduras and Nicaragua have some of the highest proportions of degraded land and area deforested per year in Latin America.[14] With fragmented ecosystems, human and environmental systems alike have less resilience to projected climate changes.

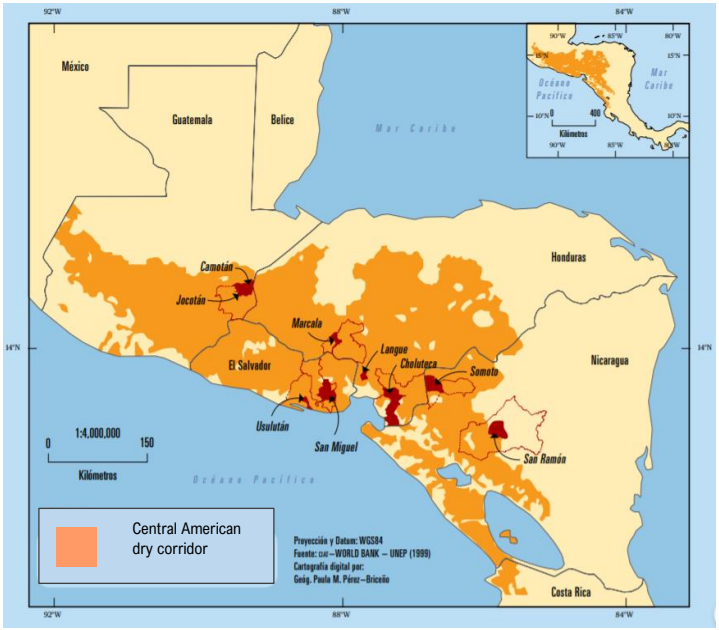

Figure 2. Map of the Central American dry corridor from Women's Environment and Development Organization's 2019 Report on Climate Migration.[15]

[12] F. Giorgi, "Climate Change Hot-Spots," *Geophysical Research Letters* 33, no. 8 (2006).
[13] Amparo Van der Zee et al., "Anexos Del Estudio De Caracterización Del Corredor Seco Centroamericano (Países Ca-4)," in *Tomo II*(FAO, Fundación Internacional Acción Contra el Hambre (ACF), 2013).
[14] G.O. Magrin et al., "Central and South America," in *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group Ii to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, ed. V.R. Barros, et al.(United Kingdom and New York, NY, USA: Cambridge University Press, 2014).
[15] Ivannia Ayales et al., "Climate Migration in the Dry Corridor of Central America: Integrating a Gender Perspective,"(Women's Environment & Development Organization2019).

Central America is especially susceptible to changes in precipitation: "The cumulative effects of warming and precipitation changes are integrated by watersheds to produce changes in intensity, duration, and frequency of both droughts and floods."[16] With warming temperatures, water basins are shrinking, leaving populations with limited to no access to drinking water. Climate projection models demonstrated a 20% reduction of inflows to major reservoirs in the Rio Lempa – the largest river system in Central America, including parts El Salvador, Honduras, and Guatemala – that could severely impact hydropower generated in the region, "as nearly half of all electricity generated in El Salvador has historically originated from hydropower, and most of that from the Rio Lempa."[17] The impacts of hydrological changes in Central America will negatively impact the capacity and quality of energy, water, and soil in this region, which will manifest in agricultural production, threatening food security for human populations.

The issue of water scarcity is especially pronounced in El Salvador – deemed "the most water-stressed nation in Central America" – where "annual water supply per capita is dangerously close to falling short of demand… The result is a multilayered crisis of water scarcity, contamination, and unequal access that affects a quarter of the country's population of 6.4 million."[18] Aquifers in central and coastal El Salvador have already receded 13 feet in recent years, and 90% of surface water sources are contaminated.[19] The impacts reach people all across the country, but those with fewer financial resources, bear the burden more frequently:

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[16] Edwin Maurer, J. Adam, and A. Wood, "Climate Model Based Consensus on the Hydrologic Impacts of Climate Change to the Rio Lempa Basin of Central America," *Hydrology and Earth System Sciences* 13(2009).

[17] Magrin et al., "Central and South America."; Maurer, Adam, and Wood, "Climate Model Based Consensus on the Hydrologic Impacts of Climate Change to the Rio Lempa Basin of Central America."

[18] "Once Lush, El Salvador Is Dangerously Close to Running Dry," last modified 2018-11-02, 2018, https://www.nationalgeographic.com/environment/2018/11/el-salvador-water-crisis-drought-climate-change/; ECLAC (Economic Commission for Latin America and the Caribbean) et al., "Climate Change in Central America: Potential Impacts of Public Policy Options,"(Mexico City, Mexico2015); ECLAC, "The Economics of Climate Change in Central America: Summary 2010,"(Santiago de Chile, Chile: Economic Commission for Latin America and the Caribbean (ECLAC), 2010).

[19] "Once Lush, El Salvador Is Dangerously Close to Running Dry," ; Ministerio de Medio Ambiente y Recursos Naturales (MARN), "Informe De La Calidad Del Agua De Los Ríos De El Salvador 2017,"(El Salvador, Centroamérica2017).

> "Poor people are the ones who tend to end up drinking contaminated water from natural sources," says Andrés McKinley, an expert on water and mining at the Central American University José Simeón Cañas (UCA)… "When large-scale industry is located near poor or lower-income communities, their overuse of water from subterranean aquifers leaves those communities without adequate water resources."[20]

The few water resources that are left are fragmented, exploited, and polluted by industries like Coca Cola and by industrial agriculture that produce coffee and sugar. These private actors contribute greatly to deforestation and soil degradation, creating a barrier for rainfall recharge of groundwater reserves. The runoff on degraded soils from severe storms provokes floods and displaces residents.[21] The country's business lobby has stood in the way of protections of water as a human right, allowing for water privatization and stimulating water conflicts where water is scarce. Conflicts over land and water will stretch beyond El Salvador, "as nearly one sixth of the population is settled in transboundary watersheds."[22]

What is the problem with the climate refugee narrative?

The dominant literature on the intersections of climate change and migration frames forcibly displaced peoples as "climate refugees" and fixates on the estimate that the world can expect up to 200 million climate migrants by 2050, while other estimates suggest a range between 25 million and 1 billion displaced people by 2050.[23] The United States has noticed

[20] "Once Lush, El Salvador Is Dangerously Close to Running Dry,"
[21] Ibid.
[22] Emilio Sempris, "Climate Change and Freshwater in Latin America and the Carribean," *To Protect Succeeding Generations...*2009.
[23] Brown, "Migration and Climate Change."

thousands of Central American 'refugees' arriving in caravans in 2018 and 2019, but the conversation scarcely includes a discussion on climate change.

