



Zolberg Institute on
Migration and Mobility

GLOBAL GOVERNANCE OF ENVIRONMENTAL MOBILITY

Regional Paper LATIN AMERICA & THE CARIBBEAN

MAY 2021

Ama Ruth Francis
Climate Displacement Project Strategist
International Refugee Assistance Project | New York
Non-Resident Fellow | Sabin Center for Climate Change Law
Columbia Law School

TABLE OF CONTENTS

ABSTRACT.....	1
1. OVERVIEW OF HUMAN MOBILITY DUE TO ENVIRONMENTAL EVENTS	
1.1 REGIONAL REVIEW.....	2
1.2 MEXICO AND CENTRAL AMERICA.....	4
1.3 SOUTH AMERICA.....	4
1.4 THE CARIBBEAN.....	5
2.REGIONAL NORMS AND PROCESSES GOVERNING HUMAN MOBILITY DUE TO ENVIRONMENTAL EVENTS	
2.1 REGIONAL REVIEW.....	6
I. INTERNAL DISPLACEMENT AND PLANNED RELOCATION.....	6
II. CROSS-BORDER MOBILITY.....	7
III. REGIONAL INSTRUMENTS AND BODIES.....	9
2.2 MEXICO AND CENTRAL AMERICA.....	11
2.3 SOUTH AMERICA.....	13
2.4 THE CARIBBEAN.....	14
3. CASE STUDIES	
3.1 MEXICO.....	17
3.2 COLOMBIA.....	18
3.3 ANTIGUA AND BARBUDA	20
4. FUTURE NORM/POLICY DEVELOPMENT	
4.1 RECOMMENDATIONS.....	21
ANNEX 1.....	24
REFERENCES.....	25

The Zolberg Institute on Migration and Mobility and paper authors would like to thank **KNOMAD**, the **ROBERT BOSCH STIFTUNG** and **OPEN SOCIETY FOUNDATIONS** for financial contributions in support of the *Global Governance on Environmental Migration* research.

ABSTRACT

Environmental events—including droughts, floods, hurricanes, sea level rise and earthquakes play a role alongside socioeconomic and political factors in triggering displacement, migration and planned relocation in Latin America and the Caribbean (LAC). LAC countries experience the strongest relationship between environmental hazards and migration in the world. From 2008 to 2019, there were more than 23 million reported incidents of internal displacement in the context of disasters linked to sudden- and slow-onset hazards linked to disasters. LAC has developed a significant normative framework in response to environmental mobility, especially relative to other regions. In practice, LAC countries use regional refugee law, regional mobility agreements, and regular and exceptional migration categories in national immigration law to extend admission and stay to LAC nationals moving across borders in the context of climate change and disasters. In theory, other mechanisms also strengthen the normative framework, including visa-free travel and recognition of the principle of non-refoulement, although law and policy on internal environmental mobility needs further development. Grounded in principles of regional refugee law, regional integration, and national immigration law, LAC's relatively robust normative framework already facilitates the movement of LAC nationals in the context of climate change and disasters, and demonstrates that existing legal tools are available for addressing environmental mobility.

KEY FINDINGS

- Environmental mobility already occurs across the region, and LAC countries deploy a number of mechanisms grounded in regional refugee law, regional integration frameworks, and national immigration law to extend admission and stay to LAC nationals moving in the context of climate change and disasters. Key sub-regional guidelines, developed within the Regional Conference on Migration (RCM) and South American Conference on Migration (SACM), seek to codify the normative framework for environmental mobility governance based on existing best practices in LAC countries.
- Cross-border environmental mobility occurs more prominently in the Caribbean compared to other LAC regions given the geography and non-contiguous nature of islands, rendering measures such as securing the use of regional integration frameworks in the environmental context, and amending national immigration laws to account for climate change and disaster important.
- In addition to environmental mobility, rural-to-urban flows, and increasing intra-regional movement, including due to the Venezuelan exodus, shape mobility patterns in LAC. Accordingly, enhancing the governance structure for multiple types of mobility flows in the region, including environmental mobility, remains critical.

RECOMMENDATIONS

LAC countries can enhance the governance framework for environmental mobility based on the following recommendations:

1. Harmonize regional approaches to protection and immigration benefits in the context of cross-border environmental mobility.
2. Strengthen the national response to IDPs.
3. Transform humanitarian protection measures into more equitable and durable solutions.
4. Embed environmental mobility into national development planning.
5. Integrate environmental mobility into disaster risk reduction and climate planning.
6. Enhance data gathering and monitoring to develop data-driven law and policy.

1. OVERVIEW OF HUMAN MOBILITY DUE TO ENVIRONMENTAL EVENTS

Environmental mobility—that is, voluntary and forced movement in response to environmental events, including floods, storms, sea level rise, extreme heat, fires, drought, earthquakes, tsunamis, and other weather-related and geophysical causes—is a growing global challenge. Environmental events, in combination with a range of social, political, and economic drivers, are increasingly pushing people to leave home worldwide. Disasters linked to sudden-onset hazards have displaced more people than violence and armed conflict since 2009 (Internal Displacement Monitoring Center (IDMC), 2020).

Climate change further exacerbates displacement risk (Adger et al, 2014). Climate change has already increased certain types of extreme weather, droughts, floods, and sea level rise, severely affecting people in low- and middle-income countries and contributing to rising mobility (Allen et al., 2018). The World Bank estimates that, without drastic global cuts in greenhouse gas (GHG) emissions and inclusive development policies, there will be more than 140 million people displaced within their own countries due to climate-related slow-onset events in Latin America, South Asia and Sub-Saharan Africa by 2050 (Rigaud et al., 2018a). As the United Nations High Commissioner for Refugees (UNHCR) reports, “climate change and natural disasters can exacerbate threats that force people to flee within their country or across national borders” (UNHCR, 2020).

The term environmental mobility encompasses displacement, migration and planned relocation in response to environmental events. Displacement refers primarily to forced movement; migration refers primarily to voluntary movement; and planned relocation refers to planned resettlement of households and communities (Weerasinghe, 2014). The term environmental mobility also includes both internal and cross-border movement. This section provides an overview of trends in environmental mobility in Latin America and the Caribbean (LAC), and describes sub-regional patterns in environmental mobility flows.

1.1 REGIONAL REVIEW

In LAC countries,¹ significant exposure to environmental events combined with high migration rates results in distinct environmental mobility trends. LAC countries experience a high incidence of hydrological and meteorological hazards because of their geographic features (*ibid*). Major environmental triggers include hurricanes, heavy rains and floods, droughts, and sea level rise (Kaenzig & Pigué, 2014; see also Hernández-Narváez et al., 2019). Tropical storms and hurricanes most heavily impact Mexico and Central America, and floods particularly impact South America (Kaenzig & Pigué, 2014). These environmental events contribute to mobility in a region already marked by significant mobility flows.² LAC countries demonstrate the strongest relationship between environmental hazards and migration outcomes in the world (Hoffman et al., 2020). Environmental events result in severe consequences because of the region’s dependence on natural resources and climate-sensitive sectors, including tourism and agriculture (Zuñiga & Garrido, 2020).

LAC environmental mobility can be temporary or long-lasting. The average duration of environmental displacement between 2013 and 2015 was twelve days, with average displacements of up to 77 days in some countries in the region (*ibid*).³ Even short displacements can result in significant impacts, including job loss and difficulty accessing health care (*ibid*). Children may also be particularly vulnerable when displaced by a sudden-onset event because they face greater risk of violence and trafficking; may not be

1 This report discusses Latin America & the Caribbean in terms of three sub-regions. Mexico & Central America, including Mexico, Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama; South America, including Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela, and French Guiana; and the Caribbean, including Antigua & Barbuda, the Bahamas, Barbados, Cuba, Dominica, Dominican Republic, Grenada, Haiti, Jamaica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Trinidad and Tobago and territories Anguilla, Aruba, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Curaçao, Guadeloupe, Martinique, Montserrat, Puerto Rico, Saba, St. Barthélemy, Saint Martin, Sint Eustatius, Sint Maarten, Turks and Caicos Islands, and US Virgin Islands. Guyana and Suriname are located on the South American continent, but are often culturally considered Caribbean countries.

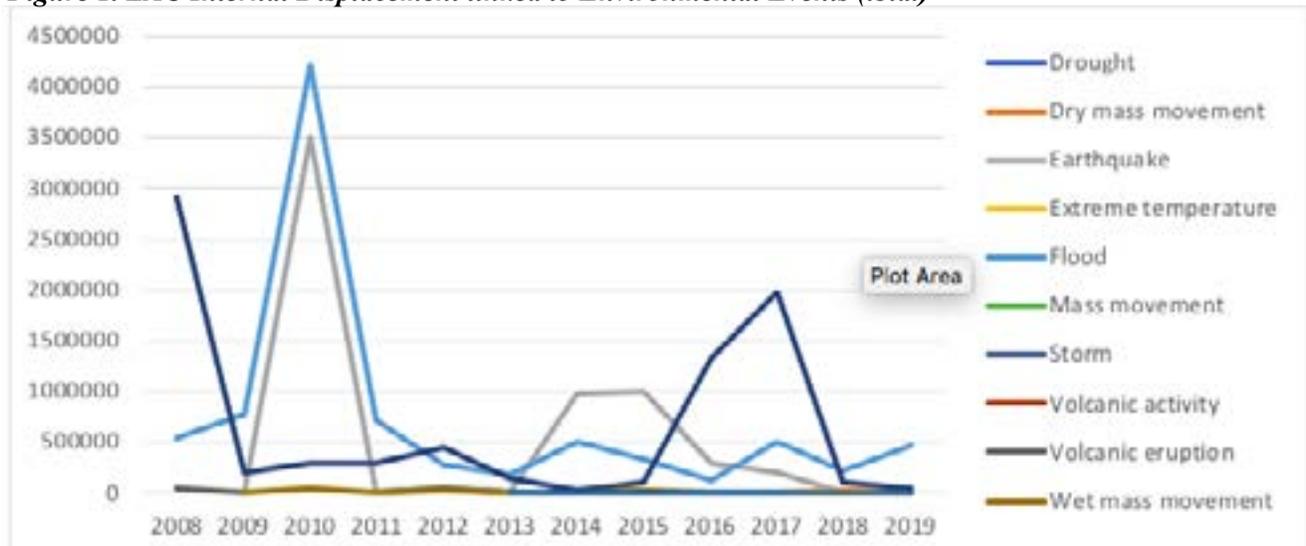
2 Antigua and Barbuda, Barbados, Dominica, Grenada and Saint Kitts and Nevis, for example, are all among the top ten emigration countries worldwide per capita (Aragón, E., & El-Assar, 2018).

3 In Peru, the average duration of internal displacement following a disaster is 77 days.

able to access essential services like health and education on their own; and experience increased risk of contracting diseases like measles and respiratory infections in emergency shelters (UNICEF, 2019). The 2017 Atlantic hurricane season displaced 400,000 children in the Caribbean (*ibid*).

From 2008 to 2019, there were more than 23 million reported incidents of internal displacement in the context of disasters linked to sudden- and slow-onset hazards and climate change in LAC, according to the Internal Displacement Monitoring Center (IDMC).⁴ This figure is a conservative estimate. IDMC’s data does not distinguish between movement that is repeated, temporary, or permanent, and the numbers are based on public reports (*ibid*).

Figure 1. LAC Internal Displacement linked to Environmental Events (*ibid*.)



Hurricanes increase mobility by 6-34% depending on the severity of the storm in Central America and the Caribbean (Spencer & Urquhart, 2018). More than four million people were displaced within their own countries between 2013 and 2015 in 18 LAC countries; and 51% of these cases were caused by hydro-meteorological disasters related to climate change (Zuñiga & Garrido, 2020).

Climate change will likely exacerbate LAC environmental mobility trends. By 2050, Latin America can expect to see 9.4 to 17.1 million internal climate migrants (the equivalent of up to 2.6 percent of Mexico, Central & South America’s population) moving away from areas impacted by low water availability, low crop productivity, rising sea levels and storm surges (Rigaud et al., 2018).⁵ This movement will impact climate-sensitive sectors, urban infrastructure, and social services in rural and urban areas (*ibid*). Although the region has long experienced environmental events, rendering a legal and policy framework for addressing environmental mobility critical regardless of whether mobility is climate-driven or not, the adverse effects of climate change on the region—including extreme heat, higher risk of drought, more frequent intense storms and reduced livelihood opportunities (Reyer et al., 2017)—calls for more robust normative development.

Environmental mobility also occurs in the context of urbanization (Zuñiga & Garrido, 2020). Latin America has experienced the highest urban population growth in the world in the last few decades (Vargas et al., 2017), and South America and the Caribbean are among the most urbanized sub-regions in the developing world (Warn & Adamo, 2015). A recent study showed that climate variability has increased internal migration in South America since the 1970s and that many migrants move to urban areas (Thiede et al., 2016). Furthermore, urban expansion can expose residents to increased displacement risk when expansion occurs in environmentally vulnerable areas (Warn & Adamo, 2015). Economic factors and conflict further drive urbanization in Latin America (Cerrutti & Bertonecello, 2003).

⁴ This figure cannot be read as the absolute number of displaced persons during this period since the figure may include repeat displacements of the same person. Data is linked to drought, earthquake, extreme temperature, flood, storm, volcanic activity and eruption, wildfire, and wet and dry mass movement.

⁵ This paper uses the term “internal climate migrants,” only when referencing data pulled from the World Bank Group’s Groundswell report.

Finally, environmental mobility occurs within the context of increased intra-regional movement. LAC has experienced especially high rates of intra-regional mobility in the past few years (see Selee, 2020). In South America, for example, the rate of intra-regional migration has grown faster than the rate of migration to industrialized countries (IOM, 2020). The recent sociopolitical and economic crisis in Venezuela is also exemplary of intra-regional flows. In the region's largest exodus in recent history, approximately 4.5 million Venezuelans left the country, with most seeking shelter in other LAC countries (UNHCR, 2020). The Venezuelan crisis points to the importance of managing multiple types of mobility flows in the region, including environmental mobility.

The complex interaction of economic, social, political and environmental drivers makes it difficult to distinguish those moving solely due to environmental causes (Barnett & Adger, 2018). Given that a range of drivers shape mobility outcomes alongside environmental factors, discussing mobility in the region requires acknowledging the interplay between different types of mobility, including refugee and conflict-driven flows. Accordingly, this paper highlights interrelated mobility flows where possible while focusing on environmental mobility.

The next section provides an overview of environmental mobility in each sub-region.

1.2 MEXICO AND CENTRAL AMERICA

Environmental mobility occurs in Mexico and Central America in response to a range of environmental events, including storms and drought. Sudden-onset hazards linked to disasters have driven approximately three million (publicly reported) incidents of internal mobility from 2008 to 2017, mostly in Mexico (Cantor, 2018). While environmental mobility tends to be internal, the sub-region, especially Mexico, demonstrates distinct cross-border flows to the United States (U.S.) because of historical ties (Nawrotzki et al., 2015), proximity to North America, economic support for the journey through remittances, and pre-existing diasporic networks (Kaenzig & Pigué, 2014).

El Niño drought conditions, which started in 2014, have increased irregular migration to the U.S. from the sub-region (WFP, 2017). Rainfall patterns especially impact out-migration to the U.S. from rural areas (see Nawrotzki et al., 2013). Research also shows a correlation between hurricanes and severe storms that impact Mexico and Central America and higher levels of regular immigration (both permanent and temporary) in the U.S. (Mahajan & Yang, 2017; see also Yang & Mahajan, 2017).

