

Environmental Migration in Mexico

Developing Institutional Capacity to Meet Emerging Challenges

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Thesis for the fulfilment of the
Master of Science in Environmental Sciences, Policy & Management (MESPOM)
jointly operated by Lund University – University of Manchester -
University of the Aegean – Central European University

Lund, Sweden, June 2025



**Erasmus Mundus Masters Course in
Environmental Sciences, Policy and
Management**

MESPOM



This thesis is submitted in fulfilment of the Master of Science degree awarded as a result of successful completion of the Erasmus Mundus Masters course in Environmental Sciences, Policy and Management (MESPOM) jointly operated by the University of the Aegean (Greece), Central European University (Hungary), Lund University (Sweden) and the University of Manchester (United Kingdom).

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Published in 2025 by IIIIEE, Lund University, P.O. Box 117, SE-221 00 LUND, Sweden,
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ISSN 1401-9191

Acknowledgements

These two years went by so fast, but the lessons and memories from my MESPOM journey will stay with me forever. This was, without a doubt, a life-changing experience that not only taught me about the environment and sustainability but also taught me to believe in myself, get out of my comfort zone, and experience life at its fullest.

First, I want to thank my mom, María Esther, because even though she is not physically here with me, she is the reason why I am here today. Thank you for always pushing, supporting, and believing in me no matter what. I love you!

I want to thank Bernadett Kiss for being a fantastic supervisor and guiding me through this rewarding research experience. Thank you for taking the time to review my progress and supporting me, as well as for the great feedback and insights you shared with me to deliver this thesis.

I want to extend special recognition to all the interviewees who took the time to speak with me and share their insights for my research.

I would like to express my sincere gratitude to all the professors I had the opportunity to meet at CEU, the University of the Aegean, and Lund University for sharing their knowledge with me and enriching my MESPOM experience academically.

I want to thank the friends I made along the way. I feel incredibly lucky that strangers from very different countries have become part of my family. Special thanks to the amazing Lund Study Group, where we may not have studied much, but we always supported each other.

I want to thank my friends in Mexico, particularly Jessica and Uriel, for being great friends since 2013. I want to thank Ray for always supporting and listening to me during my master's meltdowns.

Thank you to my MESPOM 19 batch; it was a blast sharing these two years with you!

Lastly, I want to thank myself for having the courage to apply to this program, to move to the other side of the world, to be open to learning and experiencing new things, and not to let fear stop me.

Abstract

In the face of climate change, environmental migration has become a pressing issue, particularly for countries like Mexico, which are highly vulnerable to climate-related risks and have a long-standing history of structural inequality. Although the environmental drivers of migration have been widely acknowledged, the institutional capacity to address the challenges that accompany them remains underexplored. In this sense, this research examines how environmental migration is addressed in Mexico, employing a qualitative approach that combines documentary analysis with semi-structured interviews. The study applies an adapted institutional capacity framework encompassing eight dimensions: planning instruments, technical and human capacities, financial resources, political will and prioritisation, coordination and integration, public participation and agency, knowledge, research and data, and climate justice. The findings indicate that, although there is a growing recognition of the links between climate change and human mobility, institutional responses remain fragmented, underdeveloped, and largely reactive. The absence of a national policy framework, limited coordination across sectors, and weak financial and technical capacities constrain the ability to respond in a timely and effective manner. Public participation is virtually absent, and efforts are often led by civil society or depend on local political will. However, recent efforts, such as the relocation of the community of El Bosque, the first one acknowledged by the Mexican government as climate-displaced, point to opportunities for advancing the agenda and enhancing and adapting existing mechanisms for risk reduction to the context of environmental migration. This research highlights the importance of adopting a participatory and planning approach that enhances institutional capacity and integrates environmental migration into comprehensive climate change adaptation and mitigation strategies.

Keywords: environmental migration, climate change, institutional capacity

Executive Summary

In recent years, climate change has increasingly been acknowledged as a driver of human migration. However, despite its growing relevance, the topic of environmental migration remains on the margins of public policy. This thesis examines how environmental migration is addressed in Mexico and identifies the institutional gaps and challenges that currently hinder the development of more coordinated, timely, and equitable responses. While some progress has been made, such as the inclusion of climate-related risks in national reports and development plans, these efforts remain isolated and lack coherent, long-term strategies or political urgency.