'Climate refugee' has become a buzzword for mainstream media and politics in the Global North. What associations are related to climate refugees? Some portrayals of refugees suggest helpless and passive victims, "deserving of Western sympathy" and exalting Western people as potential saviors; a story often narrated by European and American 'experts' that show people that have lost all hope in countries that have been reduced to an unhabitable wasteland.[24, 25] And then, there are images of mass migration of unskilled poor from 'developing countries' illegally crossing borders and threatening "American sovereignty."[26] However, these generalizations do not begin to scratch the surface of the diverse lived experiences of the individuals under consideration, nor does it recognize the influence of globalized politics and economics. For one, they neglect migrant agency and capacity, which "[can] shift the attention away from local understandings of the problem to one that views Northern ideas of sustainable development as self-evident and/or superior."[27] These associations are not only problematic, but dangerous. Suggesting a perceived threat has serious implications when it justifies political violence against Global South:

> …the degradation narrative has proved particularly popular in Western policy circles because it kills a number of birds with one stone: it blames poverty on population pressure, and not, for example, on lack of land reform or off-farm employment opportunities; it blames peasants for land degradation, obscuring the role of commercial

[24] Michael P. Nash, "Climate Refugees,"(USA2010).
[25] "Climate Refugees Documentary – Film Review,"
[26] "Illegal Immigrant Caravans and Criminal Catholics," 2020, https://torontosun.com/opinion/columnists/malkin-illegal-immigrant-caravans-and-criminal-catholics.
[27] Hedda Ransan-Cooper et al., "Being(S) Framed: The Means and Ends of Framing Environmental Migrants," *Global Environmental Change Part A: Human & Policy Dimensions* 35(2015): 109.

agriculture and extractive industries and it targets migration both as an environmental and security threat.[28]

The climate refugee narrative threatens to militarize climate policy and development aid by mobilizing racist fears of a dangerous poor.[29] The narrative doesn't recognize that these "refugees" are individuals with autonomy and purpose, who have the right to thrive like the rest of us. It does not recognize that these are communities struggling to uphold their ways of life and that people would rather stay to continue their livelihoods instead of being uprooted by transgressions of the Global North. Global South communities are not economically impoverished because of lesser ability, but because they have been a source of material and labor extraction for the Global North to become prosperous and advantaged. The liberalization of trade, cross-sectoral privatization, and expansion of transnational companies in Latin America has stimulated inflation and economic growth while increasing inequality and poverty, "thus shifting from a relatively sustainable production mode to one that shows growing problems of environmental degradation."[30] Is it not the responsibility of the Global North to be accountable and make up for this destruction of resilience that has been justified by colonialist, neoliberalist, and patriarchal power structures?

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[28] Betsy Hartmann, "Rethinking Climate Refugees and Climate Conflict: Rhetoric, Reality and the Politics of Policy Discourse," *Journal of International Development* 22, no. 2 (2010): 234; Piers Blaikie et al., "Land Degradation and Society,"(London: Routledge, 1987); Ester Boserup, *The Conditions of Agricultural Growth: The Economics of Agrarian Change under Population Pressure*, 2017/01/20 ed., vol. 36, American Antiquity (Chicago: Routledge, 1965); Melissa Leach and Robin Mearns, "The Lie of the Land: Challenging Received Wisdom on the African Environment," in *Land Degradation & Development*, ed. Uwem Ite(Oxford and Portsmouth, NH: International African Institute with James Currey and Heinemann, 1996); Michael Thompson, "Not Seeing the People for the Population: A Cautionary Tale from the Himalaya," in *Environment and Security: Discourses and Practices*, ed. Miriam R. Lowi and Brian R. Shaw(London: Palgrave Macmillan UK, 2000); Gavin Williams, "Modernizing Malthus: The World Bank, Population Control and the African Environment," in *Power of Devleopment*, ed. Jonathan Crush(London: Routledge, 1995).

[29] Carol Farbotko and Heather Lazrus, "The First Climate Refugees? Contesting Global Narratives of Climate Change in Tuvalu," *Global Environmental Change Part A: Human & Policy Dimensions* 22, no. 2 (2012): 384; Hartmann, "Rethinking Climate Refugees and Climate Conflict: Rhetoric, Reality and the Politics of Policy Discourse," 242.

[30] Gilberto Gallopín and Graciela Chichilnisky, "The Environmental Impact of Globalization on Latin America: A Prospective Approach," *SSRN Electronic Journal* (2000): 278.

Another issue with the climate refugee label is that is it not legitimately recognized. 'Refugee' is a term that was defined at the 1951 UN Refugee Convention to offer legal protections to people that crossed an internationally recognized border due to fear of persecution (due to race, religion, nationality, or political opinion) in their country of nationality.[31] The term 'climate refugee' is not internationally recognized and does not entitle the individual to any legal protections:

> Both the U.N. High Commissioner for Refugees (UNHCR) and the International Organisation [sic] for Migration (IOM) caution against using either the term environmental refugee or climate refugee since they have no basis in international refugee law and could undermine the international legal regime for the protection of refugees. UNHCR further emphasises [*sic*] that much displacement due to climate-related factors is likely to be internal in nature, without the crossing of international borders.[32]

The language used to describe human mobility is still largely debated and reflects the complexity of concepts involved with migration. A study by the International Organization for Migration (IOM) proposes using the term "forced climate migrant" to convey "the increasing phenomenon of non-voluntary population displacement likely as the impacts of climate change grow and accumulate."[33] Carre Geo & Environment (CGE) in Cameroon and Paris recommends the usage of the IOM's "environmental" migrant over "climate" migrant to include the challenges beyond increasing temperatures such as "forced land expropriation or industrial accidents."[34] Throughout

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[31] UNHCR, "Convention and Protocol Relating to the Status of Refugees," ed. The UN Refugee Agency(Geneva1951/1967).
[32] Hartmann, "Rethinking Climate Refugees and Climate Conflict: Rhetoric, Reality and the Politics of Policy Discourse," 238; UNHCR, "Climate Change, Natural Disasters and Human Displacement: A Unhcr Perspective.,"(UNHCR, 2008); IOM, "Migration, Environment, and Climate Change: Assessing the Evidence,"(2009).
[33] Brown, "Migration and Climate Change.", 15.
[34] Ibrahim Mbamoko et al., "Environmental Migration... For Dummies! Reflections on Environmental Migration from the Perspective of International Solidarity,"(2019), 6; IOM, "Glossary on Migration,"(Geneva: https://www.carregeo.org/d%C3%A9veloppement-durable/migration/, 2019), 62.

this paper, I adopt the term "environmental migrant" instead of 'climate refugee' since it allows room for the complexity of human mobility *and* anthropogenic displacement factors.

Aside from the terms adopted in studies and reports, people facing displacement do not necessarily identify with or accept the 'climate refugee' or 'environmental migrant' label because of the underlying assumption that they have *already* lost the opportunity to adapt to and mitigate climate change. For example, the people of Tuvalu, a small-island nation (total land area only 16 square miles) in Oceania, have been labelled the 'world's first climate refugees' after rising sea levels, warmer ocean temperatures that decline coral reef resilience, and more frequent storms have threatened their ability to sustain themselves. However, instead of seeking climate-related asylum from the United Nations, Pacific ambassadors have called for industrialized nations "to contain and reduce greenhouse gases" and have made "cultural and political arguments about identity, place and human rights to self-determination."[35] In reality, the communities that are not yet displaced have agency and the desire to continue their livelihoods; they would rather do everything in their power to stay home than to spend the energy relocating or fighting to attain legal statuses.

The environmental migrant issue is not one of national security, but one of resilience and integrity for all people and our environment. Whether or not climate refugees become legitimized in the future, we know that more people will be negatively affected by the climate crisis in coming years. It is important to develop a new international framework to integrate migrants into society:

[35] Karen Elizabeth McNamara and Chris Gibson, "'We Do Not Want to Leave Our Land': Pacific Ambassadors at the United Nations Resist the Category of 'Climate Refugees'," *Geoforum* 40, no. 3 (2009): 482.