Furthermore, the sub-region's dependence on agriculture makes it susceptible to climate-related environmental mobility in particular (Rigaud et al., 2018a). Food systems in Honduras, El Salvador and Nicaragua are heavily dependent on maize and bean production, which will decrease with climate change, resulting in economic losses for smallholder farmers (*ibid*). Climate change will also affect households that rely on rain-fed agriculture across the sub-region because of sensitivity to heat, drought and cyclones (Baez et al., 2017a; Baez et al., 2017b; Nawrotzki et al., 2017). Young women from these households are especially prone to move from rural areas, seeking alternative livelihood opportunities (Baez et al., 2017b). It is projected that between 2020 and 2050, the number of internal climate migrants in Mexico and Central America will double (Rigaud et al., 2018a) and could reach up to 3.9 million internal climate migrants (the equivalent of one percent of the sub-region's population) due to increased water scarcity and crop failure (*ibid*).

In addition to rural areas, low-lying coastal areas on the Gulf of Mexico and the Pacific coast of Guatemala, and cities such as Monterrey and Guadalajara, will be out-migration hotspots in a changing climate (*ibid*). In-migration hotspots in the sub-region will include areas with better livelihood opportunities and favorable climactic areas, like Mexico City and Guatemala City (*ibid*). Across Mexico and Central America, environmental mobility will continue to interact with urbanization trends, including urban-to-urban movement, in a warming climate.

1.3 SOUTH AMERICA

In South America, sudden-onset hazards linked to disasters have prompted nearly eleven million incidents of internal movement from 2008-2017 (Cantor, 2018). Floods associated with La Niña are the most frequent environmental event, along with geophysical hazards such as earthquakes and volcanic eruptions (Serna,

2015). Flooding was responsible for 39% of internal displacements in 2013 and 2015 across LAC (Zuñiga & Garrido, 2020); and most of the nearly 8 million internally displaced persons (IDPs) in the sub-region from 2000 to 2015 fled floods (Serna, 2015). Droughts have driven permanent and temporary internal mobility from rural areas in Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador and Peru (Cantor, 2018).

Environmental mobility in South America follows trends prevalent in other sub-regions. Rural to urban migration is common, with migrants settling in dense urban areas that are underdeveloped and susceptible to environmental events (Jaitman, 2015; Burton, 2003). As is the case in Mexico and Central America, drought affects food production, shaping mobility outcomes. One study on Ecuador forecasted that prolonged drought could lead to a 30-60% reduction in food production, thereby causing a 40 to 150% increase in cross-border mobility (Laczko & Aghazar, 2009). Frequent trans-border mobility occurs across contiguous land borders. For example, people from southern Colombia crossed into northern Ecuador to escape widespread flooding (Cantor, 2015); and Chileans crossed into Argentina after mudslides and earthquakes (*ibid*).

Climate change will affect mobility patterns. South America could see up to 9.1 million internal climate migrants by 2050 (Rigaud, 2018a). Regardless of whether environmental mobility is climate-driven or not, further normative development remains critical.

1.4 THE CARIBBEAN

Environmental events define mobility flows in the Caribbean, alongside trends such as the emigration of skilled professionals to developed countries and the feminization of migration (Aragón & El-Assar, 2018). Caribbean islands experience extremely high levels of environmental displacement risk per capita. The ten countries and territories with the highest average annual displacement risk relative to population size due to sudden-onset hazards are all small island developing states (SIDS), the top six of which are located in the Caribbean. Approximately 5.9% of the Bahamas' population could be annually displaced by hurricanes, while 3.6% of Antigua's population could be annually displaced by tropical cyclones (UNFCCC, 2018).

From 2008 to 2018, there were over 8.5 million new incidents of internal displacement reported across 21 Caribbean countries due to sudden-onset hazards linked to disasters (Caribbean Migration Consultations (CMC), 2019). Since 2014, the number of IDPs fleeing storms and flooding increased six-fold (UNICEF, 2019), mostly due to the number of Category 4 and 5 hurricanes from 2016 to 2018.⁶ The 2017 Atlantic hurricane season was particularly destructive; three major hurricanes of the season—Harvey, Irma, and Maria—displaced approximately three million people in a single month (*ibid*). Although there were fewer internal displacements due to sudden-onset hazards linked to disasters in 2019, tens of thousands of people remain displaced by previous events, including the 2010 Haitian earthquake (IDMC, 2020).⁷

The density of economic activity and population in low-lying coastal areas heightens environmental mobility risk in the Caribbean (CMC, forthcoming).⁸ More than half of the population in the sub-region lives within 1.5km from a coastline (IOM, 2017a; Mycoo, 2018). Caribbean countries can expect more than a 1.5 meter rise in sea level by 2100 if drastic cuts in global GHG emissions do not occur (Strauss & Kulp, 2018);⁹ and floods reaching at least half a meter above high tide line will become common across the sub-region within the next 50 years, and likely sooner (*ibid*).

In addition to the vulnerability created by colonial settlement and contemporary development patterns, damage from a single sudden-onset event can be extensive due to underlying socioeconomic vulnerability. Hurricane Maria, for example, resulted in damages and losses equivalent to 226% of GDP in Dominica (Government of the Commonwealth of Dominica, 2017). In a sub-region where 21% of the population lives below the poverty line, households are likely to be unable to invest in resilience and preparedness

⁶ The increase in intense storms in the Caribbean from 2016 to 2018 has not been directly attributed to climate change. Nevertheless, research demonstrates that at least one hurricane from that period was more intense due to climate change. See (van Oldenborgh et al., 2017), showing that climate change increased rainfall associated with Hurricane Harvey by 15%.

⁷ IDMC reports that nearly 33,000 people remain displaced across 22 sites following the 2010 earthquake in Haiti.

⁸ Population density in coastal areas in the Caribbean dates back to the colonial period.

⁹ See also (Mycoo, 2018), indicating that sea level rise and flooding exacerbate mobility risk, especially at warming of more than 1.5°C above average pre-industrial temperatures.

measures (UNICEF, 2019). Therefore, sudden-onset events linked to disasters may overwhelm household and government capacity, resulting in displacement outcomes.

Like other LAC sub-regions, heat exposure, droughts and hurricanes increase mobility from rural areas, especially among populations reliant on rain-fed agriculture; and in particular, among young women in the Dominican Republic and Haiti (Cantor, 2018). Furthermore, research has shown a correlation between regular immigration in the U.S. in permanent and temporary categories and hurricanes and severe storms in the Caribbean (Mahajan & Yang, 2017; Afonso, 2011).

The extent of cross-border mobility is a distinct feature of this sub-region compared to Mexico, Central and South America. The geophysical nature of Caribbean islands requires regular cross-border evacuation where trans-border movement across a contiguous land border is not possible (Cantor, 2018). Environmental events can also result in complete devastation of Caribbean islands, leading to cross-border mobility where relocating internally would be possible in larger LAC countries (Ayuso & Hansen, 2017). Barbados and Dominica, for example, experience the highest rates of cross-border mobility across Central America and the Caribbean after hurricanes (Spencer & Urquhart, 2018). Given the distinct nature of environmental mobility trends in each LAC sub-region, normative frameworks developed at the sub-regional level remain critical.

2. REGIONAL NORMS AND PROCESSES GOVERNING HUMAN MOBILITY DUE TO ENVIRONMENTAL EVENTS

LAC countries have developed a robust normative framework for facilitating cross-border environmental mobility compared to other regions worldwide. Measures to ensure the protection of rights for people moving within national borders, however, remain less advanced. This section discusses regional, sub-regional, and national norms and processes that govern environmental mobility.

2.1 REGIONAL REVIEW

i. Internal Displacement and Planned Relocation

The Inter-American Court of Human Rights, of which 25 LAC countries accept jurisdiction, legally obliges states to adopt measures to prevent internal displacement based on international principles (Case of the Human Rights Defender and Others v. Guatemala, 2014; Case of the Massacres of El Mozote and Nearby Places v. El Salvador, 2012). Yet law and policy on IDP protection remain lacking at the national level. While five LAC countries have developed law and policy on IDPs (Mexico, Guatemala, El Salvador, Peru and Colombia) (Global Protection Cluster, n.d.), only those of Mexico and Peru cover environmental mobility (*ibid*). Thus, further normative development relating to IDPs would enhance protection in the environmental context.¹⁰

Nationally Determined Contributions (NDCs) to the Paris Agreement could serve as a vehicle for enhancing the governance framework for people moving within national borders in part due to environmental events. Mexico, Colombia, Ecuador, Suriname, Uruguay, the Bahamas, and Haiti reference environmental mobility in their NDCs, and the vast majority of these NDCs contemplate planned relocation.¹¹ For example, Uruguay's NDC points to its National Relocation Plan, which allocates \$42 million to resettle populations most vulnerable to the effects of climate change (UNFCCC, n.d.). Yet elsewhere, researchers report ad hoc approaches to planned relocation, especially in the Caribbean (Thomas & Benjamin, 2018). Thus, model planned relocation guidelines could support more countries in planning for the effects of environmental mobility within their own borders with the participation of affected communities.¹²

¹⁰ The Platform on Disaster Displacement, formerly the Nansen Initiative, defines protection as “any positive action, whether or not based on legal obligations, undertaken by States on behalf of disaster displaced persons or persons at risk of being displaced that aim at obtaining full respect for the rights of the individual in accordance with the letter and spirit of applicable bodies of law, namely human rights law, international humanitarian law and refugee law” (Nansen Initiative, 2015).

¹¹ See Annex 1.

¹² Some Pacific island states have developed national guidelines on planned relocation. See (Republic of Fiji, 2018).

Table 1. IDP Laws and Policies in LAC Countries

Country	Law or Policy	References Environmental Events
Mexico	Law No. 487 (2014) Decree No. 158 (2012)	Yes Yes
Guatemala	Government Agreement No. 258-2003 (2003)	No
El Salvador	Law for the Comprehensive Protection of IDPs (2020)	No
Colombia	Decree No. 1725 (2012) Law No. 1448 (2011)	No No
Peru	Law No. 28592 (2005) Law No. 28223 (2004) Supreme Decree No. 004-2005 Legislative Decree No. 831 (1996) Supreme Decree 073-93-PCM (1993)	No Yes Yes No No

ii. Cross-Border Mobility

LAC has developed advanced norms for governing cross-border environmental mobility relative to other regions worldwide. The following measures constitute the normative framework vis-à-vis cross-border environmental mobility: (1) express terms in immigration law that define environmental events as grounds for admission and stay; (2) the refugee definition under the 1984 Cartagena Declaration on Refugees (Cartagena Declaration); (3) region-wide visa-free travel; (4) regional mobility schemes; (5) provisions that provide for regularization of non-nationals due to humanitarian considerations; and (6) recognition of the principle of non-refoulement.

Neighboring countries in North America have also received LAC nationals fleeing environmental events or not returned people to LAC countries impacted by disaster (The Nansen Initiative, 2015; Cohn et al., 2019). The U.S. has granted Temporary Protected Status (TPS) to nationals of Haiti and El Salvador after earthquakes, and to nationals from Honduras and Nicaragua following hurricanes, allowing eligible nationals to remain within the U.S. while their home countries recovered (*ibid*). TPS was extended until October 2021 for nationals from Haiti, El Salvador, Honduras, and Nicaragua (USCIS, 2020). Canada also operationalized special immigration measures to receive Haitian nationals and to not return Haitians residing in Canada impacted by the 2010 earthquake (The Nansen Initiative, 2015). Thus, North American countries contribute to the normative framework on environmental mobility operating within the Americas.

EXPRESS PROVISIONS IN NATIONAL LAW

Many LAC countries specify in national law that environmental events are grounds for admission and temporary protection. For example, Bolivia adopted its own definition of a climate migrant that allows for admission of “persons who are forced to move from one State to another due to climate effects, when a risk or threat to their life may exist, whether due to natural causes, environmental, nuclear [or] chemical disasters or hunger” (Ley No. 370, 2013 (Bolivia)).¹³ Many Central and South American countries consider environmental events as grounds for temporary protection (see more in Section 2.2 & 2.3). In the Caribbean, Cuba’s refugee law includes “those aliens and persons lacking citizenship whose entry to the national territory is authorized due to leaving their country...due to cataclysm or other phenomena of nature” (Decreto No. 26, 1978 (Cuba), as cited in Cantor, 2018).

¹³ This law may provide a model for other countries in the region. See (Ramos et al., 2016), recommending that Brazil adopt a similar provision.

VISA-FREE TRAVEL AND REGIONAL MOBILITY SCHEMES

A number of LAC countries have regular immigration measures that can facilitate environmental mobility when it occurs across national borders. Many LAC countries allow for temporary visa-free stays for LAC nationals, enabling admission from disaster-impacted countries following environmental events. However, enhancing equitable application would require waiving the current visa requirements most LAC countries impose on Haiti, Cuba and the Dominican Republic.

HUMANITARIAN CONSIDERATIONS

Many LAC countries recognize humanitarian considerations as grounds for temporary protection. In some cases, national immigration laws specify that environmental events fall within the scope of humanitarian considerations, as is the case in Mexico, Guatemala, Brazil, Ecuador, Peru and Argentina. Where national law does not expressly define humanitarian considerations as including environmental events, protection may nonetheless be afforded to those fleeing hazardous environmental conditions, especially if they are life-threatening (Cantor, 2018). Typically, temporary protection based on humanitarian considerations includes temporary residence rights from six months to two years, and rights to work and services.

PRINCIPLE OF NON-REFOULEMENT

A significant number of LAC countries recognize the principle of non-refoulement in national law, prohibiting return on the basis of a threat to life, risk of torture, or cruel, inhuman or degrading treatment. Typically, non-return provisions across the region do not expressly refer to environmental events. Nevertheless, the Regional Conference on Migration's Protection of Persons moving across Borders in the Context of Disasters: A Guide to Effective Practices for RCM Member Countries and the South American Conference on Migration's Regional Guidelines on Protection of People Displaced in the Context of Disasters and Climate Change (see more in Section 2.1.iii)—two key normative regional frameworks—counsel for the use of the principle of non-refoulement in the environmental context. Thus, non-return provisions could add a layer of protection for people who have fled environmental events in the region.