This research aims to gain a deeper understanding of how environmental migration is conceptualised and addressed in Mexico. To do so, this research seeks to answer two research questions (RQ): RQ1: How is environmental migration addressed in Mexico? RQ2: What are the institutional capacity gaps in addressing environmental migration in Mexico?

The study takes a qualitative approach and draws on three key sources of data: documentary analysis of selected documents and reports, 14 semi-structured interviews with experts and practitioners working on climate and migration, and a case study of the community of El Bosque in Tabasco, which is the first one in Mexico to be officially recognised as climate-displaced. To guide the analysis, the research followed the institutional capacity framework based on Cid et al., (2024) but adapted to the context of environmental migration through eight categories: planning instruments, technical and human capacities, financial resources, political will and prioritisation, coordination and integration, public participation and agency, knowledge, research and data, and climate justice. A notable contribution of this research is the integration of climate justice as an analytical dimension within the institutional capacity framework.

The findings show that environmental migration is increasingly mentioned in diagnosis and risk assessments but remains politically sidelined. Responses tend to be fragmented across sectors and levels of government and are often reactive, mobilised only once a crisis unfolds. The El Bosque case is a clear example of this. While the local government was responsive, its actions were constrained by technical and financial limitations. It was the pressure from civil society and the media that triggered faster action, yet the lack of long-term planning leaves uncertainty surrounding future responses in similar situations. Still, the case shows that some institutional tools already exist and could be strengthened with better coordination and clearer mandates.

One of the main gaps identified is the disconnect between national-level recognition and actual implementation at the local level, where the effects of climate change are most felt. Municipalities often lack the resources and guidance needed to act proactively. Furthermore, the absence of formal participation mechanisms for affected communities, especially rural, indigenous, or marginalised groups, limits the potential for more inclusive and grounded policy responses. Although this thesis did not include the perspectives of directly affected people, the interviews and literature both point to the need for a more participatory and rights-based approach.

The study contributes to the literature by applying and adapting a capacity-focused framework to a topic that has received limited attention in Mexico. While much of the existing work focuses on climate adaptation or risk management, there is a notable lack of research connecting institutional capacity to climate-related migration. The study also brings climate justice into the conversation, not just as a principle but as a necessary lens for understanding and addressing systemic inequalities that shape vulnerability and displacement.

Based on the findings, some recommendations are suggested. For policymakers, developing a national strategy on environmental migration is crucial, one that links climate policy, migration frameworks, and disaster management, while also designating a lead agency to coordinate

actions. It is also essential to support municipalities with technical and financial resources, as well as to create channels for affected communities to participate in decision-making. For civil society, continued advocacy, community support, and public monitoring remain crucial. International organisations can contribute by supporting institutional capacity-building and encouraging regional cooperation. Ultimately, academia has room for more participatory and interdisciplinary research.

Ultimately, this thesis highlights the pressing need to move beyond fragmented, reactive approaches and toward more strategic, inclusive, and justice-based responses to environmental migration in Mexico. While institutional limitations remain a barrier, there are also concrete entry points for transformation, particularly through greater coordination, stronger local capacities, and the active participation of affected communities. By connecting environmental migration to broader debates on institutional resilience, climate governance, and human rights, this work hopes to encourage not only further academic exploration but also more effective and equitable policymaking.