> "If your farm has been dried to a crisp or your home has been inundated with water and you're fleeing for your life, you're not much different from any other refugee," said Michael Doyle, an international relations scholar at Columbia University. "The problem is that other refugees fleeing war qualify for that status, while you don't."[36]

Environmental Migration

"Migration is another strategy in ecosystems and regions at high risk of climate hazards." - Intergovernmental Panel on Climate Change (IPCC).[37]

Due to climatic changes, the poorest population in Central America faces serious threats to food security, "increasing the current rate of chronic malnutrition," as increasing temperature and variability of rainfall is expected to reduce maize, coffee, bean, rice, and wheat productivity.[38] "In [Central America], nearly 90% of agricultural production destined for internal consumption is composed by maize (70%), bean (25%), and rice (6%)."[39] A decline in agricultural production will have significant impacts on the small farmers that produce food:

> According to data from the FAO: 62% of households in the driest areas of the Dry Corridor depend on corn, bean and sorghum production; 80% of households that depend on the production of basic grains live below the poverty line… Various estimates also show that more than [1.5] million people are moderately or severely food insecure in the region… Despite being one of the world's most vulnerable regions to the consequences

[36] Oliver Milman, Emily Holden, and David Agren, "The Unseen Driver Behind the Migrant Caravan: Climate Change," (2018), https://www.theguardian.com/world/2018/oct/30/migrant-caravan-causes-climate-change-central-america.
[37] Magrin et al., "Central and South America."
[38] Ibid., 1530.
[39] Ibid; ECLAC, "Subregión Norte De América Latina Y El Caribe: Información Del Sector Agropecuario: Las Tendencias Alimentarias 2000-2010,"(México DF, Mexico2011); "The Economics of Climate Change in Central America: Summary 2010."

> of climate change, it is estimated that by 2030 Central America will produce less than 0.5% of the planet's greenhouse gases.[40]

Small farmers, rural populations, and indigenous people are amongst those with a lower adaptive capacity in the face of climate change. The World Food Programme (WFP) reported that 30% of households with migrants "cited climate-induced lack of food as the main reason for leaving their homes and becoming migrants, and that emigration from those nations increased by a factor of five from 2010 – 2015."[41] In 2019, for the fifth consecutive year since the extreme drought period in 2014, farmers in dry corridor reported massive harvest loss with up to 72% of corn and 75% of bean harvest lost in Honduras, leading to the declaration of a state of emergency.[42] Even when harvests are lost, migration is not the first choice. Instead, people will cope by reducing their food consumption, cutting financial costs, and selling land or other assets.[43]

Women and youth face additional barriers to sustaining a livelihood in their countries of origin. For one, there is a gap of generational replacement in the agriculture sector: "The presence of other opportunities, cultural changes, ambitions, capacities to satisfy basic needs, etc. cause a loss of interest of young people in continuing the traditions of their parents."[44] In addition to the stress of declining harvests, youth seek professional careers and alternative livelihoods. "We always need agriculture, but it's not good as a business," says Cecilia Lopez, an 18-year-old in El Milagro, El Salvador, "The vision of the youth here is to not continue with

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[40] Ayales et al., "Climate Migration in the Dry Corridor of Central America: Integrating a Gender Perspective."; Inter-American Development Bank (IDB) et al., "Food Security and Emigration: Why People Flee and the Impact on Family Members Left Behind in El Salvador, Guatemala, and Honduras,"(2017).

[41] Jeff Masters, "Fifth Straight Year of Central American Drought Helping Drive Migration," *Eye of the Storm* (blog)2019, https://blogs.scientificamerican.com/eye-of-the-storm/fifth-straight-year-of-central-american-drought-helping-drive-migration/; WFP, "The Dry Corridor,"(World Food Programme, 2018).

[42] Masters, "Fifth Straight Year of Central American Drought Helping Drive Migration."

[43] (IDB) et al., "Food Security and Emigration: Why People Flee and the Impact on Family Members Left Behind in El Salvador, Guatemala, and Honduras."

[44] Van der Zee et al., "Anexos Del Estudio De Caracterización Del Corredor Seco Centroamericano (Países Ca-4)," 12.

agriculture. It's not sustainable."[45] Further, the youth homicide rate in the Northern Triangle [Honduras, Guatemala, and El Salvador] is 5 times what the World Health Organization (WHO) considers to be an epidemic.[46]

Women, in particular, are generally reliant on natural resources for livelihoods, food, water, and fuel, while experiencing a lack of access to land and financial capital.[47] Social, political, and economic inequalities render women more vulnerable as they experience a decline in health, loss of security, increased care responsibilities for families in crisis, increased time spent on getting basic needs, and fewer migration options and labor markets.[48] The WFP reports that "most single-headed households in the Dry Corridor are headed by mothers, who are economically vulnerable and food insecure" and "undertake the agricultural activities of departed men on top of their traditional domestic responsibilities."[49]

Comunidades Organizando el Poder y La Acción Latina (COPAL MN) offers a climate framework centered around justice for Latinx communities (Figure 3). The framework makes clear the intersection of extratctive industries to conflict over land and resources that can lead to displacement, especially for the rural poor. Ultimately, it seeks to include migrants and frontline communities as actors and beneficiaries of a green economy and decarbonization in the United States. With this understanding, COPAL aims to shift the narrative by having a greater context of the factors driving migration. The impacts of the climate crisis are fundamentally destabilizing and cannot be isolated from other factors that to force people to flee their countries of origin because it is a threat muliplier and burdens critical sources of life: water and land.

[45] Heather Gies, "El Salvador's Disappearing Farmers,"(Al Jazeera News, 2018).
[46] WHO, "Health of Refugees and Migrants,"(World Health Organization - Region of Americas2018).
[47] UN Women, "Gender on the Move: Climate Change, Gender, and Migration,"(2016).
[48] Ibid.
[49] WFP, "The Dry Corridor."