Table 2. Cross-Border Mechanisms

MECHANISMS	
Express Definitions	Bolivia adopted its own definition of a climate migrant that allows for admission of “persons who are forced to move from one State to another due to climate effects, when a risk or threat to their life may exist, whether due to natural causes, environmental, nuclear [or] chemical disasters or hunger” (Ley No. 370, 2013 (Bolivia)). ¹⁴ Cuba’s refugee law includes “...those aliens and persons lacking citizenship whose entry to the national territory is authorized due to leaving their country...due to cataclysm or other phenomena of nature”(Decreto No. 26, 1978 (Cuba) as cited in Cantor, 2018). Many Central & South American countries consider environmental events as grounds for temporary protection.
Cartagena Refugee definition	The 1984 Cartagena Declaration on Refugees defines a refugee as persons “who have fled their country because their lives, safety or freedom have been threatened by...” a “circumstance which ha[s] seriously disturbed the public order.” This definition was used by multiple LAC countries to admit Haitians fleeing the consequences of the 2010 earthquake. Fifteen LAC countries have integrated the definition into national law pointing to potential for use following other environmental events.
Visa—free travel	Many LAC countries allow for temporary visa-free stays for LAC nationals. Visa-free travel could thus facilitate admission to other LAC countries following environmental events. However, removing the visa requirements most LAC countries impose on nationals from Haiti, Cuba & the Dominican Republic would enhance equity. Protection guidelines developed under the RCM and SACM recommend additional amendments to admission procedures under regular migration categories for persons coming from disaster-affected countries.
Regional mobility schemes	Mobility agreements within regional integration schemes have facilitated mobility after environmental events in the region, notably in the Eastern Caribbean during the 2017 Atlantic hurricane season, and could continue to do so. Mobility schemes within MERCOSUR, CARICOM, OECS, SICA could enhance protection and confer greater immigration benefits by integrating express provisions related to environmental mobility.
Humanitarian provisions	Many LAC countries recognize humanitarian considerations as grounds for temporary protection, thereby granting access to temporary residence rights from 6 months to 2 years, and rights to work and services. Mexico, Guatemala, Brazil, Ecuador, Peru and Argentina all expressly include environmental events within the scope of humanitarian considerations.
Non-return provisions	Many LAC countries recognize the principle of non-refoulement in national law, adding a layer of protection for people who have fled environmental events.

iii. Regional Instruments And Bodies

REGIONAL AGREEMENTS

LAC’s regional mobility schemes provide a framework for facilitating both temporary and permanent cross-border environmental mobility. Multiple Caribbean islands made use of the Organization of Eastern Caribbean States’ (OECS) regional mobility scheme under the Treaty of Basseterre, for example, to admit displaced people during the 2017 Atlantic hurricane season; and to allow displaced persons to seek work and access health, education and other social services (Francis, 2019). LAC regional mobility schemes, including within the Common Market of the South (MERCOSUR) and Caribbean Community (CARICOM), could be adapted to ensure continued application to people displaced in the context of climate change and

¹⁴ This law may provide a model for other countries in the region. See (Ramos et al., 2016), recommending that Brazil adopt a similar provision.

disasters. Indeed, the express use of regional mobility schemes to facilitate environmental mobility has been endorsed in other regions—most notably, with the adoption of the Intergovernmental Authority on Development’s Protocol on Free Movement of Persons.¹⁵

1984 CARTAGENA DECLARATION

The Cartagena Declaration provides a critical element of refugee protection at the regional level. Although environmental events do not typically constitute grounds for protection under international refugee law, the Cartagena Declaration has been used to extend protection to people fleeing environmental events linked to disasters within the region. Signed by Mexico, and Central and South American countries, the Declaration broadens the amended definition of a refugee under the 1951 Convention relating to the Status of Refugees (1951 Refugee Convention) by defining refugees as:

[P]ersons who have fled their country because their lives, safety or freedom have been threatened by generalized violence, foreign aggression, internal conflicts, massive violation of human rights or other circumstance which have seriously disturbed the public order (Cartagena Declaration on Refugees, 1984).

The standard interpretation frames the Cartagena definition as requiring human action to spur the root cause of flight (CIREFCA, 1989). Nevertheless, Ecuador, Panama, Colombia and Peru applied the Cartagena refugee definition to people fleeing the 2010 Haitian earthquake based on the consequences of the disaster, such as heightened political instability and insecurity (Serna, 2015), as opposed to the environmental event itself (see Cantor, 2015). Fifteen countries across Mexico, Central America and South America have integrated the Cartagena definition into national law pointing to potential for use following other environmental events (Cantor, 2018).

Starting with the Cartagena Declaration, LAC has a 30-year history of regional solidarity around refugee protection (*ibid*). The 1994 San Jose Declaration on Refugees and Displaced Persons commemorates the 10-year anniversary of the Cartagena Declaration and calls for regional fora on environmental protection that consider mobility (San José Declaration on Refugees and Displaced Persons, 1994). Most recently, the 2014 Brazil Declaration and Plan of Action emphasizes the importance of a coherent approach to refugee protection across LAC, including for those fleeing environmental events. Unlike the Cartagena Declaration, the Brazil Declaration and Plan of Action includes Caribbean countries (*ibid*).

2014 BRAZIL DECLARATION AND PLAN OF ACTION

The 2014 Brazil Declaration and Plan of Action promotes a regionally coherent approach to refugee protection, including protection of those fleeing environmental hazards.¹⁶ Developed under the auspices of MERCOSUR, Central American Integration System (SICA), CARICOM, and Union of South American Nations (UNASUR), the Brazil Plan of Action recognizes “the challenges posed by climate change and natural disasters, as well as...the displacement of persons across borders that these phenomena may cause in the region,” and “the need to conduct studies to give more attention to this matter” (Brazil Declaration and Plan of Action, 2014). Taking a broader regional approach to refugee protection, the Brazil Declaration and Plan of Action also underscores the importance of other regional integration frameworks, like MERCOSUR and other regional mobility schemes, as regional responses to environmental mobility (*ibid*).

REGIONAL CONFERENCE ON MIGRATION

The Regional Conference on Migration (2016), a consensus-based multilateral forum that works to strengthen migration governance in LAC, provides one of two key sub-regional frameworks for addressing environmental mobility. In 2016, the RCM adopted guidelines for the protection of people crossing borders in the context of environmental events and climate change—Protection of Persons moving across Borders

¹⁵ The Intergovernmental Authority on Development in East Africa endorsed a free movement protocol that expressly affirms that “Member States shall allow citizens of another Member State who are moving in anticipation of, during or in the aftermath of disaster to enter into their territory provided that upon arrival they shall be registered in accordance with national law” and “shall take measures to facilitate the extension of stay or the exercise of other rights by citizens of other Member States who are affected by disaster in accordance with the provisions of this Protocol when return to their state of origin is not possible or reasonable” (IGAD, 2020).

¹⁶ Twenty-eight countries and 3 LAC territories adopted the Brazil Declaration and Plan of Action (Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Curacao, El Salvador, Ecuador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Lucia, Suriname, Trinidad and Tobago, Turks and Caicos, Uruguay and Venezuela).

in the Context of Disasters: A Guide to Effective Practices for RCM Member Countries (RCM Protection Framework).¹⁷ Based on the Nansen Initiative Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change, the RCM Protection Framework guides states in applying national immigration law in the environmental context in countries of origin, transit and residence (Regional Conference on Migration (RCM), 2016). It also provides recommendations for bilateral and multilateral cooperation on managing environmental mobility across national borders (*ibid*).¹⁸ Finally, the RCM Protection Framework seeks to provide a common response to environmental mobility in order to enhance protection.

SOUTH AMERICAN CONFERENCE ON MIGRATION

The South American Conference on Migration (SACM) first recognized environmental mobility in 2015 (SACM, 2015). In 2018, SACM adopted protection guidelines for cross-border environmental mobility, one of two key sub-regional frameworks for addressing environmental mobility. The Regional Guidelines on Protection of People Displaced in the Context of Disasters and Climate Change (SACM Protection Guide) sets a baseline normative framework in South America for providing protection based on existing best practices (SACM, 2018).¹⁹ The guidelines also promote a cooperative approach to filling protection gaps in the context of environmental mobility.

INTER-AMERICAN COMMISSION ON HUMAN RIGHTS

The Inter-American Commission on Human Rights, an autonomous arm of the Organization of American States, adopted Inter-American Principles on the Human Rights of All Migrants, Refugees, Stateless Persons and Victims of Human Trafficking in December 2019 (see OAS, 2019). The principles aim to protect the rights of all migrants, including rights to life, dignity and recognition before the law; and they encourage states to increase regular migration pathways. The principles recognize that “migration movements require differentiated and individualized forms of protection that cater to people at all stages of international displacement, including persons migrating for...environmental reasons” (*ibid*).

**

LAC countries have endorsed two key frameworks for enhancing protection in the context of environmental mobility: the RCM Protection Framework and the SACM Protection Guide. These non-binding regional guidelines affirm the use of regular migration categories and humanitarian protection measures to address cross-border environmental mobility based on existing best practices. Yet, Caribbean countries largely are not members of the RCM nor SACM. Sub-regional guidelines that set a normative baseline in the Caribbean would strengthen the governance framework across the entire region. Further normative development is also needed in regard to internal displacement and planned relocation. (See Section 4 on Recommendations below).

The next section looks at normative responses to admission, stay and non-return at the sub-regional level.

2.2 MEXICO AND CENTRAL AMERICA

Mexico and Central American countries contain multiple legal frameworks that facilitate admission, stay and non-return of those moving in the context of environmental events and climate change, including regional refugee law and regular migration categories. The national immigration law of a few countries also expressly includes environmental events within the scope of humanitarian provisions, establishing a basis to confer immigration benefits in the context of environmental mobility.

First, Mexico and all Central American states are party to the 1951 Refugee Convention and the 1976 Protocol and have amended their national law to include the definition of a refugee (as amended by the 1976 Protocol) and relevant procedures (Cantor, 2018). Furthermore, six states have incorporated the Cartagena Declaration definition of a refugee into national law (*ibid*). Both Mexico and Panama leveraged

¹⁷ The Regional Conference on Migration has eleven permanent member countries: Belize, Canada, Costa Rica, the Dominican Republic, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, and the United States. Argentina, Colombia, Ecuador, Jamaica, and Peru are observers.

¹⁸ At Part IV.: Countries have already acted on RCM’s guidance. Costa Rica and Panama developed Standard Operation Procedures (SOPs) in regards to environmental mobility over their common border, drawing heavily on the RCM Protection Framework (IOM, 2017b).

¹⁹ Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, Venezuela are SACM member states.

the Cartagena definition to extend refugee status to Haitians fleeing the 2010 Earthquake because of the chaos in Haiti following the disaster (Cantor, 2015; Cantor, 2018). Yet as a general matter, Central American States do not consider those displaced by environmental events to be refugees (Cantor, 2018).

Nevertheless, in practice, regular migration categories facilitate admission to other countries following environmental events. For example, Costa Rica flexibly applied family-based immigration benefits to Nicaraguans affected by an environmental event and present in Costa Rica in 2010 (Cantor, 2015). The Central America Four Border Control Agreement (CA-4), within the auspices of SICA, has also facilitated short-term cross-border environmental mobility linked to sudden-onset hazards.²⁰ The RCM Protection Framework promotes the use of regular migration categories in the environmental context (RCM, 2016).

Another relevant benefit conferred by national immigration law is visa-free travel. Most states in the sub-region allow nationals from Mexico and other Central American countries visa-free stays for at least thirty days with some notable exceptions (*ibid*). Mexico requires visas for nationals of El Salvador, Guatemala, Honduras and Nicaragua (*ibid*). All countries in the sub-region require visas for nationals of Cuba, the Dominican Republic, and Haiti (*ibid*). Visa-free travel can offer those fleeing environmental events in the region legal pathways through which to access safe territory.

In terms of temporary protection, most Central American states and Mexico have immigration laws that expressly provide for regularization of non-nationals due to humanitarian considerations (Cantor, 2018). These humanitarian provisions typically apply to people facing serious danger, experiencing extreme vulnerability, and suffering a serious adverse situation;²¹ including, conceivably, due to environmental events (*ibid*). Indeed, Mexico, El Salvador, and Guatemala's immigration law specifies that natural disasters constitute grounds for humanitarian admission and stay.²² Many Central American states that allow for regularization due to humanitarian considerations grant these non-nationals access to temporary residence (with the possibility of extension) and rights to services and work (Cantor, 2018). Given that environmental events may fall within the scope of humanitarian provisions, these exceptional immigration measures could apply to people fleeing environmental events. In practice, few states have opted not to apply such provisions in the environmental context (Cantor, 2021).

Finally, Mexico and several Central America states have incorporated the international principle of *non-refoulement* into national law. Some of these laws prohibit return where it would result in a threat to life or torture (for example, in Costa Rica, Guatemala and Mexico), and others prohibit return where it would result in cruel, inhuman or degrading treatment or punishment (for example, Guatemala and Mexico) (Cantor, 2018). These non-refoulement provisions could serve as a protection measure if environmental events resulted in life-threatening conditions in countries of origin, and the RCM Protection Framework promotes such application in rare cases (RCM, 2016; OHCHR, 2020).

At a sub-regional level, the Central American Integration System (SICA), which includes Central American and Caribbean country members and some South American observers, addresses environmental mobility in terms of disaster risk reduction (DRR) and climate change. In 2011, SICA adopted the "Regional Manual on Procedures for Foreign Ministries in Cases of Disasters" through the Coordination Centre for the Prevention of Natural Disasters in Central America (CEPREDENAC) (Central American Security Commission, 2011).²³ CEPREDENAC's 2014-2019 Plan aims to "[p]romote mechanisms that guarantee the international protection of migrants in cases of disasters and attend to their needs" (Sica, 2014).

States across the sub-region have also integrated environmental mobility into climate change law and policy. Mexico's national law on climate change calls on federal and municipal authorities to develop policy on internal displacement due to climate-related disasters (Ley General de Cambio Climático, 2018 (Mexico)). Mexico and Belize's NDCs include goals to "relocate irregular human settlements in zones

²⁰ El Salvador, Honduras, Guatemala and Nicaragua participate in this free movement zone (Mita et al., 2017; Cantor, 2015).

²¹ Cantor, LAC Cross-Border Displacement, 38-9.

²² Decreto 44-2016: Código de Migración (Guatemala) 12 October 2016, published 18 October 2016, Article 68. & Ley de Migración (Mexico) Articles 41, 116(l)(b). Decreto No. 35, Reglamento de la Ley Especial de Migración y de Extranjería, art. 181(2), 181(7), May 24, 2019, 2019 (El Sal), as cited in (Cantor, 2018)

²³ SICA member states include Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, Panama, and the Dominican Republic as an associated member state (SICA, n.d.).

prone to disasters through land use regulations,” (Gobierno de la República México, 2015) and “develop... settlement patterns/practices that enhance climate change adaptation and are resilient to climate change” (Government of Belize, 2015), respectively.

In short, the sub-region contains a number of protective measures and immigration benefits that states apply in practice to people fleeing environmental events, including the Cartagena refugee definition, regular migration categories, and humanitarian provisions contained in national immigration law; however, application in some cases requires flexible interpretations of the law. As such, the RCM Protection Framework (see Section 2.1 above) seeks to regularize the use of these mechanisms in the environmental context. However, given that the non-binding RCM Protection Framework does not extend existing state obligations, a binding treaty that commits states to applying these mechanisms in the environmental context could ensure greater consistency in their application. In the absence of the political will for a binding treaty, continued technical support to build on the RCM Protection Framework and track implementation would cement the use of humanitarian protection measures and immigration benefits in the environmental context.

2.3 SOUTH AMERICA

South America presents the most robust law in LAC for considering environmental events as grounds for admission and stay (Cantor, 2018). Notably, a few countries have adopted laws that expressly apply to those fleeing environmental events. Bolivia adopted its own definition of a climate migrant that allows for admission of “persons who are forced to move from one State to another due to climate effects, when a risk or threat to their life may exist, whether due to natural causes, environmental, nuclear [or] chemical disasters or hunger” (Ley No. 370, 2013 (Bolivia)). Similarly, Argentine law provides temporary protection to “those people that... temporarily cannot return to their countries of origin due to the humanitarian conditions prevailing or due to the consequences generated by natural or environmental disasters caused by man” (Decree no. 616, 2010 (Argentina)).

The sub-region’s practice of facilitating environmental mobility through the application of national law could serve as a model for other LAC countries. Furthermore, like other sub-regions, regional refugee law, regular migration categories, and humanitarian provisions within immigration law contribute to the sub-regional governance framework for environmental mobility.

All South American states are party to the 1951 Refugee Convention, except Guyana and Venezuela. South American states have also signed on to the 1967 Protocol, with the exception of Guyana (Cantor, 2018). Those that are party to the 1967 Protocol have incorporated the amended definition of a refugee into domestic law (*ibid*). Furthermore, nine South American states have incorporated the refugee definition put forth by the Cartagena Declaration (*ibid*). Like other LAC countries, Ecuador and Peru used the Cartagena clause—“circumstances which have seriously disturbed public order”—to extend refugee protection to a small number of Haitians following the 2010 earthquake, due to the ensuing breakdown in law and order following the earthquake (Cantor, 2015).

South American countries have also used regular migration categories in the context of environmental mobility, and the SACM Protection Guide promotes this approach. For example, Colombia flexibly applied work and student immigration categories to Haitian nationals after the 2010 earthquake (Cantor, 2021). The openness across the sub-region can facilitate movement in anticipation and response to environmental events. Most South American nationals enjoy visa-free entry for short-periods to other South American countries, except nationals from Guyana, Suriname and French Guiana (Serna, 2015). Many South American states require visas for nationals of only one Caribbean State, one Central American state, or none at all (*ibid*). Most, however, require a visa for nationals of Cuba, the Dominican Republic, Haiti, Guyana and Suriname (*ibid*).