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Abbreviations

CAF	Development Bank of Latin America and the Caribbean
CNDH	National Human Rights Commission (Comisión Nacional de Derechos Humanos)
CONAPO	National Population Council (Consejo Nacional de Población)
FCO	Foreign and Commonwealth Office
GHG	Greenhouse Gas
IOM	International Organisation for Migration
IPCC	Intergovernmental Panel on Climate Change
NDC	Nationally Determined Contribution
NGO	Non-governmental organisation
RQ	Research Question
SEGOB	Ministry of the Interior (Secretaría de Gobernación)
UNFCC	United Nations Framework Convention on Climate Change

1 Introduction

As we expand our understanding of climate change, we also increasingly comprehend its social repercussions. In this sense, a growing topic in climate change literature explores the nexus between climate change and migration. In 1992, the International Organisation for Migration (IOM) claimed that environmental degradation and climate change could lead to significant migration flows (Van Bavel, 2024). A report commissioned by the World Bank stated that by 2050, more than 140 million people may need to migrate due to the impacts of climate change, primarily in Sub-Saharan Africa, South Asia, and Latin America (Rigaud, et al., 2018).

When tracing back human movements, environmental factors are recognised as an element causing people to migrate. During the last glacial period, changes in climate and environmental conditions allowed our ancestors to cross from Asia to America through the Bering Strait. More recently, in the 1930s, the episode known as the Dust Bowl produced severe droughts in the U.S that caused a mass migration of farmers from Oklahoma and Texas (Ionesco et al., 2017)

Despite the vast literature acknowledging a link between climate change and migration, there remains considerable debate about this connection due to the multidimensional character of migration, which encompasses not only environmental factors but also social, economic, cultural, and political elements (Zickgraf, 2021).

Efforts have been made to define better and conceptualise migration related to climate change. In 2007, IOM proposed a definition that describes environmental migrants as people forced to leave their homes due to sudden or progressive environmental changes that affect their lives and living conditions (International Organisation for Migration, 2007). However, this definition can be problematic as it focuses solely on the environmental part, disregarding other factors that interplay in human migration. In this sense, for this research, I will follow the interpretation proposed by Van Bavel, who defines environmental migration as a migration that is driven, at least in part, by the effects of climate change or environmental factors that affect the habitability of people in a current space (Van Bavel, 2024).

Resuming the projections of environmental migrants, for the case of Mexico, the World Bank estimates that the country could harbour around 3.9 million environmental migrants in the coming decades (Rigaud, et al., 2018). Nevertheless, other scholars' numbers add up to eight million people who may be affected and internally displaced (Saliba & Zanuso, 2022). Despite the divergence in the figures, several authors have documented that environmental migration is occurring, and it is likely to continue happening in Mexico (Saldaña-Zorrilla & Sandberg, 2009; Cohen et al., 2013; Deheza & Mora, 2013; Nawrotzka & DeWaardb, 2016; Rubio Díaz-Leal, 2017; Chort & de la Rupelle, 2019; Gouritin, 2021).

While most of the literature regarding environmental migration in Mexico has focused on analysing trends and providing empirical evidence on how sudden environmental events, mainly droughts and floods, affect rural migration within the country and to the U.S., limited attention has been given to how Mexico can effectively address this issue. There is a lack of research on the development of institutional capacities to support populations affected by climate change.

Mexico is a country highly vulnerable to climate change, where its geographical location, north of the equator but under the Tropic of Cancer, produces high variability in the precipitation patterns across the country, with a tropical climate in the south with monsoonal circulation and dry and deserts characteristics in the rest of the national territory (CAF, 2014).

The Development Bank of Latin America and the Caribbean (CAF) developed a climate vulnerability Index for the region, finding that Mexico is positioned under the high-risk category of exposure to climate change. Whereas the Caribbean countries are at a higher risk of exposure, Mexico is the country in all of Latin America that experienced more climate-related disasters between 1980 and 2013, with 124 events, more than 13 million people affected, and economic losses of more than US\$34.8 million (CAF, 2014).

Most climate-related disasters that have impacted Mexico are considered sudden-onset events, including five hurricanes, two major droughts, and one large flood in the last four years (CENAPRED, 2025). Nevertheless, slow-onset events have also started to take their toll, with significant consequences for forced environmental migration. For instance, the community of El Bosque, part of the municipality of Centla in the southern state of Tabasco, has been displaced due to sea level rise (Ibarra Sarlat & Toledo, 2024).