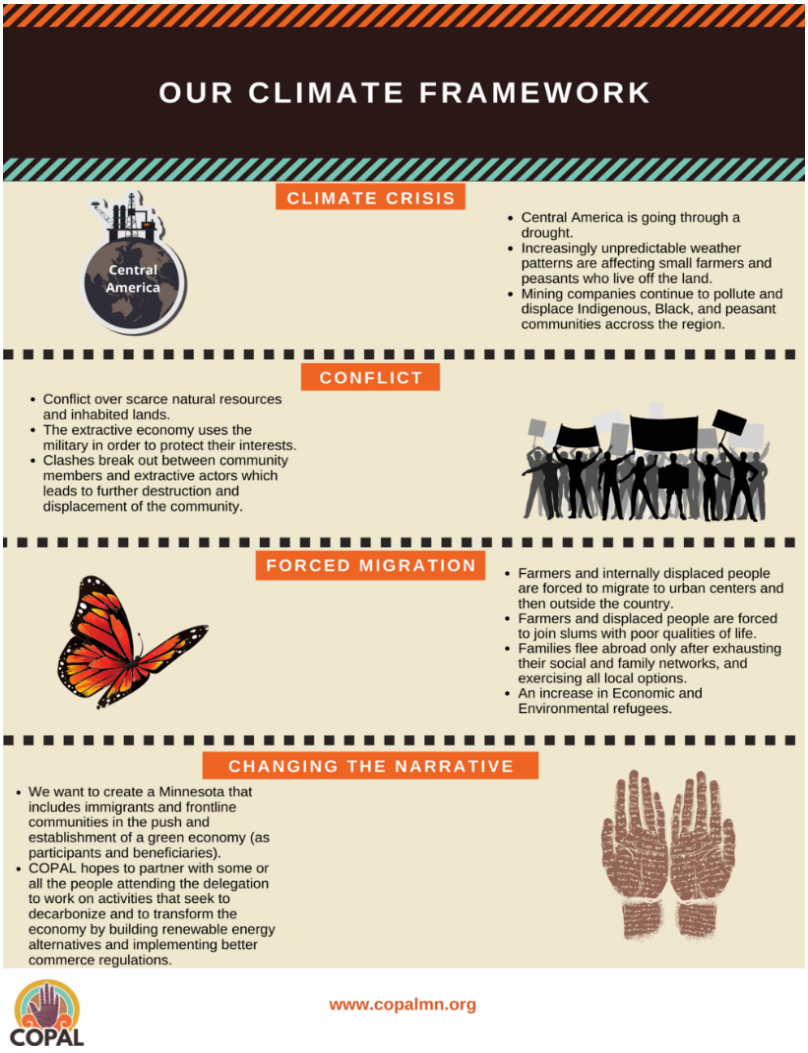

Figure 3. COPAL MN's Climate Framework contextualizes and breaks down the impact of the climate crisis on Central American populations.

Methods

This research draws on a mix of qualitative data, including peer-reviewed articles, government documents, and news articles discussing 'climate migration.' I collected a week's worth of fieldnotes from my participation in a delegation trip in November 2019 with Minnesota climate justice organizers and government representatives to visit communities in Honduras and El Salvador to discuss the intersections of climate change and migration. The delegation was organized by Allianza Americas and COPAL MN.

During our trip, we visited one village in Honduras, four neighborhoods in El Salvador, and hosted additional meetings in El Progreso, Honduras and San Salvador, El Salvador (Figure 4). Narratives were constructed from conversations with visited communities and from meetings with pastoral, humanitarian, and independent news members. Throughout the research, I prioritized re-centering the discussion on environmental migration to reflect the voices of those at the frontlines of the climate crisis and those experiencing emigration with their communities.

Additional interviews were conducted during my participation as a student observer at the Conference of Parties (COP25) to the United Nations Climate Change Conference in Madrid, Spain between December 9 and 13, 2019.

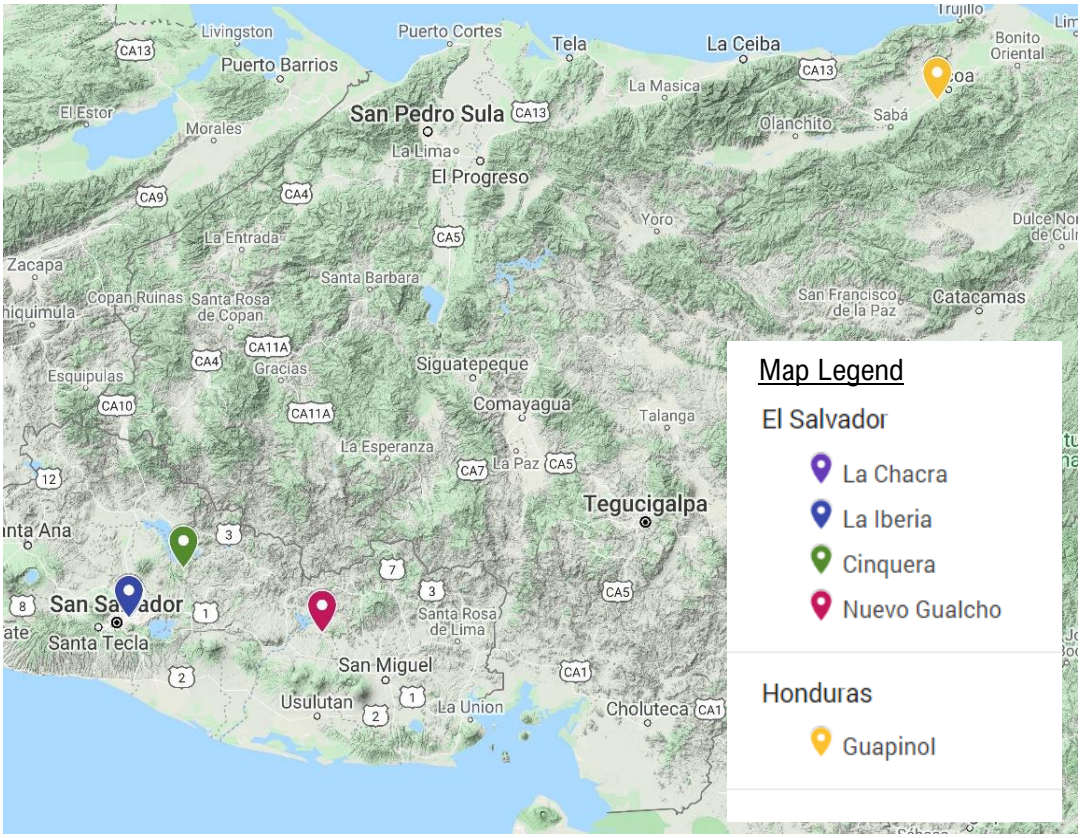

Figure 4. Map of the Salvadoran and Honduran communities featured in the following testimonies. Original map created via GoogleMaps.

Findings (Body)

Migrant narratives in Central America

"Our rivers are drying up and we are coming to the realization that if we allow transnational corporations to take what's left, we'll lose what we started." -Antonio, Honduran Catholic Pastoral Member

In 2019, 2.2 million people suffered crop losses in due to drought in the dry corridor, leaving 1.4 million urgently needing food assistance.[50] People are facing food insecurity as extreme droughts and floods threaten the sustenance of food and income. "A third of all employment in Central America is linked to agriculture, so any disruption to farming practices can have devastating consequences."[51] Smallholder farmers are pressured to move to the city or even out of the country to seek jobs that will provide sustenance for their families. These jobs are largely low in quality and pay. When they arrive in the United States, they tend to occupy poor-quality neighborhoods where there may be hazardous toxins or other barriers to a healthy livelihood.

Latin America has seen a growth the rate of family remittances coming into the country, shifting the economic dependence of people in these countries from local labor to money from migrant family members. In 2018, El Salvador received $5.5 billion and Honduras $4.7 billion in remittances, reflecting a growth in GDP while distorting the fact that people are not able to secure dependable income within the country.[52] While migration offers families the opportunity to secure more finances, the sources are insecure and the displacement separates communities, reducing their resilience to pressures of their lived experience. However, many people don't

[50] "Erratic Weather Patterns in the Central American Dry Corridor Leave 1.4 Million People in Urgent Need of Food Assistance," 2019,
[51] Milman, Holden, and Agren, "The Unseen Driver Behind the Migrant Caravan: Climate Change."
[52] "Fact Sheet: Family Remittances to Latin America and the Caribbean in 2018," 2019, https://www.thedialogue.org/analysis/fact-sheet-family-remittances-to-latin-america-and-the-caribbean-in-2018/.

attribute the current difficulties of their lived experience to climate change: there are many other factors at work.