Mobility agreements within regional integration schemes can also support anticipatory movement or environmental mobility in response to environmental hazards in South America. The MERCOSUR Residence Agreement provides that nationals of nine of the twelve South American countries have access to temporary, and eventually permanent, residence (Acosta, 2018). Members of the Andean Community of Nations (CAN)—Bolivia, Colombia, Ecuador, Peru—are also integrated into the MERCOSUR Residence Agreement, allowing for intra-regional labor migration and passport-free entry among many

South American countries (Serna, 2015). MERCOSUR citizenship, due to be implemented through the MERCOSUR Citizenship Statute in 2021, would allow for almost equivalent rights between foreign residents and nationals (MERCOSUR, 2010). Thus, MERCOSUR provides a key potential mechanism for facilitating movement and resettlement for those fleeing environmental events intra-regionally.

Moreover, like many countries within the Mexico and Central America region, many South American states have national laws that allow for regularization due to humanitarian considerations (Cantor, 2018). Generally, the scope of humanitarian considerations is defined according to three factors: serious danger, extreme vulnerability and serious adverse circumstances (*ibid*). The national laws of Brazil, Ecuador, Peru and Argentina all expressly provide that humanitarian considerations include the impacts of a disaster (*ibid*).²⁴ As is the case in Mexico and Central America, status granted under humanitarian considerations is typically temporary, from six months to two years, and can be renewed; it provides for temporary residence and rights to work and services (*ibid*).

Furthermore, several South American states have incorporated the principle of *nonrefoulement* into national refugee law. Chilean law contains a provision that prevents return where “the security of the person would be in danger” (*ibid*). The national law of Suriname provides that an applicant to asylum who has been rejected cannot be returned where the person “cannot in the light of the social and political situation in his country of origin and his personal circumstances reasonably be required to return to that country” (Aliens Act 1991, 1992 (Suriname)). These non-refoulement provisions could add an additional layer of protection for those fleeing environmental events, and the SACM Protection Guide affirms this approach (SACM, 2018).

In sum, South American countries contain relatively robust law and policy that facilitate, and could continue to facilitate, movement for those fleeing environmental events. Many countries expressly name environmental events as grounds for admission and stay. Furthermore, South America’s intra-regional integration schemes such as MERCOSUR, while not expressly mentioning environmental migrants and displaced persons, can facilitate anticipatory movement and resettlement. Protection for those fleeing environmental events in the sub-region could be strengthened by adapting MERCOSUR to the needs of environmental migrants and displaced persons, as well as expressly integrating environmental considerations into national laws related to non-return.

Furthermore, the SACM provides another opportunity to strengthen the normative framework sub-regionally. The SACM endorsed the Global Compact on Safe, Orderly, and Regular Migration (SACM, 2017), and member states could continue to work with the International Organization for Migration to promote the compact’s implementation, especially in regards to the compact’s policy recommendations on environmental mobility (United Nations General Assembly, 2018).

2.4 THE CARIBBEAN

Caribbean states take a different approach to responding to environmental mobility than countries in other sub-regions across LAC. Environmental events are not integrated into national law and policy as express grounds for entry and stay as widely as in South America. Furthermore, some of the measures that could conceivably be applied in the environmental context in Mexico and Central and South America, such as the Cartagena refugee definition and humanitarian provisions that provide for regularization, are not present to the same extent in the sub-region. Nevertheless, in practice, the sub-region displays an increasingly robust framework for responding to environmental mobility.

Nine Caribbean states are party to the 1951 Refugee Convention, and eight are party to the 1967 Protocol (*ibid*). French, Dutch, U.S. and British territories are all party to the 1967 Protocol (*ibid*). The Dominican Republic has incorporated the 1951 Refugee Convention’s amended refugee definition into domestic law (*ibid*). At least one Caribbean country expressly considers those fleeing environmental events within the scope of its refugee law. Cuba’s 1978 Migration Regulations define refugees as “those aliens and persons lacking citizenship whose entry to the national territory is authorized due to leaving their country owing to social or warlike calamity, due to cataclysm or other phenomena of nature and who will remain temporarily

²⁴ Mexican & Guatemalan law also expressly provide that environmental events are grounds for regularization based on humanitarian conditions.

in Cuba, until normal conditions are re-established in their country of origin” (Cantor, 2018).²⁵ Under this definition, refugees are granted temporary residence along with their dependents. Cuban authorities applied this definition after the 1996 volcanic eruption in Montserrat, but not after the 2010 Haitian earthquake (Cantor, 2015).

Notably, Caribbean countries were not part of the Cartagena Declaration, and thus many have not integrated its complementary refugee definition into national law (Cantor, 2018). Most Caribbean states, however, adopted the 2014 Brazil Declaration and Plan of Action, which commemorates the 30th anniversary of the Cartagena Declaration, signaling growing interest across LAC in a regional approach to facilitating mobility flows.²⁶

Visa-free travel and discretion-based admission provide two other mechanisms through which people fleeing environmental events can enter Caribbean countries. English-speaking sovereign countries tend to allow for visa-free travel of up to thirty days for nationals of other English-speaking Caribbean countries (*ibid*). Nationals from Cuba, Haiti, and Dominican Republic require a visa to enter most Caribbean countries (*ibid*). Overseas territories and departments also tend to require visas for Caribbean nationals, but enjoy visa-free travel to Caribbean countries (Cantor, 2018). A few Caribbean countries and overseas territories and departments also require visas from nationals of Central and South American States (*ibid*).

Furthermore, many Caribbean countries provide for exceptional admission based on the discretion of the state (*ibid*). Immigration authorities may grant the entry of non-nationals “on an exceptional basis, including through “humanitarian visas” (CMC, forthcoming). For example, the Dominican Republic admitted Haitian nationals after the 2010 earthquake on a humanitarian basis (Cantor, 2021). These discretionary provisions, while not expressly referring to environmental events, could add a layer of protection vis-à-vis environmental mobility in the sub-region.

In practice, many Caribbean countries adjust immigration procedures to admit those fleeing environmental events (Baez, 2017). During the 2017 Hurricane Season, various Caribbean countries enacted Cabinet decisions that allowed border authorities to admit those fleeing environmental events, and waive visa requirements (*ibid*). For example, St Lucia housed prisoners from Turks & Caicos in 2017 (*ibid*), and Dominica, extended stay for Haitians in the country by six months when the 2010 earthquake hit (Dominica News Online, 2010). Puerto Rico allowed entry of several thousand disaster displaced people evacuated from the U.S. Virgin Islands, British Virgin Islands, Dutch Sint Maarten and French Saint Martin (Baez, 2017; Walters, 2017; Fox News, 2017).

In terms of stay, regional integration schemes provide the most advanced mechanism for facilitating long-term stays in the context of environmental mobility. Migration agreements through regional mechanisms like CARICOM and the Organisation of Eastern Caribbean States (OECS) provided critical benefits during the 2017 Atlantic hurricane season that could be formalized going forward. These regional mobility schemes provided for indefinite stays for some people fleeing after environmental events, as well as allowed for admission into other islands; supported the waiver of travel document requirements where documents had been lost or damaged; and eased access to foreign labor markets through a mutual recognition of skills scheme and/or a waiver of work permit requirements (Francis, 2019). Other good practices in the Caribbean include suspending deportation to disaster-affected countries; and the integration of migration officers in emergency capacity building trainings in order to enhance protection for those fleeing environmental events (CMC, forthcoming).

Finally, several Caribbean countries have incorporated the international principle of non-refoulement into national law, which could enhance protection for those fleeing environmental events. Jamaican refugee law, for example, provides for stay based on humanitarian grounds (*ibid*). Cayman Islands and Montserrat law provides for leave to remain for asylum-seekers where non-return is warranted based on “obvious and compelling reasons” (*ibid*, pp.16-17). In Trinidad, if a non-national will “suffer unusual hardship” or

25 p. 65, citing Edición actualizada del Decreto No. 26, Reglamento de la Ley de Migración de 19 de Julio de 1978 (Cuba) in the Gaceta Oficial, No. 44, 16 October 2012, 1373-1387, Article 80.

26 The Cartagena Declaration was first adopted by 10 countries; 17 countries signed onto the San Jose Declaration on its 10th anniversary; 20 countries signed the Mexico Declaration and Plan of Action on its 20th anniversary; and the Brazil Declaration was signed by 31 countries on its 30th anniversary (Jubilut et al., 2019).

there are “compassionate or humanitarian considerations... that warrant the granting of special relief,” the relevant Minister may quash/stay deportation (Immigration Regulations, 1974 (Trinidad & Tobago)). One Trinidadian Cabinet Decision noted that: “Cases of refugees from natural disasters be left open and be decided, when the need arises, on the basis of the circumstances prevailing in Trinidad and Tobago at the particular period in time” (Cabinet Decision in Minute No. 4809, 1979 (Trinidad & Tobago)). After the 2010 Haitian earthquake, the French Caribbean (St. Martin, Guadeloupe, Martinique) and French Guiana granted more than 50% of asylum claims based on subsidiary protection grounded in French recognition of the non-refoulement principle (Audebert, 2017). Although generally provisions on non-return do not expressly refer to environmental events, as is the case in LAC countries in other sub-regions, these provisions could be applied in the environmental context.

Regional fora provide another framework through which to enhance environmental mobility governance in the sub-region. Under the Caribbean Migration Consultations, a regional consultative process that promotes dialogue on the protection of migrants, displaced persons and refugees (CMC, n.d.), a Plan of Action to Address Human Mobility in the Context of Disasters and the Adverse Effects of Climate Change in the Caribbean 2020-2022 (Caribbean Plan of Action) has been developed. The Caribbean Plan of Action identifies measures to (1) help people stay in their communities; (2) protect the rights of those fleeing environmental events; and (3) support people in moving out “of harm’s way by leveraging the potential of mobility for disaster risk reduction and climate change adaptation” (CMC, forthcoming).

Regional intergovernmental bodies—the Caribbean Disaster Emergency Management Agency (CDEMA), the CARICOM Implementation Agency for Crime and Security (IMPACS), and the Caribbean Community Climate Change Center—have all begun to incorporate the nexus between environmental events, climate change and mobility into their working agendas. The CARICOM IMPACS Strategy names climate change and environmental mobility as threats to sub-regional security (*ibid*). CARICOM IMPACS and CDEMA have also conceptualized a working group of immigration and customs officers to coordinate response to environmental events (*ibid*).

From a climate change perspective, a few Caribbean NDCs mention environmental mobility. Both the Bahamas and Haiti contemplate relocation in their NDCs (see Republic of Haiti, 2015; The Government of the Bahamas, 2015). Some Caribbean countries have noted the importance of addressing environmental mobility in policy frameworks. Antigua and Barbuda recognized in 2016 that “environmental threats such as natural hazards and climate change” can internally displace families in low-lying coastal areas and also result in conflict over scarce resources like food and water (Government of Antigua & Barbuda, 2017). The document also noted that storms have displaced thousands in Antigua and Barbuda (*ibid*). Nearly a decade prior, Antigua noted that climate change could increase out-migration leading to “brain drain” (Government of Antigua & Barbuda, 2009) and that migrants from neighboring islands may be particularly vulnerable due to living in squatter settlements prone to flooding (*ibid*). Cuba’s national adaptation plan (Tarea Vida) includes reducing the population density of low-lying coastal areas as a top strategic priority (CMC, forthcoming), as well as relocating vulnerable populations (*ibid*). Ad hoc measures for facilitating planned relocation are also in place across the Caribbean (Thomas & Benjamin, 2018).

Integrating environmental events as express grounds for stay, entry and non-return in a greater number of Caribbean countries would enhance the governance framework for environmental mobility in the sub-region. Nevertheless, in practice Caribbean countries do facilitate entry, stay and non-return for some people moving in the context of environmental mobility. Regional guidelines that formalize these practices would improve the sub-region’s response to environmental mobility.

**

In summary, South American countries contain the most robust law on environmental events as express grounds for entry and stay in LAC. The Mexico and Central America and Caribbean sub-regions also maintain mobility mechanisms that are applied in the environmental context in practice, including regional mobility schemes and other regular migration categories, exceptional migration categories within national immigration law based on humanitarian grounds, and complementary protection. The application of these measures in the environmental context is not consistent across LAC. However, the guidelines adopted by the RCM and SACM based on the recommendations of the Nansen Initiative signal a positive step toward regularizing the use of these protective mechanisms and immigration benefits in the context of environmental mobility.

3. CASE STUDIES

The following case studies provide an overview of current conditions and state-based norms for one country in each LAC sub-region. The three country-level analyses—of Mexico, Colombia and Antigua and Barbuda—demonstrate the range of environmental mobility and normative responses in the region.

3.1 MEXICO

Mexico is an upper-middle country which experiences a range of environmental events, including floods, forest fires, earthquakes, storms and hurricanes (Mexico National Human Rights Commission, 2016). Unplanned human settlement, settlements in hazardous areas and the absence of robust DRR mechanisms compound the negative effects of environmental events (*ibid*). Disasters linked to sudden-onset hazards, along with armed conflict, religious conflict and infrastructure development, are a lead cause of displacement (*ibid*). From 2013 to 2015, there were nearly 300,000 people internally displaced in Mexico, mostly by hydro-meteorological events like storms, floods and landslides (Zuñiga & Garrido, 2020). Climate change effects like decreased water availability and sea level rise also impact environmental mobility trends (Rigaud et al., 2018a). The World Bank estimates that by 2050, there could be 3.1 million internal climate migrants in Mexico, including people fleeing from extreme water stress (*ibid*).

Research has shown a positive relationship between months of drought and warm spells and increased rural to urban migration (Nawrotzki et al., 2017). Due to climate change impacts, Mexico City and other major cities in the Central Plateau will become hotspots for climate in-migration (Rigaud et al., 2018a). These urban areas provide better opportunities for livelihoods and settlement than areas in the drier north and low-lying coastal states that will be degraded by sea level rise (*ibid*).

The urban direction of environmental mobility falls within a larger pattern of urbanization in Mexico (Zuñiga & Garrido, 2020; Vignoli, 2017). Mexico is experiencing rapid urbanization, a decline in agricultural livelihoods and decreased population density in rural areas (Rigaud et al., 2018a). Seventy-nine percent of the population currently resides in urban areas (*ibid*). Environmental mobility to cities can strain urban infrastructure. Mexico City in particular needs to improve its water management systems to accommodate a growing number of residents fleeing environmental impacts (*ibid*).

Environmental mobility in Mexico also demonstrates the time lag possible between an environmental event and displacement. The mean duration of time IDPs were displaced after an environmental event in Mexico from 2013 to 2015 was 4.86 days (Zuñiga & Garrido, 2020). Yet research has also demonstrated that migration outcomes can materialize years later (Spencer & Urquhart, 2018).²⁷ Out-migration from households in rural Mexico is low following an environmental shock, according to some research, but peaks three years after an environmental event linked to a disaster (Nawrotzki et al., 2017).

As an upper-middle income country, Mexico is particularly well positioned to use development to reduce risks associated with environmental mobility. Data from the World Bank shows Mexico will be able to reduce the potential number of internal climate migrants by as much as 2.5 million by 2050 if it takes an approach to development that reduces inequality, among other measures that build adaptive capacity (Rigaud et al., 2018a).