The community of El Bosque and civil organisations requested government support to relocate to a safe place that would allow them to keep their safety and their livelihoods as fishermen. It should be noted that before this request, local and national governments had neglected the situation, despite being aware of the risks and social impacts in that area, which highlights their lack of preparedness, response, and institutional capacity to address climate-related disasters (Ibarra Sarlat & Toledo, 2024).

As a result of the combined efforts of different non-profit organisations and the high-profile mediatic reach of the case, the Mexican government, both at the local and federal levels, recognised the El Bosque community as the first case of climate change displacement in the country. After more than one year of tug-of-war, the authorities notified the affected families about a plan to relocate the families and build new houses in 2024 (Ibarra Sarlat & Toledo, 2024). However, the relocation process remains incomplete to this day, leaving several families in precarious living conditions without access to basic services or a dignified quality of life (Vega, 2024).

The El Bosque case has not only marked a precedent as the first documented and recognised by all government levels in Mexico as an environmental displacement situation, but it has also raised questions about the capacity of national institutions to adequately face environmental challenges in a planned manner (Ibarra Sarlat & Toledo, 2024). Considering the vulnerability of the country to climate change and the estimates that at least a few million inhabitants will be susceptible to temporary or permanent environmental migration, there is a need to establish a legal framework and specialised policies that respond to environmental displacement, but that also incorporate resilience strategies in both highly risk areas, but also in the relocation destinations to be better prepared to respond to environmental hazards.

1.1 Problem Definition

Although environmental migration is increasingly recognised as a critical issue, Mexico still lacks both the institutional capacity and legal framework needed to effectively respond to the challenges it presents (Ibarra Sarlat & Toledo, 2024).

The case of El Bosque highlights the absence of systematic planning, resilience strategies, and legal frameworks to support climate-displaced populations. The need for new or renovated institutional infrastructure to address new challenges is already recognised. However, the elements needed in a policy design that can address environmental migration from a preparedness and human rights perspective still need to be studied in more detail.

Part of the relatively quick and effective response to the El Bosque situation appears to be influenced by a significant involvement from civil society and strong media coverage, which prompted a relatively rapid response from the government. However, the same celerity does not seem to be the rule in other cases that have not been more publicly exposed, reflecting the urgency of policies and clearer mechanisms that can facilitate government action while promoting more integrated coordination and collaboration between different actors, government, civil society, communities, and academia.

1.2 Aim and Research Questions

This research first examines how environmental migration has been addressed in Mexico, from planning and policy design to implementation and evaluation. Secondly, it aims to assess the extent to which Mexico’s institutional landscape possesses the capacities required to respond effectively to environmental migration. Thirdly, it identifies key elements that could strengthen a national policy on environmental migration.

The problem definition outlined above highlights the urgency of addressing this issue. The inadequate management of the El Bosque case appears to stem from institutional limitations, such as a lack of long-term planning or fragmented responsibility allocation, that hinder the effective development and implementation of a coordinated response to address environmental migration. To better understand why these limitations persist, it is important to look at the issue not only from the government’s perspective, but also from the role played by civil society, academia, and the communities themselves. This research aims to contribute to a more comprehensive understanding of institutional capacity in this field and to inform future policy development in Mexico.

Based on the research aim, the following two research questions were identified and developed to be addressed in this thesis:

Table 1: Research questions and underlying rationale

Research Question	Rationale
RQ1: How is environmental migration addressed in Mexico?	Environmental migration is an increasingly relevant issue that demands coherence and collaboration across sectors. Evaluating current actions and efforts is crucial to understanding how Mexico perceives and addresses environmental migration, not only from a policy perspective but also in terms of the contributions of non-governmental organisations (NGOs) and academia.
RQ2: What are the institutional capacity gaps in addressing environmental migration in Mexico?	While environmental migration is increasingly acknowledged, limitations in coordination, technical expertise, and financial resources constrain institutional responses to this issue. Identifying these gaps is essential to enhancing institutional capacity and improving preparedness for future climate-related challenges.

Source: Own illustration

1.3 Scope and Delimitations

This research focuses on internal environmental migration in Mexico. Although international environmental migration can also occur, most of the environment-related displacement is expected to happen within the country’s borders (Ionesco et al., 2017; Rigaud, et al., 2018).