GUAPINOL, HONDURAS

Honduras has been impacted by political corruption, compromising the country's health, economic vitality, and safety. Collaboration between the military, drug traffickers, and a corrupt social class concentrate wealth and power through extortion, nepotism, and tax evasion.[53] The impact of this corruption costs Honduras over $263 million USD (about 12.5% of the country's GDP) every year.[54] With dominance over Honduran politics and economics, the country is able to authorize the activity of extractive transnational industries that override citizen land ownership and natural reserve protections, allowing the development of mining, hydroelectric, and plantation projects.[55] "One way or another they'll kill us," says Juana of the Guapinol River community. "Not only Guapinol will be exploited, but also the protected areas upstream."[56] Naturally, communities organize to protect their rights, but then face criminalization that is regulated by private police and the military, resulting in violent and life-threatening conditions for Hondurans.

A riparian community in Honduras, the Tocoa municipality, has faced such threats (Figure 5). "The river was like chocolate water," says Juana.[57] In 2018, an iron mining corporation, *Inversiones Pinares*, began mining and dumping wastes in the river, leaving the water thick with contamination. The water that was used by the Tocoa community for cooking,

[53] Alejandra Gallardo, "Central American Delegation Fieldnotes,"(2019), 11/10/19.
[54] "Honduras Pierde 65 Mil Millones De Lempiras Cada Año Por Corrupción," last modified 2020-02-07, 2020, https://www.radioprogresohn.net/noticias-nacionales/65-mil-millones-de-lempiras-pierde-honduras-cada-ano-por-corrupcion/.
[55] Gallardo, "Central American Delegation Fieldnotes," 11/12/19.
[56] Ibid., 11/11/19.
[57] Ibid.

bathing, and drinking became unusable for those living downstream of the mining operations. The company is the largest landowner in Honduras and has been linked to the ruling party, with a history of conflicts with rural communities for implementing extractive projects such as African palm plantations.[58] No legal process was used to acquire the land. The area of mining development in the Botaderos Mountains (upstream of the Guapinol River) was established as a national park in 2012, but by 2013 the corporation-funded Congress "removed 537 acres from its core,"[59] manipulating laws to remove protections over the land. Although the Tocoa locals have legal property ownership along the river, these protections were invalidated by a judicial system that functions not for law, but for money.

Figure 5. ***Left****: Minnesotan delegates join the local community by the Guapinol River (November 2019).* ***Right****: Painted rocks along the Guapinol riverbed, reading "Don't dump trash" and "Water is life." Photos by author.*

"Before the corporations arrived, the community was on respectable terms and safe. You could leave your bike outside and no one would take it. They raped our women, beat civilians – and if we tried to interfere – we'd get death threats, kidnapped, tortured, and killed," says Leonel George, a human rights organizer from Tocoa.[60] Leonel describes over 40 families have been separated and displaced by the violence and lack of access to basic rights and resources, but that

[58] "Anti-Mining Camp in Honduras Evicted by State Forces," last modified 2018-11-01, 2018, https://peoplesdispatch.org/2018/11/01/anti-mining-camp-in-honduras-evicted-by-state-forces/.
[59] "Witness to the Struggle of the Guapinol, Honduras Environmental Defenders: Criminalization of Protest, Grass Roots Victory, Challenges of Solidarity," 2018, http://www.share-elsalvador.org/uploads/1/0/8/1/108170557/witness_to_the_struggle_of_the_guapinol_-_by_paul_fitch_1.pdf.
[60] "Central American Delegation Fieldnotes," 11/11/19.

is not anyone's first option. The Tocoa municipality communities organized the 'Guapinol camp in Defense of Water and Life' by the mining corporation's entrance, taking turns cooking and camping for 88 consecutive days. During this time, police and military members threatened, wounded, and arrested several people and took the life of a beloved elderly community member. Fathers, brothers, and sons of Tocoa were targeted and incarcerated in the maximum-security prison in La Tolva. At the time of our visit, they had not seen the incarcerated men for about 3 months, causing a deep agony in the hearts of the affected families that could not be certain that their loved ones would come back alive. "We might as well be at war," says Leonel.[61] The terrorization facing the Tocoa municipality and conditions of extreme poverty (78% poverty rate) make it extremely difficult to live a dignified and healthy life.[62] The community attributes the increasing incidence of caravans to the repression and lack of protections for families. The violation of human rights reflects a silencing and criminalization seen in many other rural and Indigenous communities for protecting water and their livelihoods.

LA CHACARA & LA IBERIA, EL SALVADOR

Approximately 3.5 miles east of San Salvador, the capital of El Salvador, are the communities La Chacara and La Iberia. La Chacara is made up of about 650 families in an area regarded as one of the most violent and dangerous in Greater San Salvador due to the presence of organized crime gangs known as "maras," from the MS-13 and 18th Street gangs whose members were deported from Los Angeles in the mid-1990's. Around 2016, there was a massive wave of internal and external migration from La Chacara (especially of young adults), leaving behind what seemed like a ghost town. Despite the stigmas that have posed challenges to obtaining

[61] Ibid.
[62] Ibid.

development funds from the country, community members welcomed us to a neighborhood that they have strived to revitalize through coordination of an Intercommunal Board and Prevention Council that targets building capacity with youth, fighting for land and water rights, and supporting education development.

"We are blessed to have a water source here, but we have to fight so they are not taken away. We have to recognize our rights and remember *why* we fight, or we'll be stepped on," says one of the women board directors, "As women, it is natural for us to organize because we experience these problems firsthand in our households."[63] The community has access to water along the Acelhuate Stream that splits from the northern Lempa River, but there are significant issues with environmental quality and rights.

Stream pollution from upstream wastes presents health concerns to La Chacara, as the Acelhuate Stream carries plastics from household garbage that settles along the way, including by the homes in La Chacara. Residents prioritize their own waste management by holding each other accountable, so that they do not litter on the streets. Children are taught sustainability from this perspective at their school and are taught to have a respect for the community and the environment they live in.

The locals have observed an increase in variability of weather patterns, particularly of rain events and earthquakes. During extreme rain events, it's up to a civil protection team to remain vigilant and follow protocols. Three bright red lines are painted on the hillside to monitor risk of flooding since their retention wall was destroyed by storms in the last 5 years and fails to hold back excessive water flow (Figure 6). In the case that a family is displaced during a flood,

[63] Ibid.

they have made communal houses available for shelter. The Intercommunal Board has demanded that the Ministry of Environment and Natural Resources provide maintenance for the stream and build a secure levee for flood protection. According to the locals, their country's government has shown up to collect testimonies from La Chacara residents to seek funding, but the funds have never been allocated.[64] In part, they face challenges in obtaining official records of their residence, undermining their claims for community development and water management. Regardless, community leaders remain committed to raise awareness about waste reduction and safe water practices, but they recognize the need for municipal accountability to assist in lowering the barriers for families to access clean water and reliable infrastructure. "Many families will save and spend thousands of dollars to send young family members out of the community. They think that they'll be safer somewhere else," says a board director.

Figure 6. A broken retention wall along the Acelhuate Stream. Metal sheets have been set up along the residences to protect from water damage when the water rises. Plastic trash lines either side of the stream, bringing wastes from the western community of Santa Tecla and other neighborhoods upstream. Photo by author.