Given the prevalence of environmental mobility out of rural areas in Mexico, measures that target rural Mexico are particularly important. Diversifying income opportunities as well as improving access to education would reduce mobility from rural areas (*ibid*) for those moving due to environmental events and socioeconomic factors. Poverty reduction programs in rural areas already increase resilience (Aksakal & Schmidt, 2015). Programs such as Fondo de Apoyo Rural para Contingencias Climatológicas, which increases access to insurance against hydro-meteorological events; the social protection program Oportunidades which facilitates cash transfer; and PROCAMPO, which provides support to subsistence

²⁷ Finding no increase in migration from Central American and Caribbean countries after a hurricane, but an increase after a time lag.

farmers, all support staying-in place as a possible response to environmental events (Rigaud et al., 2018a) and economic stress factors.

Mexico also has a few legal and policy measures in place that create a framework for addressing environmental mobility. Article 6 of the Ley de Interculturalidad, Atención a Migrantes y Movilidad en el D.F. [Law of Interculturality, Attention to Migrants and Mobility in the Federal District] recognizes that displaced persons can include those displaced by natural phenomena that cause disasters (Ley de Interculturalidad, 2011 (Mexico)). Article 12 directs the federal government to develop social, economic, political and cultural assistance and aid programs to address the needs of those on the move because of environmental events in Mexico (*ibid*). The Ministry of Health's Health Security Guidelines recommend that immediate medical attention and shelters equipped with water and food be provided to populations affected by hospital emergencies, including victims of natural disasters (Mexico National Human Rights Commission, 2016). Mexico is one of two LAC countries that has developed law and policy to protect IDPs.

Going forward, there are opportunities for Mexico to take action based on its legal and policy frameworks. For example, the General Law on Climate Change requires multiple levels of government to “propose and foster mechanisms to raise and obtain funds for use in the protection and relocation of human settlements that are most vulnerable to the effects of climate change” (Ley General de Cambio Climático, 2018 (Mexico), Art. 30 (III)). Mexico could also build on its goal to “relocate irregular human settlements in zones prone to disasters through land use regulations,” as stated in its NDC (Gobierno de la República México, 2015). At the sub-regional level, Mexico's participation in the RCM, which adopted the RCM Protection Framework, signals the country's commitment to enhancing protection in the context of environmental mobility (RCM, 2016).

Recent policy has ushered in more stringent migration measures, especially at the US-Mexico border. Migrants from Mexico to the U.S. form the largest migration corridor,²⁸ in part due to environmental triggers.²⁹ A June 2019 joint U.S.-Mexico declaration commits Mexico to increasing immigration enforcement and keeping migrants in Mexico as they await asylum proceedings in the U.S. (CRS, 2020). The agreement was adopted after a surge in migration from Central America, which was partially drought-driven (IOM & WFP, 2016). As environmental impacts continue to shape mobility patterns in Mexico and Central America in interaction with other drivers, Mexico's migration policies will influence the ability of asylum-seekers sub-regionally to seek refuge across borders.³⁰

3.2 COLOMBIA

The combined effects of conflict and disasters significantly shape mobility outcomes in Colombia (IDMC, n.d.). At the end of 2019, Colombia had the second highest number of IDPs in the world (IDMC, 2020). In 2012, Colombian IDPs constituted 95% of the total number of IDPs in the Western Hemisphere (Yonetani, 2013). Colombian IDPs remain displaced on average for three days after a disaster, a much shorter time than if they are displaced by conflict (Zuñiga & Garrido, 2020; Schultz et al., 2014).

Colombia has coastal areas bordering both the Pacific Ocean and Caribbean Sea (Hernández-Narváez et al., 2019). It is particularly vulnerable to sea level rise and coastal erosion because of population density in its coastal municipalities and the prohibitively high cost of adaptation measures (Serna, 2015). By 2100, floods caused by sea level rise could impact 5% of the population, while coastal erosion could affect 3.4% (Hernández-Narváez et al., 2019). Sea level rise and coastal erosion also threatens food security and infrastructure (*ibid*). The Colombian government has noted both an increase and decrease of rainfall in certain areas, which could exacerbate mobility patterns shaped by flooding and drought (Serna, 2015). From 2013 to 2015, Colombia experienced the highest number of disasters in the region (Zuñiga & Garrido, 2020).

28 Some of this migration is related to environmental events. Research has found a correlation between hurricanes and severe storms that impact Mexico, and higher levels of regular immigration (both permanent and temporary) in the US (Mahajan & Yang, 2017; Sherburne, 2017; Afonso, 2011), but see (Kaenzig & Pigué, 2014) complicating this narrative.

29 Drought is the most common environmental shock to drive movement from Mexico to the U.S (Chort & de la Rupelle, 2016; Nawrotzki et al., 2013).

30 As a result of policies narrowing of access to asylum at the U.S.-Mexico border, asylum requests in Mexico have more than doubled, rising from 30,000 in 2018 to 71,000 in 2019 (Soto, 2020).

Across South America from 2008 to 2013, floods were the main triggering event of environmental mobility. Colombia was particularly impacted by an extremely heavy rainy season which resulted in flooding and landslides for eight months from 2010 to 2011 (Serna, 2015; Amar et al., 2014; Rinke, 2011), affecting more than three million people and causing over five billion dollars in damages (Rinke, 2011). More recently, flooding in Putumayo department, and heavy rain in Chocó affected more than 40,000 people (IDMC, 2020). In 2019, disasters linked to sudden-onset events, the majority of which were floods, triggered 35,000 publicly recorded incidents of internal displacements in Colombia (IDMC, n.d.).

Flooding can also lead to transboundary displacement. During the 2010-2011 rainy season, for example, Colombians sought emergency services in Ecuador (Cantor, 2015; see also Serna, 2015). Residents of La Siberia settlement in Norte de Santander also temporarily crossed into Venezuela in order to seek shelter in the Colombian town of Herrán (Antolínez, 2015). There, Colombians were able to access food supplies, health and education services and livelihood opportunities (*ibid*).

The 2010-2011 flooding event also illustrates the nexus between environmental and conflict-driven mobility (Abel et al., 2019). By 2013, many flood-displaced people had returned to their home communities (Schultz et al., 2014). However, a proportion of IDPs who had been previously displaced by conflict before the prolonged flooding were unable to return to their home communities (*ibid*). These conflict-displaced persons returned to their communities of displacement (*ibid*). Thus, environmental events may lead to “double displacement” of IDPs (*ibid*).

Given that Colombia experiences a high level of mobility risk due to environmental events, multiple regimes and programs have been developed for responding to environmental mobility. The Colombian Temporary and Circular Labour Migration (TCLM) project, for example, recruited Colombian farmers for seasonal agricultural work in Spain starting in 2006 (de Moor, 2011). TCLM, in partnership with the International Organization for Migration, targeted workers from communities at high risk of environmental events like volcanic eruptions (*ibid*).

TCLM was supported by a 2001 bilateral agreement between Spain and Colombia that regulated labor migration for the purpose of seasonal work (*ibid*). The bilateral agreement included an express development purpose, noting the development impact of remittances and requiring measures that would promote the return and re-integration of Colombia migrants into their home societies (*ibid*). Thus TCLM aimed to secure a triple-win for receiving communities, sending communities and migrants themselves by filling labor shortages in Spain, providing migrants with alternative livelihood opportunities and creating channels for the flow of remittances and knowledge transfer in Colombia (Rinke, 2011). Temporary migration schemes in the environmental context have been increasingly encouraged as an adaptation and development strategy (Brickenstein & Tabucanon, 2013).

The Inter-American Court of Human Rights has also articulated state responsibility to IDPs in cases involving Colombia (Case of the Mapiripán Massacre v. Colombia, 2005; Case of the Afro-Descendant Communities Displaced from the Cacarcia River Basin (Operation Genesis) v. Colombia, 2013). In the Case of the Mapiripán Massacre v. Colombia, the court clarified that the American Convention requires states to give IDPs “preferential treatment and to take positive steps to revert the effects of... condition of weakness, vulnerability, and defenselessness, including those vis-à-vis actions and practices of private third parties” (Case of the Mapiripán Massacre v. Colombia, 2005). Thus Colombia must take proactive measures to reduce the vulnerability of IDPs (*ibid*, Río Negro Massacress v. Guatemala, 2012). This obligation applies to signatories of the American Convention on Human Rights across LAC (Río Negro Massacress v. Guatemala, 2012). Furthermore, in 2004, the Colombia Constitutional Court ordered the government to increase resources available to IDPs (Constitutional Court of Colombia, Decision T-025/04, 2004). Colombia now has one of the most accurate mechanisms in the region for recording internal displacements (Zuñiga & Garrido, 2020).

Finally, Colombia can leverage at least two mechanisms to facilitate environmental mobility when it occurs across national borders. First, Colombia participates in the MERCOSUR Residence Agreement, which allows access to temporary residence (and the ability to apply for permanent residence after 2 years) and corresponding rights to work and access social security (Acosta, 2018). Second, Colombia immigration law contains discretion for the flexible application of regular migration categories to accommodate

particularly vulnerable persons, including those fleeing environmental events (Cantor, 2015). Colombian authorities used this flexibility to regularize Haitians through work and education immigration categories after the 2010 earthquake (*ibid*). The use of such measures in the context of disasters and climate change is enshrined in the SACM Protection Guide, in which Colombia participates (see SACM, 2018).

Given that more than 50% of people impacted by environmental events in Colombia are also IDPs, increasing coordination between agencies responsible for emergency assistance and IDP protection remains critical (Wong, 2008). No single agency has the mandate to respond to IDPs affected by environmental events (*ibid*), leaving a gap at the intersection of conflict-driven and environmental mobility. Thus, harmonizing agency responses to IDPs fleeing environmental events would enhance protection for those experiencing double displacement. This remains particularly important given that displacement has continued unabated, despite the 2016 peace agreement between the government and the Revolutionary Armed Forces of Colombia (IDMC, 2020).

3.3 ANTIGUA AND BARBUDA

Antigua and Barbuda is a set of twin islands in the Eastern Caribbean, with a population of approximately 90,000 in Antigua, and 1,200 in Barbuda (The Government of Antigua and Barbuda, 2015). The small island developing state is exposed to a number of environmental risks exacerbated by climate change, including coastal erosion, flooding and tropical storms of increasing intensity (*ibid*). Antigua and Barbuda faces extremely high mobility risk; IDMC forecasts that 3.3% of its population could be internally displaced by sudden-onset hazards linked to disasters annually (IDMC, 2018c). Antigua and Barbuda has the third highest level of average annual internal disaster displacement risk relative to population size in the world (*ibid*).

The 2017 Atlantic hurricane season devastated Caribbean SIDS, including Antigua and Barbuda. A single hurricane, Hurricane Irma, internally displaced 1.5% of Antigua and Barbuda's population (*ibid*). When Hurricane Irma destroyed 90% of properties in Barbuda, the government ordered the evacuation of the nearly 2,000 residents (Emergency Powers (Mandatory Evacuation) Order No. 60, 2017 (Antigua & Barbuda); Government of Antigua & Barbuda, 2018).

Following Hurricane Irma, the government initiated the repeal of the Barbuda Land Act of 2007, which had guaranteed communal land ownership rights in Barbuda (Pressly, 2019). The government holds that privatization allows residents of Barbuda to insure their homes and borrow against property to support hurricane recovery (*ibid*). However, some residents of Barbuda claim that the repeal of the Barbuda Land Act was a bid to open up Barbuda, which has been held in common since emancipation from slavery to development (Sou, 2019).

The case of evacuation from Barbuda to Antigua points to a distinct practice of cross-border evacuation in the Caribbean, atypical in other parts of the region (CMC, forthcoming). Antigua and Barbuda's DRR law explicitly mentions displacement in the context of evacuation. The Disaster Management Act requires the National Disaster Preparedness Response Plan to include "procedures to apply in the event that the evacuation of all the residents of any area is considered to be desirable in the event of a disaster emergency" (Disaster Management Act (No. 13), 2002). National DRR documents also acknowledge that "environmental threats such as natural hazards and climate change" could displace households in low-lying coastal areas; and that displacement could fuel conflict over essential resources, with particular impact on children (Government of Antigua & Barbuda, 2017). Similarly, Antigua and Barbuda's Second National Communication on Climate Change within the UNFCCC framework noted the "brain drain" effect of out-migration of skilled and semi-skilled nationals due to climate impacts on its coastal areas (Government of Antigua & Barbuda, 2009).

Other frameworks through which Antigua and Barbuda responds to environmental mobility include national immigration law and regional mobility schemes. Discretionary power written into Antigua and Barbuda's immigration law allowed for the extension of visa waivers to Haitian nationals who had family residing in Antigua and Barbuda with the capacity to economically support them after the 2010 earthquake in Haiti (Cantor, 2018). Antigua and Barbuda law grants authority to the Chief Immigration Officer to allow "prohibited immigration" if necessary (*ibid*, Annex D).

Antigua and Barbuda also participates in CARICOM's Single Market and Economy framework and the OECS' Economic Union, regional mobility agreements that have been applied in the environmental context. During the 2017 Atlantic hurricane season, Antigua and Barbuda admitted Dominicans displaced by Hurricane Maria (Francis, 2019). Antigua and Barbuda's admission of displaced Dominicans points to the benefits of using regional mobility schemes to manage environmental mobility; that is, regional mobility schemes can provide access to territory, labor markets and permanent resettlement opportunities in the wake of an environmental event.

Antigua and Barbuda's case also points to the particular challenges facing SIDS in relation to environmental mobility. Given their relatively small land masses and shock-susceptible economies, environmental events can result in cross-border displacement, where internal movement may have occurred in other countries in the region. Thus, sub-regional integration proves critical—both in terms of providing options for admission into other nearby islands and economic advancement.

4. FUTURE NORM/POLICY DEVELOPMENT

Significant normative development in relation to environmental mobility has occurred in LAC compared to other regions. LAC countries deploy a number of mechanisms in practice to extend admission and stay to people moving in the context of climate change and disasters. These mechanisms include regional refugee law, regional mobility schemes, and regular and exceptional migration categories in national immigration law. The RCM Protection Framework and SACM Protection Guide set baseline norms based on the existing use of these and other measures in the environmental context, and further affirm the applicability of the international principle of non-refoulement in rare cases. Nevertheless, LAC could strengthen its normative framework on environmental mobility by developing robust law and policy that protects rights, enhances livelihood opportunities, and integrates environmental mobility into DRR and development planning.

4.1 RECOMMENDATIONS

1. HARMONIZE REGIONAL APPROACHES TO ENVIRONMENTAL MOBILITY GOVERNANCE

- While guidelines exist on cross-border environmental mobility for Mexico, Central and South America, the Caribbean has yet to adopt its own sub-regional framework on environmental mobility. A sub-regional entity such as CARICOM should develop sub-regional guidelines for the protection of people moving across borders in the context of disasters and climate change for the Caribbean to complement the RCM and SACM guidelines, building on the Caribbean Migration Consultation Plan of Action.
- In follow-up to the Brazil Declaration and Plan of Action, which aims in part to enhance protection in the context of environmental mobility, any declaration adopted in 2024 to commemorate the 40th anniversary of the Cartagena Declaration should expressly affirm the RCM and SACM protection guidelines, and the above-mentioned Caribbean guidelines if already adopted.

2. STRENGTHEN THE NATIONAL RESPONSE TO IDPS THROUGH LAW AND POLICY.

- Five LAC countries—Mexico, Guatemala, El Salvador, Peru and Colombia—have developed national law and policy on protection of IDPs. Only two out of these five countries contain IDP laws and policies that reference environmental events. Given that the majority of environmental mobility first occurs within national borders, increasing national law and policy on IDPs that includes environmental mobility considerations would help support governments in protecting the rights and addressing the needs of those fleeing environmental events within national borders.