Although the many current cases of triggered environmental migration in Mexico are localised in coastal areas, the lack of specific information makes it challenging to work at a local level. In this sense, this work covers environmental migration in Mexico in a broader sense, aiming to shed light on the elements that could integrate a national environmental migration policy. Nevertheless, it is important to consider that a national policy should be adapted to the different subnational contexts, which could be an area for future research.

El Bosque in southern Mexico serves as a reference point to illustrate, through a real and recent case, how environmental migration is being addressed in Mexico, the currently available policy mechanisms for action, and the lessons learned from this experience. However, most documents and reports on environmental migration in Mexico, even if they provide a detailed examination of some regions, were insufficient or inadequate to narrow the scope of this research to a particular locality within the country.

Additionally, when discussing institutional capacity, specifically from governmental institutions, the autonomy of local authorities (meaning state and municipal levels) is very limited, with most migration policy and budget decisions coming from the federal government. Even so, it is essential to recognise that the causes, consequences, and capabilities associated with environmental migration may vary across the Mexican territory. For instance, the environmental drivers of migration differ in coastal areas compared to desert zones. Similarly, the response and capacity must be different in larger cities with a more robust budget than in smaller towns and rural areas. Nonetheless, this research aims to provide an overview of the broader institutional capacity needs in the country, given its centralised decision-making structure.

Environmental migration has emerged as a critical issue in global climate governance, underscoring the need for cooperation among various stakeholders. The 2015 Paris Agreement marked a turning point in Mexico's climate action, resulting in the adoption of more serious planning of climate change mitigation and adaptation strategies, being Mexico the first developing country to submit its Nationally Determined Contributions (NDC) outlining ambitious targets for reducing greenhouse gas emissions (GHG) and addressing adaptation measures (United Nations Climate Change, 2015). The first policy document addressing climate change in Mexico was released in 2009 with the Special Climate Change Program 2009-2012, which mentions environmental migration twice throughout the report. In this sense, the documentary analysis considered only documents from 2013 onwards.

1.4 Ethical Considerations

The scope of this research involves collecting data through semi-structured interviews to gather the perspectives of practitioners and experts in the field of study. In this sense, the appropriate standards of ethical considerations were applied throughout the research. Informed consent was shared with all participants (Annexe I), detailing the purpose of the study, how the information from the interviews would be used and stored, the voluntary nature of their participation, and their right to withdraw from the research at any time. No potential harm to the participants was identified, and the anonymity of the participants was ensured at all parts of the process by not including any personal or identifiable information in the interviews' recordings and transcriptions. The data collected was securely stored in a password-secured digital folder. The results of the research will be shared with interested participants once Lund University officially publishes the thesis.

Regarding the capture of secondary data, this research aimed to maintain academic integrity by correctly referencing and citing ideas, illustrations, and information from other people's work

and research using the APA referencing system. This research used the Zotero reference management program to organise references and ensure the correct quotation.

This research was not funded by any external sources. Still, it is important to acknowledge the contribution of the Erasmus Mundus Joint Master's Program and a scholarship awarded by the Mexican Ministry of Science, Humanities, Technology and Innovation. Their funding made it possible to pursue these graduate studies and, therefore, to culminate this research.

1.5 Audience

This research aims to identify the current capabilities and gaps in Mexican institutions to face environmental migration. In this sense, the primary audience identified is policymakers and public servants working directly or indirectly on environmental migration issues. This is achieved by expanding the knowledge and recognising the need to incorporate an environmental migration perspective into the country's plans, policies, and strategies. That includes individuals working in migration, refugee, and asylum-seeking agencies, as well as those involved in climate change mitigation and adaptation, civil protection, and urban planning.

A second target group for this research comprises mostly local non-governmental organisations (NGOs) and regional and international civil society entities working on environmental migration in Mexico or Latin America. This study aims to provide lessons learned and identify areas for improvement to enhance institutional capacity in responding to environmental migration challenges. However, this research could also be helpful to organisations working in climate migration in other developing countries that are experiencing an increasing population impacted by environmental migration and will need to implement and adapt policy frameworks to address this issue.