A short walk from La Chacara, the community of La Iberia uses urban art to combat violence and keep youth engaged and empowered throughout the neighborhood, addressing some similar social issues present in La Chacara. In 2014, a group of 20 youth leaders organized to discuss concerns in their community and ways to deescalate and mediate conflict to catalyze social change. Since then, collective efforts have driven the formation of civil protection, sports, women, and health committees and initiatives. The youth committee leads five

[64] Ibid.

main initiatives: breakdancing, Batacuda drumming, a skate park transformed from a garbage dump, GrafiTour community murals, and rap/spoken word (Figures 7-9). Additionally, youth leaders secured NGO funding to build the Cube – a center for youth to express creativity and engage in education through access to books, a recording studio, computers, an internet network, and youth role models. Outside of La Iberia, these youth are labelled delinquents and denied opportunities to work, but the local initiatives have helped keep hundreds of at-risk youth away from violent and gang lifestyles. Youth become accountable actors and foster values of stewardship and justice through their growing visions for art, society, and culture. This way, community resilience is used to break the stigma that prevents these communities from receiving financial resources for sustainable development projects.

Figure 7. Iberia youth member presents his rap song in the Cube. Photo by author.

Figure 8. Kevin, breakdance group leader, shows a dance in their studio. Photo by author.

Figure 9. Batucada drum group performs a song with their handmade drums. Photo by author.

NUEVO GUALCHO, EL SALVADOR

In the rural region of Usulután, El Salvador we were welcomed by a rural community called Nuevo Gualcho that was established from refugee camps by Salvadoran war veterans looking to follow the footsteps of their cultivator ancestors. The region served as a strong resistance base during the Salvadoran Civil War (1980-1992), including a community-led radio network, Izcanal, that is now continued as an organizational platform, reaching 5 regions of eastern El Salvador to advocate for human rights and intersectional issues for rural Salvadorans. Of local interest, environmental campaigns remain important to promote a culture of peace and unity.

José Wilfredo Hernández, a member of the Izcanal production team, is a corn-grower, himself, and is concerned about food security for neighboring communities. He recalls particularly irregular and unstable weather in 2018, including prolonged periods of drought, a narrowing of the wet season, as well as a significant decrease in river levels in the past 10 years. There is an added stress to the soil quality due to local deforestation and lack of a conservation culture.[65] The challenging weather conditions discourage young adults from practicing agriculture and eventually push them to seek employment or educational opportunities in urban centers or other countries. However, those families that stay behind don't want to lose their agricultural roots, so they communicate with local sustainable agriculture networks to share sustainable practices, seed banks, and more.

At Nuevo Gualcho, community founder Juana has used her versatile war veteran skills (from making medicine from native plants to organizing militants) to establish a committee of women

[65] Ibid.

leaders from neighboring communities. As Nuevo Gualcho developed, women's voices became central to decision-making in the region, using collaborative models to exchange knowledge and advocate for household concerns in spaces where women are traditionally left out. They have worked towards a vision for common good, with a high regard for the poor, through their commitment to defend health, resist water privatization, and denounce injustices. The committee has demanded and received funding from international NGOs for kitchens, water filters, and support to develop their agricultural infrastructure. The German Development Bank funded the Potable Water and Basic Household Sanitation project in which a communal Executive Committee for the project collaborated with municipal authorities to implement a solar panel system for water pumping and sanitation. The project serves as an exemplar in the country for solar energy and Nuevo Gualcho community members are proud to use renewable resources to minimize their damage to the environment.[66]

Nuevo Gualcho's youth has reclaimed veteran efforts by organizing for community service, using digital media platforms. In response to environmental quality and access to educational resources, youth leaders have worked with the municipality of Nueva Granada to improve road access to the local river and extend a trash collection route to include four more rural communities in an effort to reduce trash burning and waste disposal in the river. Next, they are working to create an effective recycling system. Collaboration with European NGOs (unnamed), has provided the community an artisanry space, access to a Wi-Fi network, and enough books to make their library the 15th national library of El Salvador (Figure 10). In 2013,

[66] "Nuevo Gualcho: Un Novedoso Proyecto De Agua Alimentado Con Energía Solar," 2015, http://www.fisdl.gob.sv/novedades/ciudadano/10791-nuevo-gualcho-un-novedoso-proyecto-de-agua-alimentado-con-energia-solar#.XpaQDMhKhPY.

youth participated in capacity-building by getting judiciary representation to speak on leadership, gender, violence, and gangs that are a concern for youth across the country.

Even with the progress made, youth are faced with limited opportunities. In the 90's, over 400 youth (most of them women) left for the United States to seek better livelihoods to support the community economically. The migrants take their talents and skills with them. There used to be a supply of labor for textiles and tailoring in Nuevo Gualcho, but since the 90's there haven't been enough dedicated women to maintain a business. Seven of Juana's nine children have immigrated to the United States with no plans of return. They send remittances to support the community, but the families left behind carry pain in their hearts knowing what risks their loved ones may face away from home. Nuevo Gualcho's families have successfully resisted gangs through social cohesion, but youth are still faced with challenges in pursuit of sustainable economic opportunities and higher education. With agriculture becoming increasingly unreliable, local options are quickly exhausted. The elders of Nuevo Gualcho continue to seek ways to revitalize the land in hopes of sustaining a thriving rural lifestyle.

Figure 10. Nuevo Gualcho's library where MN delegates met with community leaders. Photo by author.

CINQUERA, EL SALVADOR

Cinquera originates from Lenca indigenous communities – the largest indigenous group currently represented in Honduras, but that used to live across several countries in what is now known as Guatemala, Honduras, and El Salvador. The Lenca name loosely translates a: 'hill or place of rocks and palms' because they occupied mountainous areas in the region and along the

Lempa River. The municipality that is known today as Cinquera is immersed in the humid subtropical climate zone. In the post-colonial era, this region was dedicated to indigo cultivation for almost 300 years, an agricultural product that grows well in the dry volcanic soils of the area. The Spaniards organized a Central American indigo market to compete with the European textile industry where indigenous Salvadorans where exploited and nearly enslaved.[67] The dangerous work required people to pulp leaves with their bare feet, "opening wounds susceptible to infection in the extremely unsanitary conditions."[68] Unregulated indigo cultivation led to water pollution in the area, as it shades light in aquatic ecosystems and hinders biological growth.[69]

In the 1970's, the oppression and mistreatment of indigenous peoples by wealthy landowners created conflict. During the Civil War in the 1980's, the area became a battleground where Guerrilla soldiers established underground Vietnamese kitchens (Figure 11), set up makeshift hospitals, and strategized with allies under the forest cover; by the end of the war in 1992, Cinquera was left behind as a ghost town. Today, you can see remains of shrapnel and campsites by the recently constructed churches and walking trails.

Figure 11. During the war, food preparation was dangerous because the smoke could allow enemy air forces to detect an encampment. Vietnamese kitchens were imitated, using underground channels that cooled the hot smoke, so it would disperse on the ground away from the camps instead of above the trees. Photo by author.

[67] Seth Micah Jesse, "Indigo and Indigeneity in El Salvador,"(Inter-American Foundation, 2018).
[68] Ibid.
[69] Gallardo, "Central American Delegation Fieldnotes."