3. TRANSFORM PROTECTIVE MECHANISMS INTO MORE EQUITABLE AND DURABLE SOLUTIONS.

- Although many LAC countries have relevant immigration measures in place—such as visa-free entry and humanitarian visas for those who might not qualify as refugees (Brazil Declaration and Plan

of Action, 2014)—temporary admission based on regular migration categories for intra-regional movement does pose challenges (Serna, 2015). Some of these measures only provide for short-term stay and could expire before return to a home country is possible (*ibid*). These immigration measures also do not secure access to services that may be needed by people fleeing environmental events and make it difficult to track protection needs, since people may not be registered as environmental migrants or displaced (*ibid*). Requiring a return ticket for proof of intent to leave for visa-free entry can also hinder applicability of visa-free travel in the environmental context. Across the region, durable solutions are needed that also include countries typically excluded from visa-free travel, including Haiti, Guyana and Suriname.

- Regional mobility schemes in particular could be re-designed to explicitly reference climate change and disasters, and provide greater protection in the context of environmental mobility, especially given that they have been increasingly promoted as a response mechanism in other regional contexts (such as East Africa) (Wood, 2018).
 - For example, the Caribbean Plan of Action recommends that special work permits be granted to people displaced across borders who are not eligible for a Certificate of Skills under CARICOM’s Caribbean Single Market Economy (CMC, 2019). The Caribbean Plan of Action recommends that Caribbean mobility schemes also address “access to livelihood opportunities and public services (health, education, social protection)” (CMC, forthcoming).
 - MERCOSUR does not currently provide a right of entry, which undermines its functionality as an anticipatory migration mechanism in the face of an environmental event. MERCOSUR nationals can be denied entry by border officials without “proof of sufficient resources for a short (‘tourist’) stay, hotel accommodation or return ticket” (Acosta, 2018). In other words, MERCOSUR nationals must prove to border officials that they are eligible for short-term stays before being able to apply for temporary residence. Expanding MERCOSUR to include a right of entry would enhance its applicability as an environmental response mechanism in this context, especially given that it grants access to residence (IOM, 2014). A more comprehensive set of rights under the proposed MERCOSUR citizenship statute could address this issue (MERCOSUR, 2017).
- The Brazil Declaration supports deeper cooperation within regional integration mechanisms to “improve the analysis and understanding of displacement and address its causes; offer international protection to those persons in need; and continue moving towards the progressive harmonization of public policies, standards and procedures through the exchange of good practices for the protection of refugees, displaced and stateless persons” (Brazil Declaration, 2014).

4. INTEGRATE ENVIRONMENTAL MOBILITY INTO NATIONAL DEVELOPMENT PLANNING.

- Given the interplay between economic and environmental drivers, development planning that improves living conditions, such as education and livelihood access, and diversifies labor markets can reduce out-migration (*ibid*).
- More than 30 LAC countries have created development plans (Regional Observatory on Planning for Development, n.d.). LAC countries largely integrate DRR and climate risk into development plans but aim to counteract the negative effects of environmental events by making changes to the built environment. Dominica’s National Resilience Development Strategy 2030 is an exception; it mentions environmental mobility and aims to conduct a Population Situation Analysis to understand “how climate change-induced disasters affect vulnerability and population elements” and inform “the resettlement of displaced persons” (Government of the Commonwealth of Dominica, n.d.).
- LAC national protection programs that reduce poverty also decrease environmental mobility risk, including for youth prone to migrate due to drought (Baez et al., 2017). The World Bank reports that “concerted action on climate change mitigation and adaptation together within inclusive development policies, and embedding climate migration into policy and planning, could help to substantially reduce the number of internal climate migrants by 2050” (Rigaud et al., 2018a, p.1).
- International actors might provide technical support to national governments interested in using development planning to build economic resilience in order to reduce environmental mobility risk—including by assessing the economic effects of population loss and facilitating the diversification of environment-dependent livelihoods.

5. INTEGRATE ENVIRONMENTAL MOBILITY INTO DRR AND CLIMATE PLANNING.

- LAC DRR law and policies take disparate approaches to environmental mobility, with many mentioning evacuation (Ley No. 18.621 Sistema Nacional de Emergencias, 2009 (Uruguay)), some contemplating the movement of humanitarian assistance personnel (Que reglamenta el Decreto Ley No. 3, 2008 (Panama)), and two defining recovery and assistance efforts as including the return of IDPs (Decreto No 11.632, 2013 (Paraguay)). Paraguay law and policy is an exception in its treatment of environmental mobility; it aims to ensure that migrants have equal access to DRR services (ibid; República del Paraguay, 2013). Other countries might consider replicating Paraguay’s approach.
- The Caribbean Plan of Action recommends “integrat[ing] displacement considerations into regional disaster management strategies, including but not limited to the Caribbean ‘Regional Comprehensive Disaster Management Strategy and Programming Framework 2014–2024’, to promote cooperation with neighboring countries to prepare for disaster displacement, including early warning systems, contingency planning, coordination mechanisms, evacuation planning, reception and assistance arrangements, as well as public information“ (CMC, forthcoming).
- Approximately 16% of LAC countries use NDCs to plan for environmental mobility, especially in regard to planned relocation. A greater number of LAC countries might consider this approach in their national climate planning or consider developing a regional consensus on planned relocation guidelines.
- LAC countries should also adopt the recommendations set forth by the Warsaw International Mechanism Task Force on Displacement, as adopted in Katowice.

6. ENHANCE DATA GATHERING AND MONITORING TO DEVELOP DATA-DRIVEN LAW AND POLICY.

- Better country-level data (Rigaud et al., 2018a) and monitoring (Zuñiga & Garrido, 2020) would support the development of more robust policies. The Brazil Plan of Action’s commissioning of a study by UNHCR signals the importance of further data gathering.
- The sub-regional entities under whose auspices the Brazil Declaration and Plan of Action was developed—MERCOSUR, SICA, CARICOM, UNASUR—could adopt responsibility for data collection with technical and financial support from international actors.

* *

To date, LAC countries have developed robust normative frameworks vis-à-vis environmental mobility based on regional and sub-regional processes and existing national law. Therefore, strengthening the governance framework for environmental mobility, especially across borders, will likely be most effective if it builds on existing regional and sub-regional mechanisms. Enhancing national IDP law and policy, integrating environmental mobility into development, DRR, climate planning and further data-gathering would improve the normative framework. International organizations might bolster efforts to improve governance by providing technical and financial support to address the aforementioned gaps in LAC and improve global governance of environmental mobility worldwide by facilitating knowledge-sharing between LAC and other regions.

Annex 1 – Nationally Determined Contributions & Environmental Mobility

COUNTRY	TREATMENT OF ENVIRONMENTAL MOBILITY
Mexico	Aims to relocate irregular human settlements in zones prone to disasters through land use regulations
Colombia	Notes that peace processes can be associated with negative environmental impacts, including due to migration patterns that increase pressure on natural resources in the most vulnerable areas. Aims to integrate such concerns in post-conflict scenarios
Ecuador	Aims to develop policies and strategies in the face of the temporary or permanent migration of populations by conditions linked to climate change
Suriname	Revised NDC notes that the government has abandoned 2015 NDC recommendation of partial relocation due to the threat of sea level rise
Uruguay	Aims to resettle socially-disadvantaged families who live in flood-prone and vulnerable areas, and ensure access of relocated communities to basic services, in accordance with the 2010 National Relocation Plan
Bahamas	Includes relocation of communities from the shoreline as an adaptation option that has already proven effective
Haiti	Includes internal and cross-border migration and planned relocation as an adaptation strategy. Recommends a cost-benefit analysis of planned relocation, further knowledge-gathering on climate migration, and land-use and sustainable development planning to address internal displacement risk in flood-prone areas

REFERENCES

- Abel, G. J., Brottrager, M., Crespo Cuaresma, J., & Muttarak, R. (2019). Climate, conflict and forced migration. *Global Environmental Change*, 54, 239–249. <https://doi.org/10.1016/j.gloenvcha.2018.12.003>
- Acosta, D. (2018). *The National Versus the Foreigner in South America: 200 Years of Migration and Citizenship Law*. Cambridge University Press.
- Adger, W. N., Pulhin, J. M., Barnett, J., Dabelko, G. D., Hovelsrud, G. K., Levy, M., Spring, U. O., & Vogel, C. H. (2014). 2014: Human Security. In *Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects, Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (pp. 755–791). Cambridge University Press. https://www.ipcc.ch/site/assets/uploads/2018/02/WGIIAR5-Chap12_FINAL.pdf
- Afonso, O. C. A. (2011). Natural Disasters and Migration: Storms in Central America and the Caribbean and Immigration to the U.S. *The UC Davis Undergraduate Research Journal*, 14. <http://explorations.ucdavis.edu/docs/2011/andrade.pdf>
- Afro-Descendant Communities Displaced from the Cacarica River Basin (Operation Genesis) v. Colombia, (Inter-American Court of Human Rights November 20, 2013). https://www.corteidh.or.cr/docs/casos/articulos/seriec_270_ing.pdf
- Aksakal, M., & Schmidt, K. (2015). Migration and Social Protection as Adaptation in Response to Climate-Related Stressors: The Case of Zacatecas in Mexico. In F. Hillmann, M. Pahl, B. Rafflenbeul, & H. Sterly (Eds.), *Environmental Change, Adaptation and Migration: Bringing in the Region* (pp. 80–97). Palgrave Macmillan UK. https://doi.org/10.1057/9781137538918_5
- Aliens Act 1991, Law of 16 January 1992 concerning the Admission and the Expulsion of Aliens, (1992). (Republic of Suriname). <https://www.refworld.org/docid/3ae6b4fd0.html>
- Allen, M. R., Dube, O. P., Solecki, W., Aragón-Durand, F., Cramer, W., Humphreys, S., Kainuma, M., Kala, J., Mahowald, N., Mulugetta, Y., Perez, R., Wairiu, M., & Zickfeld, K. (2018.). 2018: Framing and Context. 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*. [In Press]. <https://www.ipcc.ch/sr15/>
- Amar, J. J. A., Orozco, C. M., Molinares, D. J., Llanos, R. A., Sañudo, J. P., Correa, A. D. C., González, M. M., Utria, L. M. U., Campís, E. S., Tapia, S. E., Haydar, C. R., Mora, M. D., & Riva, L. Z. (2014). *Desplazamiento Climático y Resiliencia: Modelos de Atención a Familias Afectadas por el Invierno en el Caribe Colombiano: El Caso del Sur del Atlántico (2010-2011)*. Centro de Investigaciones en Desarrollo Humano, Universidad del Norte. <https://core.ac.uk/download/pdf/70288831.pdf>
- Aragón, E., & El-Assar, A. (2018). *Migration Governance in the Caribbean: Report on the island states of the Commonwealth Caribbean*. IOM. https://caribbeanmigration.org/sites/default/files/repository/regional_report_on_migration_governance_in_the_island_states_of_the_commonwealth_caribbean.pdf
- Audebert, C. (2017). The recent geodynamics of Haitian migration in the Americas: Refugees or economic migrants? *Revista Brasileira de Estudos de População*, 34. <https://doi.org/10.20947/S0102-3098a0007>
- Ayuso, T., & Hansen, M. B. (2017, October 18). Exodus from hurricane-hit Dominica as recovery remains elusive. *The New Humanitarian*. <https://www.thenewhumanitarian.org/feature/2017/10/18/exodus-hurricane-hit-dominica-recovery-remains-elusive>

- Baez, A. (2017, September 13). Puerto Rico opens arms to refugees from Irma's Caribbean chaos. Reuters. <https://www.reuters.com/article/us-storm-irma-caribbean-idUSKCN1BO26P>
- Baez, J., Caruso, G., Mueller, V., & Niu, C. (2017a). Droughts augment youth migration in Northern Latin America and the Caribbean. *Climatic Change*, 140(3), 423–435. <https://doi.org/10.1007/s10584-016-1863-2>
- Baez, J., Caruso, G., Mueller, V., & Niu, C. (2017b). Heat Exposure and Youth Migration in Central America and the Caribbean. *American Economic Review*, 107(5), 446–450. <https://doi.org/10.1257/aer.p20171053>
- Barnett, J., & Adger, W. N. (2018). Mobile Worlds: Choice at the Intersection of Demographic and Environmental Change. *Annual Review of Environment and Resources*, 43. <https://doi.org/10.1146/annurev-environ-102016-060952>
- Brazil Declaration and Plan of Action. (2014). Regional Refugee Instruments & Related, UNHCR. <https://www.refworld.org/docid/5487065b4.html>
- Brickenstein, C., & Tabucanon, G. M. (2013). Circular Migration as Climate Change Adaptation: Reconceptualising New Zealand's and Australia's Seasonal Worker Programs. <https://doi.org/10.18046/PREC.V3.1724>
- Burton, I. (2003). Do we have the adaptive capacity to develop and use the adaptive capacity to adapt? In J. B. Smith & R. J. T. Klein (Eds.), *Climate Change, Adaptive Capacity And Development* (1st edition, pp. 137–151). World Scientific Publishing.
- Cabinet Decision in Minute No. 4809, (1979). (Trinidad and Tobago). <https://www.refworld.org/pdfid/571109654.pdf>
- Cantor, D. J. (2015). Law, Policy and Practice Concerning the Humanitarian Protection of Aliens on a Temporary Basis in the Context of Disasters (Disasters, Climate Change and Displacement: Evidence for Action). The Nansen Initiative. https://disasterdisplacement.org/wp-content/uploads/2015/07/150715_FINAL_BACKGROUND_PAPER_LATIN_AMERICA_screen.pdf
- Cantor, D. J. (2018). Cross-Border Displacement, Climate Change and Disasters: Latin America and the Caribbean. UNHCR, Platform on Disaster Displacement (PDD). https://caribbeanmigration.org/sites/default/files/cross-border_displacement_climate_change_and_disasters_lac_david_cantor_2018.pdf
- Cantor, D. (2021). Environment, Mobility, and International Law: A New Approach in the Americas. *Chicago Journal of International Law*, 21(2). <https://chicagounbound.uchicago.edu/cjil/vol21/iss2/3>
- Caribbean Migration Consultations (CMC). (Forthcoming). Plan of Action to Address Human Mobility in the Context of Disasters in the Caribbean (2020-2022). CMC. Draft on File with Author.
- Caribbean Migration Consultations (CMC). (n.d.). What is the CMC? | Caribbean Migration. CMC. <https://caribbeanmigration.org/what-cmc>
- Caribbean Migration Consultations (CMC). (2019). Regional Consultation towards a Framework for Regional Cooperation on Human Mobility in the Context of Disasters and the Adverse Effects of Climate Change in the Caribbean. (The Caribbean Migration Consultations). <https://disasterdisplacement.org/cmc-june2019>
- Cartagena Declaration on Refugees. (1984). The Colloquium on the International Protection of Refugees in Central America, Mexico and Panama. The Colloquium. http://www.oas.org/dil/1984_cartagena_declaration_on_refugees.pdf
- Central American Integration System (SICA). (n.d.). Integration at a Glance. SICA. https://www.sica.int/sica/vista_en.aspx?IdEnt=401&Idm=2&IdmStyle=2