Lastly, another audience group includes the academic community, as there is still a lack of research on environmental migration in Mexico, particularly from an institutional perspective. Although this topic continues to evolve, this research may provide some insights into the current stage of institutional response to environmental migration and identify areas for capacity building and policy development that will require further investigation.

1.6 Disposition

Chapter One provides a preamble to the topic addressed in this research, including the research questions (RQs), aims, limitations, and target audience. *Chapter Two* presents the literature review, outlining the main research gap and the analytical framework employed for the data analysis. *Chapter Three* covers the research design and methods for collecting, analysing, processing, and interpreting the data used in the research. *Chapter Four* presents the main study findings and draws on the RQ answers. *Chapter Five* outlines the discussion of the results. *Chapter Six* presents the conclusions and identifies areas for future research.

2 Literature Review

This chapter reviews the literature on the nexus between climate change, the environment, and human migration. This chapter also provides an overview of the institutional capacity framework and its application to environmental or climate governance topics.

2.1 Contextualising the nexus between climate change and migration

The topic of environmental migration has gained popularity in recent years. However, this is not a new topic. For instance, the CliMig bibliographic database, which compiles and monitors literature related to migration, climate change, and the environment, identifies Malthus's 1798 “An Essay on the Principle of Population” as the first modern reference to explore a nexus between environmental factors and human migration. Despite a few texts exploring this topic, it was not until the late 1990s that a significant upturn in the literature on climate change and migration occurred, coinciding with the first publication of the Intergovernmental Panel on Climate Change (IPCC) report. For instance, the CliMig database has compiled more than 2,280 academic sources that explore this nexus from 1990 to 2024. The rise in environmental migration literature is not surprising and reflects the growing understanding of the social dimensions of climate change, including its impact on human mobility.

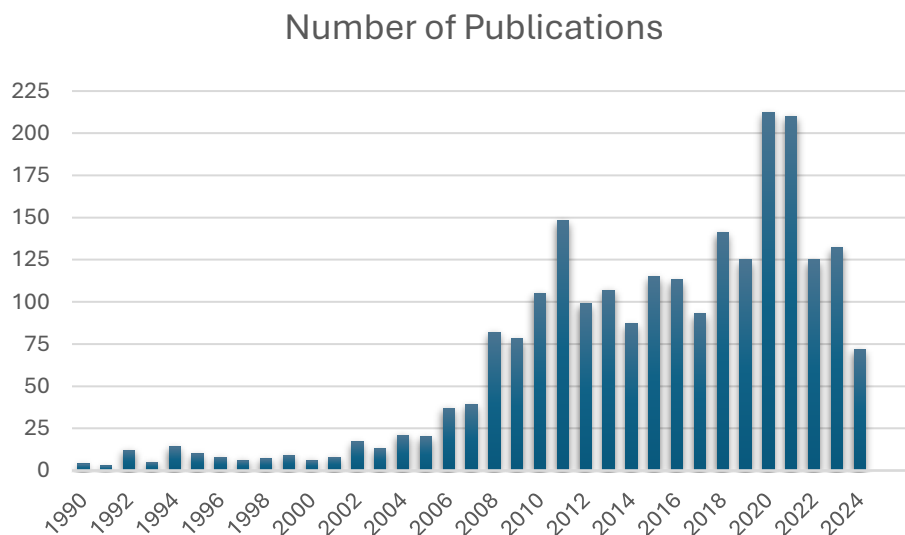


Figure 1: Evolution of literature on climate and migration

Source: Own illustration based on the CLIMIG Database (2025)