Guerilla war veterans came back to Cinquera and described feeling a personal obligation to steward the forest that provided them cover and life during the peak of the war. Today, the Municipal Reconstruction and Development Association (ARDM) executes various programs for the integral development of Bosque de Cinquera Ecological Park by protecting natural resources and managing the forest sustainably, with productive, social, and educational projects (Figure 12). The Cinquera community is proud of the secondary forest they have conserved, and has a vision to raise biodiversity health. Cinquera has become a focal point for scientific research by hosting researchers to survey the flora and fauna species, helping recover species in El Salvador such as: deer, ocelots, the Roque tree frog, pacas, and the plants that help them thrive.[70]

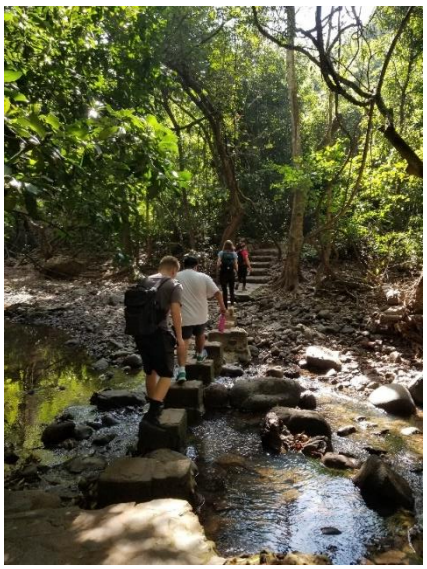

Figure 12. MN delegates hike through Bosque de Cinquera Ecological Park. Photo by author.

Discussion

Reframing the narrative

One of the primary motivations of this research is to offer a narrative that is often missing or overlooked in discussions on immigrants. With a growing hostility against migrants from Latin America and Asia, there a toxic and misinformed sentiment towards an 'other' group that is unfamiliar and different from us. The fear-based prejudice against migrants is used to perpetuate group-based inequality and justify the institutionalization of laws that restrict access to communal resources, instead of acting on the sources of conflict. [71] The US has a history of

[70] Ibid.
[71] john a. powell and Stephen Menendian, "The Problem of Othering: Towards Inclusiveness and Belonging," *Othering & Belonging: Expanding the Circle of Human Concern*, no. 1 (2017).

fueling militarism in Latin America, helping create a closed cycle of concentrated power.[72] Additionally, the strengthening of US-Mexico border policing and neglect has resulted in thousands of deaths, disappearances, and assaults of asylum-seeking migrants from Central America. Growing border policies and enforcement helps obscure the accountability of the Global North in fomenting violence:

> Even though they are the primary cause behind global warming, [Western governments] are constantly looking for ways to separate themselves from its consequences… These governments are seeing climate migrants not as people but "security threats" and heavily investing in private companies that are promising to eliminate this threat using walls, bullets, drones and cages. Thanks to the Western fear of migrants and unwillingness to come up with a sustainable and humane solution to the climate crisis, this border-industrial complex has grown strong enough to help shape national immigration policies and fuel militarisation [sic] and human rights abuses across the world.[73]

The discourse needs to be fundamentally reframed: "We need to stop weaponizing migrants, so that the public isn't afraid of numbers; it needs to be reframed as a **human issue.**"[74]

To dismantle the oppressive structures that threaten society and the environment, we must make a conscious effort to resist the paradigm towards a more intersectional understanding (Figure 13). Environmental migrants should have the right to migrate with dignity and become recognize as valid members of our communities. We can break barriers by engaging in dialogue for change and resisting the toxic narratives that fuel devaluation of immigrants. It is critical to

[72] "Fleeing a Hell the Us Helped Create: Why Central Americans Jounrey North," 2018, https://www.theguardian.com/us-news/2018/dec/19/central-america-migrants-us-foreign-policy.
[73] "Why Climate Action Needs to Target the Border-Industrial Complex," 2019, https://www.aljazeera.com/indepth/opinion/climate-action-target-border-industrial-complex-191029104800226.html.
[74] Caroline Zickgraf, interview by Alejandra Gallardo2019, Madrid, Spain.

favor a dialogue where migrant rights are heard and have viable options to transition into sustainable livelihoods.

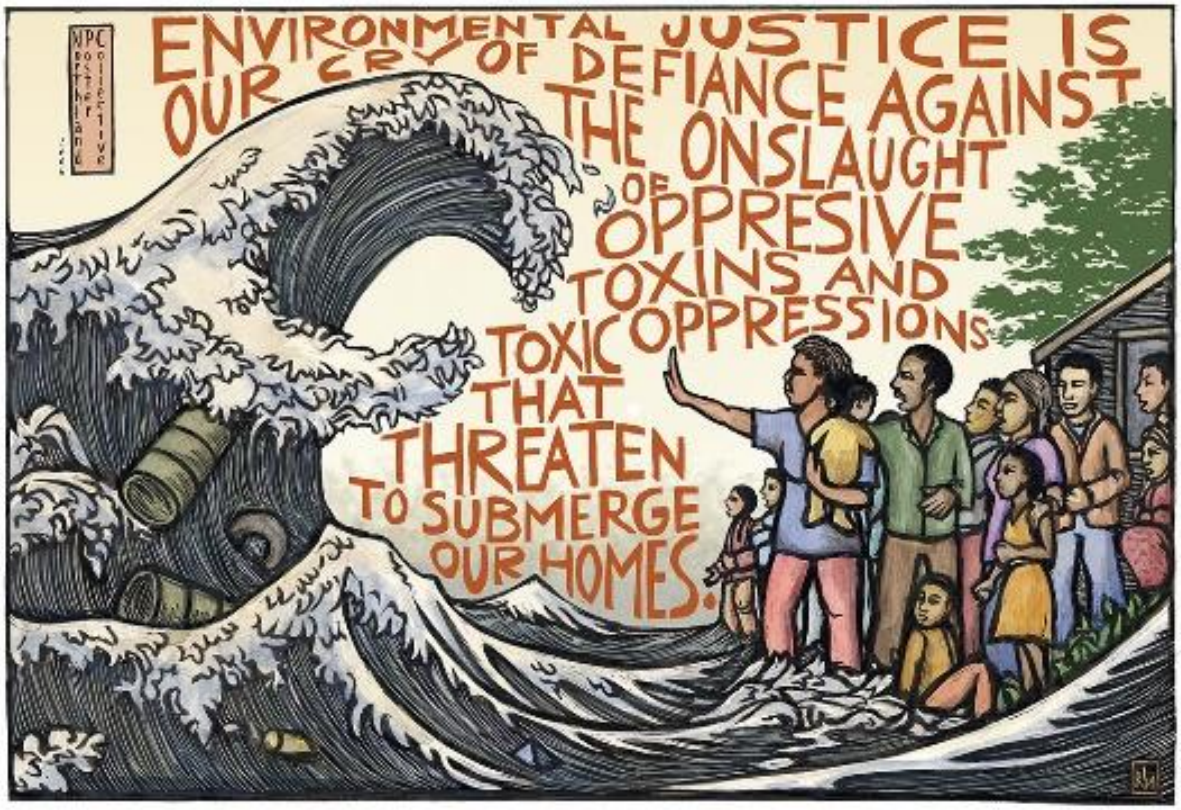

Figure 13. "Environmental Justice" poster art by Ricardo Levins Morales, 2006.

By identifying the climatic pressures on society that contribute to migration, we understand the link to human rights and develop a more compassionate approach to the discourse. The testimonies at Guapinol revealed that people *do not want to leave* their communities and are willing to put their lives on the line for the sake of their families and loved ones. They face the consequences of criminalization in Honduras when they organize non-violent resistance, and if they leave, they risk their safety by migrating. Likewise, citizens of La Chacara in El Salvador are caught in a struggle to advocate for protections against flooding events, only to be invalidated and further neglected because of a legal barrier to prove their

residence. Even when conditions get critical, the community continues to resist and, to me, that speaks volumes of their strength and courage.