- Central American Integration System (SICA). (2014). Plan Regional de Reducción de Riesgo de Desastres PRRD (2014—2019). The Coordination Center for the Prevention of Disasters in Central America and the Dominican Republic (CEPREDENAC), World Bank Group. [http://www.cac.int/sites/default/files/CEPREDENAC_Plan_Regional_de_Reducci%C3%B3n del Riesgo de Desastres_2014-2019_2014.pdf](http://www.cac.int/sites/default/files/CEPREDENAC_Plan_Regional_de_Reducci%C3%B3n_del_Riesgo_de_Desastres_2014-2019_2014.pdf)
- Central American Security Commission. (2011). Manual Regional de Procedimientos de las Cancillerías en casos de Desastres. The Central American Integration System (SICA), Centro de Coordinación para la Prevención de los Desastres Naturales en América Central (CEPREDENAC). <https://www.sica.int/busqueda/Noticias.aspx?IDItem=63334&IDCat=3&IdEnt=22&Idm=1&IdmStyle=1>
- Cerrutti, M., & Bertonecello, R. (2003). Urbanization and Internal Migration Patterns in Latin America. https://www.researchgate.net/publication/251308910_Urbanization_and_Internal_Migration_Patterns_in_Latin_America
- Chort, I., & de la Rupelle, M. (2016). Determinants of Mexico-U.S. Outward and Return Migration Flows: A State-Level Panel Data Analysis. *Demography*, 53(5), 1453–1476. <https://doi.org/10.1007/s13524-016-0503-9>
- Climate Change Commission, Philippines. (n.d.). National Framework Strategy on Climate Change 2010-2022. Office of the President of the Philippines Climate Change Commission. https://www.neda.gov.ph/wp-content/uploads/2013/10/nfsc_sgd.pdf
- Cohn, D., Passel, J. S., & Bialik, K. (2019, November 27). Many immigrants with Temporary Protected Status face uncertain future in U.S. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/11/27/immigrants-temporary-protected-status-in-us/>
- Colombian Constitutional Court, Decision T-025 of 2004, (2004). https://www.brookings.edu/wp-content/uploads/2016/07/colombia_t-025_2004.pdf
- Comisión Nacional de Prevención de Riesgos y Atención de Emergencias, & Gobierno de Costa Rica. (2011). Manual de Procedimientos de Cancillería para la Coordinación de la Asistencia Humanitaria y Técnica en Casos de Desastre. <https://www.ifrc.org/docs/IDRL/Manual%20de%20CANCILLER%c3%8da%20FINAL%20PARA%20IMPRESI%c3%93N.pdf>
- Conferencia Internacional Sobre Refugiados Centroamericanos (CIREFCA). (1989). Principios y Criterios para la Protección and Asistencia a los Refugiados, Repatriados y Desplazados en América Latina. United Nations. https://www.oas.org/dil/esp/cirefca_89-9_esp.pdf
- Congressional Research Service (CRS). (2020). Mexico’s Immigration Control Efforts. <https://fas.org/sgp/crs/row/IF10215.pdf>
- de Moor, N. (2011). Temporary labour migration for victims of natural disasters: The Colombia-Spain model. *Climate Change and Migration: Rethinking Policies for Adaptation and Disaster Risk Reduction*, 90–103.
- Decreto No. 616/2010—Reglamentación de la Ley de Migraciones No. 25.871 y sus modificatorias, (2010). (Argentina). <https://www.refworld.org/docid/4be2de512.html>
- Decreto No 11.632 por el cual se reglamenta la Ley No 2615/05, Pub. L. No. 2615/05 (2013). (Republica del Paraguay). https://www.sen.gov.py/application/files/8415/9188/6664/Decreto_11632_reglamentario_de_la_SEN.pdf
- Disaster Management Act, (2006). (Saint Lucia). <https://www.preventionweb.net/english/policies/v.php?id=9477&cid=145>
- Disaster Management Act (No. 13), (2002). (Antigua and Barbuda). <http://laws.gov.ag/wp-content/uploads/2018/08/a2002-13.pdf>

- Dominica News Online. (2010, January 16). CARICOM WELCOME: Region relaxes visa requirements for Haitians. Dominica News Online. <https://dominicanewsonline.com/news/homepage/news/accidents-tragedy/caricom-welcome-region-relaxes-visa-requirements-for-haitians/>
- Economic Commission for Latin America and the Caribbean (ECLAC). (2014). Trends and patterns of Latin American and Caribbean migration towards 2010 and challenges for a regional agenda. ECLAC. <https://www.cepal.org/es/publicaciones/37218-tendencias-patrones-la-migracion-latinoamericana-caribena-2010-desafios-agenda>
- Edición actualizada del Decreto No. 26, Reglamento de la Ley de Migración de 19 de Julio de 1978, Pub. L. No. 26 (1978). <https://www.gacetaoficial.gob.cu/es/decreto-26-de-1978-de-consejo-de-ministros>
- Emergency Powers (Mandatory Evacuation) Order 2017 No. 60 of 2017, (2017). (Antigua and Barbuda). http://legallaaffairs.gov.ag/pdf/bills/Emergency_Powers_Evacuation_Order_2017-Wed-8th-Sept-17.pdf
- Food Security and Emigration: Why people flee and the impact on family members left behind in El Salvador, Guatemala and Honduras, August 2017 | World Food Programme. (n.d.). Retrieved January 23, 2021, from <https://www.wfp.org/publications/2017-food-security-emigration-why-people-flee-salvador-guatemala-honduras>
- Fox News. (2017, September 11). Puerto Rico helps evacuate US citizens from neighboring Caribbean islands. Fox News. <https://fox2now.com/news/puerto-rico-helps-evacuate-us-citizens-from-neighboring-caribbean-islands/>
- Francis, A. (2019). Free Movement Agreements & Climate-Induced Migration: A Caribbean Case Study (SSRN Scholarly Paper ID 3464594). Social Science Research Network. <https://papers.ssrn.com/abstract=3464594>
- Global Protection Cluster. (n.d.). Global Database on IDP Laws and Policies [Database]. Global Protection Cluster: Working Together for Protection. <https://www.globalprotectioncluster.org/global-database-on-idp-laws-and-policies/>
- Gobierno de la República México. (2015). Intended Nationally Determined Contribution. UNFCCC. <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Mexico%20First/MEXICO%20INDC%202003.30.2015.pdf>
- Government of Antigua & Barbuda. (2017). Country Document for Disaster Risk Reduction: Antigua and Barbuda, 2016 - Antigua and Barbuda. UNDRR. <https://reliefweb.int/report/antigua-and-barbuda/country-document-disaster-risk-reduction-antigua-and-barbuda-2016>
- Government of Antigua & Barbuda. (2018). Hurricane Irma Recovery Needs Assessment. https://www.gfdrr.org/sites/default/files/publication/Antigua%20and%20Barbuda%20executive%20summary_print_text%282%29.pdf
- Government of Belize. (2015). Intended Nationally Determined Contribution. UNFCCC. <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Belize%20First/BELIZE's%20%20NDC.pdf>
- Government of the Commonwealth of Dominica. (n.d.). National Resilience Development Strategy: Dominica 2030. Retrieved January 30, 2021, from <https://observatorioplanificacion.cepal.org/sites/default/files/plan/files/Dominica%202030The%20National%20Resilience%20Development%20Strategy.pdf>
- Government of the Commonwealth of Dominica. (2017). Post-Disaster Needs Assessment Hurricane Maria, September 18, 2017. Government of the Commonwealth of Dominica. <https://perma.cc/8ZVZ-U6EW>

- Hernández-Narváez, D. M., Vega Cabrera, A. M., Zamora Bornachera, A. P., & Sierra Correa, P. C. (2019). Climate change and socioeconomic impacts on the Colombian coastal and insular area. <https://doi.org/10.25268/bimc.invemar.2019.48.2.764>
- Hoffmann, R., Dimitrova, A., Muttarak, R., Crespo Cuaresma, J., & Peisker, J. (2020). A meta-analysis of country-level studies on environmental change and migration. *Nature Climate Change*, 10, 1–9. <https://doi.org/10.1038/s41558-020-0898-6>
- Human Rights Defender and Others v. Guatemala, (Inter-American Court of Human Rights August 28, 2014). https://www.corteidh.or.cr/docs/casos/articulos/seriec_283_ing.pdf
- Immigration Regulations (G.N. 178/1974), 2 (1974). (Trinidad and Tobago). https://www.oas.org/dil/Immigration_Act_Trinidad_and_Tobago.pdf
- Intergovernmental Authority on Development (IGAD). (2020, February 26). Protocol on Free Movement of Persons Endorsed at Ministerial Meeting. IGAD. <https://igad.int/divisions/health-and-social-development/2016-05-24-03-16-37/2373-protocol-on-free-movement-of-persons-endorse-at-ministerial-meeting>
- Internal Displacement Monitoring Centre (IDMC). (n.d.). Colombia [Database]. IDMC. <https://www.internal-displacement.org/countries/colombia>
- Internal Displacement Monitoring Centre (IDMC). (2018a). 2018 Global Report on Internal Displacement. IMDC & Norwegian Refugee Council (NRC). <https://www.internal-displacement.org/global-report/grid2018/>
- Internal Displacement Monitoring Centre (IDMC). (2018b). GRID Spotlight: Atlantic Hurricane Season. IDMC. https://www.internal-displacement.org/sites/default/files/publications/documents/2018-GRID-spotlight-atlantic-hurricane-season_0.pdf
- Internal Displacement Monitoring Centre (IDMC). (2018c). Systematic data collection and monitoring of displacement and its impacts at local, national, regional and international level to inform comprehensive needs and risk assessments for the formulation of policy and plans. IDMC, UNFCCC. https://environmentalmigration.iom.int/sites/default/files/20180810_IDMC%20Summary%20Report_Activity%20III%201-3.pdf
- Internal Displacement Monitoring Centre (IDMC). (2019a). 2019 Global Report on Internal Displacement. IMDC & Norwegian Refugee Council (NRC). <https://www.internal-displacement.org/global-report/grid2019/>
- Internal Displacement Monitoring Centre (IDMC). (2019b, May 10). Disasters and violence displaced two million people across the Americas in 2018. IDMC. <https://www.internal-displacement.org/media-centres/disasters-and-violence-displaced-two-million-people-across-the-americas-in-2018>
- Internal Displacement Monitoring Centre (IDMC). (2020). 2020 Global Report on Internal Displacement (GRID). IMDC & Norwegian Refugee Council (NRC). <https://www.internal-displacement.org/global-report/grid2020/>
- International Organization for Migration (IOM). (2014). Estudio sobre Experiencias en la Implementación del Acuerdo de Residencia del MERCOSUR y Asociados [Conference Reference Document]. IOM. http://csm-osumi.org/sites/default/files/6_doc_ref_-_estudio_sobre_experiencias_en_la_implementacion_del_acuerdo_de_residencia_del_mercosur_y_asociados.pdf
- International Organization for Migration (IOM). (2017a). Working Papers on Migration: Migration in the Caribbean – Current Trends, Opportunities, and Challenges. IOM. https://reliefweb.int/sites/reliefweb.int/files/resources/Working%20papers_%20en_baja_20.06.17.pdf

- International Organization for Migration (IOM). (2017b). Costa Rica and Panama Prepare for Cross-Border Disaster-Displacement. Platform on Disaster Displacement. <https://disasterdisplacement.org/costa-rica-and-panama-prepare-for-cross-border-disaster-displacement>
- International Organization for Migration (IOM). (2020). South American Migration Report No.3 2020: Migration Trends in South America (No. 3; Migration Analysis Unit). IOM. https://robuenosaires.iom.int/sites/default/files/Informes/Migration_Trends.pdf
- International Organization for Migration (IOM), World Food Programme (WFP). (2016). Hunger Without Borders: The hidden links between food insecurity, violence and migration in the northern triangle of Central America. WFP. <https://environmentalmigration.iom.int/hunger-without-borders-hidden-links-between-food-insecurity-violence-and-migration-northern-triangle>
- Jaitman, L. (2015). Urban infrastructure in Latin America and the Caribbean: Public policy priorities. Latin American Economic Review, 24(13). <https://doi.org/10.1007/s40503-015-0027-5>
- Jubilit, L. L., Espinoza, M. V., & Mezzanotti, G. (2019, November 22). The Cartagena Declaration at 35 and Refugee Protection in Latin America. E-International Relations. <https://www.e-ir.info/2019/11/22/the-cartagena-declaration-at-35-and-refugee-protection-in-latin-america/>
- Kaenzig, R., & Piguet, E. (2014). Migration and Climate Change in Latin America and the Caribbean. In E. Piguet & F. Laczko (Eds.), People on the Move in a Changing Climate: The Regional Impact of Environmental Change on Migration (pp. 155–176). Springer Netherlands. https://doi.org/10.1007/978-94-007-6985-4_7
- Laczko, F., & Aghazarm, C. (Eds.). (2009). Migration, Environment and Climate Change: Assessing the Evidence. International Organization for Migration (IOM). <https://environmentalmigration.iom.int/migration-environment-and-climate-change-assessing-evidence>
- Ley de Interculturalidad, Atención a Migrantes y Movilidad Humana en el Distrito Federal, (2011). (Mexico). https://www.cndh.org.mx/sites/all/doc/Programas/migrantes/OtrasNormas/Estatal/DF/Ley_IAMMHDF.pdf
- Ley General de Cambio Climático, (2018). (Mexico). http://dsiappsdev.semarnat.gob.mx/datos/juridico/leyes/LG_DE_CAMBIO_CLIMATICO.pdf
- Ley No. 18.621 Sistema Nacional de Emergencias, 27858 (2009). (Oriental Republic of Uruguay). <https://www.ifrc.org/docs/IDRL/UruguayLey%2018.pdf>
- Ley No. 370 de 2013, Ley de migración, (2013). (Plurinational State of Bolivia). <https://www.refworld.org/docid/55b636204.html>
- Mahajan, P., & Yang, D. (2017). Taken by Storm: Hurricanes, Migrant Networks, and U.S. Immigration (No. 17–50; Working Papers). Center for Economic Studies, U.S. Census Bureau. <https://ideas.repec.org/p/cen/wpaper/17-50.html>
- Mapiripán Massacre v. Colombia, (Inter-American Court of Human Rights September 15, 2005). https://www.corteidh.or.cr/docs/casos/articulos/seriec_134_ing.pdf
- MERCOSUR. (2010). Estatuto de la Ciudadanía del MERCOSUR: Plan de Acción. Mercosur, Argentine System of Legal Information (SAIJ), Ministerio de Justicia y Derechos Humanos Argentina. <http://www.saij.gob.ar/64-internacional-estatuto-ciudadania-mercosur-plan-accion-rmd2010000064-2010-12-16/123456789-0abc-de4-6000-00102dserced?&o=12&f=Total%7CTipo%20de%20Documento%7CFecha%7CTema/Derecho%20constitucional%7COrganismo/CMC%7CAutor%7CEstado%20de%20>
- MERCOSUR. (2017). Action Plan for a MERCOSUR Citizenship Statute, N 64/10. MERCOSUR, CMC. http://www.sice.oas.org/Trade/MRCSRS/Decisions/DEC_032_2017_s.pdf