In 1889, Ravenstein, in “The Laws of Migration”, acknowledged unattractive climate as a minor factor influencing migration, as did other authors who recognised how the search for better land and milder climate as a way to have easier living conditions was a significant incentive that originated migrations in the past (Piguet et al., 2011). However, during the nineteenth century, environmental factors were removed from the table, leaving the floor to neoclassical economic theory to explain migration decisions solely as a strategy to maximise resources (Ionesco et al., 2017; Piguet et al., 2011). In this sense, human movements related to environmental factors can be traced back 20,000 years, when a glaciation period caused the sea level to drop, allowing our late ancestors to cross from Asia to America through the Bering Strait (Ionesco et al., 2017). Another example is the decline of the Mayan civilisation, where intense droughts and deforestation caused the abandonment of several cities. The previous examples are from ancient civilisations, but after the Industrial Revolution, it is also possible to find examples of how

environmental events have caused human migration. In 1845, a sudden warmer period in Ireland led to a potato blight, causing a famine that resulted in the migration of 2 million people. Similarly, in the 1930s, the Dust Bowl in the U.S. produced severe droughts that caused a mass migration of farmers from Oklahoma and Texas (Ionesco et al., 2017).

Despite the increasing literature discussing the nexus between the environment and migration, today, there is still debate about defining a person who migrates for environmental reasons. The lack of a legal definition has slowed down the implementation of policies and mechanisms to protect people who migrate for environmental reasons. In the 70s, Professor Lester Brown introduced the term “environmental refugee”, referring to people who are forced to leave their homes due to changes in the environment around them (Black, 2001). However, there is considerable discussion regarding using the term refugee when discussing environmental migration. This is mainly because the 1951 Convention Relating to the Status of Refugees, in its definition, does not include any considerations about environmental factors.

Nevertheless, during the Ninety-fourth Session of the IOM Council, held in 2007, a proposed definition for environmental migrants was proposed as follows: “Environmental migrants are persons or groups of persons who, predominantly for reasons of sudden or progressive change in the environment that adversely affects their lives or living conditions, are obliged to leave their habitual homes or choose to do so, either temporarily or permanently, and who move within their country or abroad” (International Organisation for Migration, 2007.) However, this definition can be problematic as it focuses solely on the environmental part, disregarding other factors that interplay in human migration, making it extremely difficult to find a case where migration occurs only because of environmental causes when, in reality, it is a combination of factors, where trying to isolate them provides a fragmented picture of the phenomenon. This becomes relevant as migration is a multidimensional phenomenon (Zickgraf, 2021) where environmental elements interplay with economic, social, political, and cultural aspects, making it complex to find a case that perfectly follows the IOM’s definition, where it seems that the environment is the sole or prevailing cause of migration. In this sense, this research follows the interpretation proposed by Van Bavel, who defines environmental migration as a migration that is driven, at least in part, by the effects of climate change or environmental factors that affect the habitability of people in a current space (Van Bavel, 2024).

Migration driven, at least in part, by the effects of climate change or environmental factors that affect the habitability of people in a current space.

Figure 2: Definition of Environmental Migration

Source: Van Bavel (2024)

A clear definition is necessary to implement policies or programs addressing environmental migration, and a deeper understanding of the phenomenon and its intersections is required. In this sense, Zickgraf (2021) identifies four dimensions of environmental migration: 1) a spatial dimension that describes the movement between different geographical spaces, 2) a temporal dimension to understanding that migration is dynamic, people can migrate only for short periods, or decide to relocate as a long-term plan, 3) a livelihood dimension to understand how environmental factors can affect the livelihood of people and how this can influence the decision of moving or staying, and 4) a psycho-social dimension that includes elements such as place attachment and cultural values that can shape migration patterns and intentions. In contrast, Ionesco et al.(2017) identify three dimensions to understanding environmental migration: 1) the level of coercion, meaning if the movement is forced or voluntary; 2) the level

of preparedness, which refers to whether the movement is proactive or reactive, and 3) the duration of the movement, being it short-term or long-term.