Cutivating reslience and perserving cultural identity

Climate resilience is the capacity of a system to absorb shock and stresses. Most often, the concept is associated with adaptations where, for example, using drought-tolerant crops can increase the resilience of food production to drought. Agriculture and land-use adaptations also have considerable CO_2 mitigation potential from strategies like regenerative agriculture, degraded ecosystem restoration, and securing indigenous forest tenure.[75] While these activities should certainly be endorsed, climate resilience can also be cultivated through social cohesion at the community-level.

In the urban centers of Iberia in El Salvador, community efforts supported a strong sense of culture through youth engagement projects and urban art. Youth members expressed a stronger desire to invest in the community whether it meant becoming a role model or writing a hit love song to put the community on the map. Activities for creative expression allowed youth to communicate and organize which, in turn, deterred many of them from gang involvement in recent years.[76] They were also mentioned as keeping others accountable to uphold standards of sustainability and respect in the community.

At the Bosque de Cinquera Ecological Park, community forestry has been used as a tool to conserve their natural environment, Indigenous history, and war experiences. Together, community members are involved in the management process and coordinate to provide

[75] Paul Hawken, *Drawdown: The Most Comprehensive Plan Ever Proposed to Reverse Global Warming*(New York, New York: Penguin Books, 2017).
[76] Gallardo, "Central American Delegation Fieldnotes."

Figure 14. View of Bosque de Cinquera Ecological Park. Photo by author.

educational tours of the area (Figure 14). Despite facing conflict with neighbors around the park that have poor land practices, such as tree clearing and burning, Cinquera continues to seek ways to continue improving the condition of the land. Years of community organizing has brought significant benefits for this region of El Salvador: about 5 miles northwest from Cinquera, the municipality Suchitoto approved a referendum to recognize water as a human right – allowing Water Council community assemblies to manage water access instead of external private actors.[77]

These testimonies demonstrate how social cohesion plays a non-traditional role in climate resilience. Cultivating a strong sense of cultural identity encourages neighbors to organize and build social movements to advocate for their rights to safe and clean environments. The climate crisis not only jeopardizes the health of ecological systems, but it also threatens to dissolve the deep-rooted social networks and values that are essential to resist violence and other threats to life.

Takeaways for decisionmakers

Now that our climate is under a state of emergency, it is especially important that governing bodies enable people to transform our frameworks, economies, and policies to truly manifest climate justice.[78] There is no doubt that business-as-usual economic and political models will accelerate the rates at which the climate crisis escalates and, with it, the number of

[77] Évora Barreiro "And Then Suchitoto Voted "Yes"," 2019, https://www.fcmujeres.org/en/y-suchitoto-dijo-si/.
[78] William J Ripple et al., "World Scientists' Warning of a Climate Emergency," *BioScience* (2020).

people that may *need* to migrate. "We need to start talking about the positive impacts and benefits of migration, as a strategy for survival and a life-saving option."[79] Environmental migrants are not limited to Latin America; people in many other countries will be displaced in coming years. Whether people migrate within or beyond country borders, people will need facilitated routes of migration and places that have the capacity to accommodate them. Countries can collaborate bilaterally to welcome migrants from their neighbors by providing temporary work permits, providing private sponsorship for meaningful economic opportunities, and support relocation planning efforts.[80] By working to create legal migration routes to provide safe passage for those needing to relocate, countries can promote new models of cooperation where efforts are redistributed, and Global North countries can step up and contribute to migration with dignity.[81]

"We need to start talking about the positive impacts and benefits of migration, as a strategy for survival and a life-saving option."

-CAROLINE ZICKGRAF
DIRECTOR OF THE HUGO OBSERVATORY: ENVIRONMENT, MIGRATION, POLITICS

At the regional level, cities can include proactive preparations in their infrastructure, sustainable development plans, and health services, so that they can anticipate a growth in migrant populations. The creation of humanitarian visa policies and regimes by NGOs can protect those who need to move in the case of a sudden event. Municipal managers should work to serve the needs of the communities, as they will effectively know what is best. For those still living in their countries of origin, there is an opportunity to realize community projects that fundamentally improve education, food security, and provide employment to those at risk of

[79] Zickgraf.
[80] Mbamoko et al., "Environmental Migration... For Dummies! Reflections on Environmental Migration from the Perspective of International Solidarity."
[81] Ibid.

displacement. However, assistance from humanitarian aid organizations and rich countries will be essential to fund these projects in at-risk communities.[82]

Building community resilience by providing meaningful economic opportunities can break the cycle of extreme poverty and displacement. While sustainable development projects could be beneficial, they best serve people if transparent, community-based decisions guide the process. As observed in Cinquera and Suchitoto, the success of water protection policy and community forestry was enabled by community-based management; their efforts have shed light on the small-scale opportunities that can help El Salvador and Honduras cultivate climate resilience. Nuevo Gualcho, also, demonstrates these lessons. By communicating with neighborhoods and municipal officials in the region, the community was able to install a solar panel system for water pumping, expand their library, and improve road access to water and sanitation systems. Ultimately, policy and actions that are socially and culturally embedded will create a space for transformative change to take place.

Conclusion

Environmental migration is not an issue to be solved or ended, but rather recognized and actively addressed. While climate change cannot be identified as the sole driver of Central American migration, the problems that create it are deeply intertwined with the roots of many other social justice issues and inequities. It is also inappropriate to generalize the experience of environmental migration because it is multicausal and unique to each individual. Currently, there are no international frameworks or processes being implemented to protect climate-displaced people. Policies are far from even considering climate in their goal. There is a lack of recognition

[82] Alianza Americas, Centro Presente, and Lawyers for Civil Rights, "Fleeing, Not Migrating: Toward a Solution to the Human Rights Crisis Affecting Migrants and Asylum Seekers,"(2019), 4.

and actions at the global and regional level that is missing to ensuring safety, resources, and human rights for displaced peoples and migrants. Further, global fossil-fuel consumption, degenerative farming, and a consumerist paradigm threaten to escalate the rate at which the climate crisis worsens. And, in countries like El Salvador and Honduras, there is a violent reality of criminalization facing those that resist these systems of extraction. For the Global North, it will be essential to establish leadership in creating and implementing sustainable systems of production.

We can challenge the narratives of Central American migrants that suggest lazy or violent criminals are arriving to the United States, by understanding they are people with dignity and there are significant factors pushing them to seek safety and support. Viewing narratives from El Salvador and Honduras provides insight to the struggles of adapting to the progressing impacts of climate change while maintaining the integrity and stability of Global South communities. The climate crisis is chaotic and will disrupt many parts of our lives, including the social, political, and economic systems that encapsulate enough conflict to produce environmental migrants. However, there *is* hope and vision for a just future. The narratives also highlight the resilience and unique opportunities for change in spaces where people *want* to improve the conditions of their homes.

Grassroots efforts to support climate-friendly food production, protect water as a communal resource, and provide economic opportunities to women and youth can make significant impacts at the local level. Community organizing can serve as a powerful tool for people to respond to climate and social justice issues in a way that addresses their specific needs, especially where historical and cultural identity is retained and defended. Tactics implemented for community development can also be climate-friendly and sustainable over generations. As

we see in grassroots movements, the tools for positive social and environmental change are already available. State and global governance will have to align with these local interests to bring forth transformative change.

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