- Mexico National Human Rights Commission. (2016). Special Report on Internal Forced Displacement in Mexico. <https://forodfi.cndh.org.mx/content/doc/Informes/Special-Report-Displacement.pdf>
- Mycoo, M. A. (2018). Beyond 1.5 °C: Vulnerabilities and adaptation strategies for Caribbean Small Island Developing States. *Regional Environmental Change*, 18(8), 2341–2353. <https://doi.org/10.1007/s10113-017-1248-8>
- National Disaster Management Act and Subsidiary Legislation, Cap 19.06 (2002). (St. Christopher and Nevis). <https://www.ifrc.org/docs/idrl/829EN.pdf>
- Nawrotzki, R. J., DeWaard, J., Bakhtsiyarava, M., & Ha, J. T. (2017). Climate shocks and rural-urban migration in Mexico: Exploring nonlinearities and thresholds. *Climatic Change*, 140(2), 243–258. <https://doi.org/10.1007/s10584-016-1849-0>
- Nawrotzki, R. J., Riosmena, F., & Hunter, L. M. (2013). Do Rainfall Deficits Predict U.S.-bound Migration from Rural Mexico? Evidence from the Mexican Census. *Population Research and Policy Review*, 32(1), 129–158. <https://doi.org/10.1007/s11113-012-9251-8>
- Nawrotzki, R. J., Riosmena, F., Hunter, L. M., & Runfola, D. M. (2015). Amplification or suppression: Social networks and the climate change—migration association in rural Mexico. *Global Environmental Change : Human and Policy Dimensions*, 35, 463–474. <https://doi.org/10.1016/j.gloenvcha.2015.09.002>
- Nita, S., Pécoud, A., De Lombaerde, P., Neyts, K., & Gartland, J. (Eds.). (2017). Migration, Free Movement and Regional Integration. UNESCO, United Nations University. https://cris.unu.edu/sites/cris.unu.edu/files/Migration%20free%20movement%20and%20regional%20integration_0.pdf
- Organization of American States (OAS). (1991). Inter-American Convention to Facilitate Disaster Assistance. Inter-American Commission on Human Rights (IACHR). <https://www.oas.org/juridico/english/treaties/a-54.html>
- Organization of American States (OAS). (2019). Inter-American Principles on the Human Rights of All Migrants, Refugees, Stateless Persons and Victims of Human Trafficking, Res. 4/19 (p. 28). Organization of American States (OAS), Inter-American Commission on Human Rights (IACHR). <https://www.oas.org/en/iachr/decisions/pdf/Resolution-4-19-en.pdf>
- Pressly, L. (2019, August 14). ‘Why I don’t want to own the land my business is built on.’ BBC News. <https://www.bbc.com/news/stories-49210150>
- Que reglamenta el Decreto Ley No. 3 de 22 de febrero de 2008, que crea el Servicio Nacional de Migración y dicta otras disposiciones, Pub. L. No. DECRETO EJECUTIVO No. 320 (2008). (Panama). https://tbinternet.ohchr.org/Treaties/CAT/Shared%20Documents/PAN/INT_CAT_ADR_PAN_25593_S.pdf
- Ramos, E. P., Jubilit, L. L., Cavedon-Capdeville, F. de S., & Claro, C. de A. B. (2016). Environmental migration in Brazil: Current context and systemic challenges (Issue 5, Vol. 2; Migration, Environment and Climate Change: Policy Brief Series). International Organization for Migration. <https://www.preventionweb.net/publications/view/49807>
- Regional Conference on Migration (RCM). (2016). Protection for persons moving across borders in the context of disasters: A guide to effective practices for RCM member countries. The Nansen Initiative, Regional Conference on Migration (RCM). <https://disasterdisplacement.org/wp-content/uploads/2016/11/PROTECTION-FOR-PERSONS-MOVING-IN-THE-CONTEXT-OF-DISASTERS.pdf>
- Regional Observatory on Planning for Development. (n.d.). Planning for development [Database]. Regional Observatory on Planning for Development in Latin America & the Caribbean. <https://observatorioplanificacion.cepal.org/en/planning-development>

- Republic of Fiji. (2018). Fiji: Planned Relocation Guidelines—A framework to undertake climate change related relocation. Ministry of Economy, Republic of Fiji. <https://www.refworld.org/docid/5c3c92204.html>
- Republic of Haiti. (2015). Intended Nationally Determined Contribution. UNFCCC. https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Haiti/1/CPDN_Republique%20d'Haiti.pdf
- República del Paraguay. (2013). Política Nacional de Gestión y Reducción de Riesgos. United Nations Development Programme (UNDP). https://www.ifrc.org/docs/IDRL/paraguayPNGRR%20-%20SEN_drht72rp.pdf
- República del Paraguay. (2013). Política Nacional de Gestión y Reducción de Riesgos. United Nations Development Programme (UNDP). https://www.ifrc.org/docs/IDRL/paraguayPNGRR%20-%20SEN_drht72rp.pdf
- Reyer, C. P. O., Adams, S., Albrecht, T., Baarsch, F., Boit, A., Trujillo, N. C., Carlsburg, M., Coumou, D., Eden, A., Fernandes, E., Langerwisch, F., Marcus, R., Mengel, M., Mira-Salama, D., Perette, M., Perezniето, P., Rammig, A., Reinhardt, J., Robinson, A.,... Thonicke, K. (2017). Climate change impacts in Latin America and the Caribbean and their implications for development. *Regional Environmental Change*, 17(6), 1601–1621. <https://doi.org/10.1007/s10113-015-0854-6>
- Rigaud, K. K., de Sherbinin, A., Jones, B., Bermann, J., Clement, V., Ober, K., Schewe, J., Adamo, S., McCusker, B., Heuser, S., & Midgley, A. (2018a). Groundswell: Preparing for Internal Climate Migration. World Bank Group. <https://openknowledge.worldbank.org/handle/10986/29461>
- Rigaud, K. K., de Sherbinin, A., Jones, B., Bermann, J., Clement, V., Ober, K., Schewe, J., Adamo, S., McCusker, B., Heuser, S., & Midgley, A. (2018b). Latin America Policy Note (Groundswell: Preparing for Internal Climate Migration) [Policy Note]. World Bank Group. <https://openknowledge.worldbank.org/bitstream/handle/10986/29461/GroundswellPN3.pdf?sequence=8&isAllowed=y>
- Rinke, T. (2011). Temporary and Circular Labor Migration Between Spain and Colombia (No. 6; The State of Environmental Migration). Institute for Sustainable Development and International Relations (IDDRI). <http://labos.ulg.ac.be/hugo/wp-content/uploads/sites/38/2017/11/The-State-of-Environmental-Migration-2011-25-34.pdf>
- Río Negro Massacres v. Guatemala, (Inter-American Court of Human Rights September 4, 2012). https://www.corteidh.or.cr/docs/casos/articulos/seriec_250_ing.pdf
- Salgar Antolínez, D. (2015, May 16). Confinados en la frontera colombo-venezolana. *El Espectador*. <https://www.elespectador.com/noticias/el-mundo/confinados-en-la-frontera-colombo-venezolana/>
- San José Declaration on Refugees and Displaced Persons. (1994). International Colloquium in Commemoration of the “Tenth Anniversary of the Cartagena Declaration on Refugees.” *Regional Refugee Instruments & Related, the Colloquium*. <https://www.refworld.org/docid/4a54bc3fd.html>
- Scott, D., Simpson, M. C., & Sim, R. (2012). The vulnerability of Caribbean coastal tourism to scenarios of climate change related sea level rise. *Journal of Sustainable Tourism*, 20(6), 883–898. <https://doi.org/10.1080/09669582.2012.699063>
- Schultz, J. M., Ceballos, Á. M. G., Espinel, Z., Oliveros, S. R., Fonseca, M. F., & Florez, L. J. H. (2014). Internal displacement in Colombia. *Disaster Health*, 2(1), 13–24. <https://doi.org/10.4161/dish.27885>
- Selee, A. (2020, February). Tested by Massive Inflows, a New Era of Migration Policy Emerges in Latin America and the Caribbean – Latin America & the Caribbean Migration Portal. Migration Policy Institute: Latin America & the Caribbean Migration Portal. <https://www.migrationportal.org/insight/new-era-migration-policy-emerges-latin-america-caribbean/>

- Serna, N. R. (2015). Human Mobility in the Context of Natural Hazard-Related Disasters in South America (Disasters, Climate Change and Displacement: Evidence for Action). The Nansen Initiative South America Consultation. https://www.nanseninitiative.org/wp-content/uploads/2015/12/14122015_FINAL_BACKGROUND_PAPER_SOUTH_AMERICA_screen.pdf
- Sherburne, M. (2017, September 12). Hurricanes drive immigration to the U.S.—Helped by green cards. PhysOrg. <https://phys.org/news/2017-09-hurricanes-immigration-ushelped-green-cards.html>
- Soto, A. G. R. (2020). One Year after the U.S.-Mexico Agreement: Reshaping Mexico’s Migration Policies. <https://www.migrationpolicy.org/research/one-year-us-mexico-agreement>
- Sou, G. (2019, July 17). Barbudans are resisting “disaster capitalism”, two years after Hurricane Irma. The Conversation. <http://theconversation.com/barbudans-are-resisting-disaster-capitalism-two-years-after-hurricane-irma-119368>
- South American Conference on Migration (SACM). (2015). Santiago Declaration. IOM, Civil Society. http://csm-osumi.org/sites/default/files/conferencias/xv_csm_declaracion_de_santiago_2015_eng2.pdf
- South American Conference on Migration (SACM). (2017). Lima Declaration on the Global Compact for Safe, Orderly and Regular Migration (South American Conference on Migration). SACM. https://www.comillas.edu/images/OBIMID/Noticias/SOUTH_AMERICAN_CONFERENCE_LIMA_DECLARATION.pdf
- South American Conference on Migration (SACM). (2018). Lineamientos regionales en materia de protección y asistencia a personas desplazadas a través de fronteras y migrantes en países afectados por desastres de origen natural. IOM,. <https://reliefweb.int/report/world/lineamientos-regionales-en-materia-de-proteccion-y-asistencia-personas-desplazadas-trav>
- Spencer, N., & Urquhart, M.-A. (2018). Hurricane Strikes and Migration: Evidence from Storms in Central America and the Caribbean. *Weather, Climate, and Society*, 10(3). <https://doi.org/10.1175/WCAS-D-17-0057.1>
- Strauss, B., & Kulp, S. (2018). Sea-Level Rise Threats in the Caribbean: Data, tools, and analysis for a more resilient future. Inter-American Development Bank. <https://sealevel.climatecentral.org/uploads/ssrf/Sea-level-rise-threats-in-the-Caribbean.pdf>
- The Government of Antigua and Barbuda. (2009). Antigua and Barbuda’s Second National Communication on Climate Change. UNFCCC. <https://unfccc.int/resource/docs/natc/antnc2.pdf>
- The Government of Antigua and Barbuda. (2015). Intended Nationally Determined Contribution. UNFCCC. <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Antigua%20and%20Barbuda%20First/Antigua%20and%20Barbuda%20First.pdf>
- The Government of the Bahamas. (2015). Intended Nationally Determined Contribution. UNFCCC. <https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Bahamas/1/Bahamas%20INDC%20Submission.pdf>
- The Nansen Initiative. (2015). Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change (Vol I&II). The Nansen Initiative. <https://www.nanseninitiative.org/global-consultations/>
- Thiede, B., Gray, C., & Mueller, V. (2016). Climate Variability and Inter-Provincial Migration in South America, 1970-2011. *Global Environmental Change: Human and Policy Dimensions*, 41, 228–240. <https://doi.org/10.1016/j.gloenvcha.2016.10.005>

- Thomas, A., & Benjamin, L. (2018). Policies and mechanisms to address climate-induced migration and displacement in Pacific and Caribbean small island developing states. *International Journal of Climate Change Strategies and Management*, 10(1), 86–104. <https://doi.org/10.1108/IJCCSM-03-2017-0055>
- UN Climate Change (UNFCCC). (n.d.). Uruguay: National Resettlement Plan. UN Climate Change. <https://unfccc.int/climate-action/momentum-for-change/lighthouse-activities/national-resettlement-plan>
- UN Climate Change (UNFCCC). (2018). Activities III. 1-3: Report for Final Review (Warsaw International Mechanism Task Force on Displacement). Internal Displacement Monitoring Centre (IDMC). https://unfccc.int/sites/default/files/resource/WIM%20TFD%20III_1-3%20IDMC.pdf
- UNICEF. (2019). Children uprooted in the Caribbean: How stronger hurricanes linked to a changing climate are driving child displacement. UNICEF. <https://www.unicef.org/media/62836/file/Children-uprooted-in-the-Caribbean-2019.pdf>
- United Nations General Assembly. (2018). Global Compact for Safe, Orderly and Regular Migration, A/RES/73/195. United Nations. https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_73_195.pdf
- United Nations High Commissioner for Refugees (UNHCR). (2020). Global Trends 2019: Forced Displacement in 2019. UNHCR. <https://www.unhcr.org/globaltrends2019/>
- United Nations Human Rights Committee (OHCHR). (2020). Views adopted by the Committee under article 5 (4) of the Optional Protocol, concerning communication No. 2728/2016 (CCPR/C/127/D/2728/2016; International Covenant on Civil and Protective Rights). http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/non-us-case-documents/2020/20200107_CCPRC127D27282016-_opinion.pdf
- US Citizenship and Immigration Services. (2020, December 7). Temporary Protected Status. Department of Homeland Security. <https://www.uscis.gov/humanitarian/temporary-protected-status>
- van Oldenborgh, G. J., van der Wiel, K., Sebastian, A., Singh, R., Arrighi, J., Otto, F., Haustein, K., Li, S., Vecchi, G., & Cullen, H. (2017). Attribution of extreme rainfall from Hurricane Harvey, August 2017. *Environmental Research Letters*, 12(124009). <https://doi.org/10.1088/1748-9326/aa9ef2>
- Vargas, J., Brassiolo, P., Sanguinetti, P., Daude, C., Goytia, C., Álvarez, F., Estrada, R., & Fajardo, G. (2017). RED 2017. Urban growth and access to opportunities: A challenge for Latin America. Development Bank of Latin America (CAF). <https://scioteca.caf.com/handle/123456789/1091>
- Vignoli, J. R. (2017). Cities and migration in Latin America and the Caribbean: Updated estimates of key socio-demographic effects (UN/POP/EGM/2017/1). Population Division of the Department of Economic and Social Affairs, United Nations Secretariat. <https://www.un.org/en/development/desa/population/events/pdf/expert/27/papers/III/paper-Rodriguez-final.pdf>
- Walters, J. (2017, September 12). US Virgin Islands refusing entry to non-American Irma evacuees, survivors say. *The Guardian*. <http://www.theguardian.com/world/2017/sep/12/us-british-virgin-islands-hurricane-irma-refused-entry>
- Warn, E., & Adamo, S. (2015, November 11). The Impact of Climate Change: Migration and Cities in South America [Bulletin no: Vol 63 (2)]. International Organization for Migration (IOM), World Meteorological Organization. <https://public.wmo.int/en/resources/bulletin/impact-of-climate-change-migration-and-cities-south-america>

- Weerasinghe, S. (2014). Planned Relocation, Disasters and Climate Change: Consolidating good practices and preparing for the future. UNHCR, Brookings Institute, The Nansen Initiative, Georgetown University Walsh School of Foreign Service Institute of International Migration, European Union (EU), Federal Department of Foreign Affairs (FDFA). <https://reliefweb.int/sites/reliefweb.int/files/resources/54082cc69.pdf>
- Wong, K. (2008, April 30). Colombia: A case study in the role of the affected state in humanitarian action. ODI. <https://www.odi.org/publications/2555-colombia-case-study-role-affected-state-humanitarian-action>
- Wood, T. (2018). The Role of Free Movement of Persons Agreements in Addressing Disaster Displacement – A Study of Africa. Platform on Disaster Displacement (PDD). <https://environmentalmigration.iom.int/role-free-movement-persons-agreements-addressing-disaster-displacement-%E2%80%93-study-africa>
- World Food Programme (WFP). (2017). Food Security and Emigration: Why people flee and the impact on family members left behind in El Salvador, Guatemala and Honduras. WFP, IOM, IFAD, Inter-American Development Bank (IDB), OAS. <https://www.wfp.org/publications/2017-food-security-emigration-why-people-flee-salvador-guatemala-honduras>
- Yang, D., & Mahajan, P. (2017, September 15). Hurricanes drive immigration to the US. The Conversation. <http://theconversation.com/hurricanes-drive-immigration-to-the-us-83755>
- Yonetani, M., Holladay, S., Ginnetti, J., Pierre, N., & Wissing, M. (2013). Global Overview 2012: People Internally Displaced by Conflict and Violence. IDMC, NRC. <https://www.internal-displacement.org/sites/default/files/publications/documents/2012-global-estimates-corporate-en.pdf>
- Zuñiga, R. A., & Garrido, J. (2020). Chapter 21: Internal displacement due to disasters in Latin America and the Caribbean. In Change, Hazards and Adaptation Options: Handling the impacts of a changing climate (1st ed.). <https://doi.org/10.1007/978-3-030-37425-9>