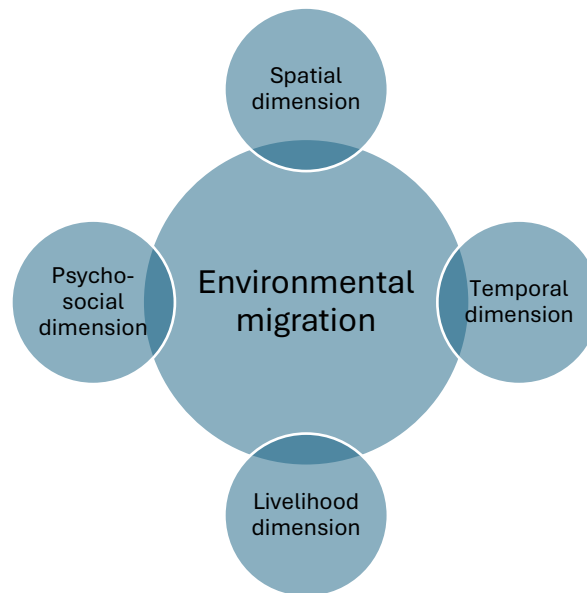


Figure 3: The Dimension of Environmental Migration

Source: Adapted from (Zickgraf, 2021)

Beyond the dimensions that exhibit the complexities of environmental migration, other scholars have studied and categorised the different environmental causes that can lead people to migrate. Källin, (2010) proposed five scenarios to understand the nature of migration in the context of climate change, which provides a useful approximation for understanding how different environmental migration characteristics may require different policy responses.

- a) **Sudden-onset disasters.** Refer to hazards that occur abruptly or with little warning, such as floods or hurricanes.
- b) **Slow-onset environmental degradation.** Describes events that develop gradually over time, for example, sea-level rise, desertification, and salinisation of groundwater.
- c) **Sinking Island States.** The severity of sea-level rise threatens to render some island states uninhabitable or cause them to disappear completely underwater.
- d) **High-risk designated areas.** These refer to areas identified and designated as high-risk zones that are too dangerous for human settlements. Examples include areas that suffer recurrent flooding or landslides.
- e) **Decrease in resource availability.** Describes the potential public order disturbing or armed conflict that a decrease in natural resources, such as water or arable land, could partially trigger.

Environmental migration is a complex issue with multiple linkages beyond climate change, including legal protection, preparedness and response, and environmental justice. It is important to understand that climate change alone, particularly in the case of slow-onset events, does not determine a migration decision. As discussed, cultural factors, livelihood opportunities, risk perception, and the preparedness or capacity to migrate can influence the alternatives between migrating and staying in a place (Rigaud, et al., 2018). In this sense, climate change and

environmental factors appear as a threat multiplier that intensifies the impacts of other elements that can lead to displacement (Siegfried, 2023).

Traditionally, most migration literature comes from social scientists, migration experts, and law practitioners. However, environmental migration is shifting towards a more multidisciplinary approach that involves climate change experts, urban planners, data scientists, and others. For instance, the first report of the IPCC back in 1990 already acknowledged that climate change can potentially trigger human migration (McLeman et al., 2025), while the 2022 IPCC report, in Chapter 8, highlights, with a high level of confidence, that “migration and displacement are directly induced by the impacts of climate change” and that the effects of climate change also impact other important variables for enabling migration, including sociodemographic, economic, and political considerations. In this sense, migration can be an adaptation measure to respond to climate change. Still, climate change can also be a driver for forced displacement, increasing the vulnerabilities of those people impacted (Birkmann et al., 2022).

The Groundswell Report predicts that climate change may force more than 140 million people to migrate by 2050, with Sub-Saharan Africa, South Asia, and Latin America being the regions most severely impacted. Even with strong climate action, the number of environmental migrants reaches around 60 million people (Rigaud, et al., 2018). Similarly, according to the Internal Displacement Monitoring Centre, in 2022, 32.6 million people were displaced due to disasters, mostly floods and storms (Climate Migration Council, 2023). Environmental migration will not only have social implications but also pose significant ramifications for countries and their development planning. For example, Ortiz-Paniagua & Pérez, (2017) state that migration may lead to further pollution, deforestation, disorganised urbanisation, overexploitation of natural resources, and changes in land use.

There is a clear nexus between climate change and migration, a growing understanding of its implications, and the need to protect affected communities in the origin and destination areas. Nevertheless, there is still a long way to go in the legal recognition of environmental migration, which is a critical step towards public policy intervention. However, there are already some advances at the international climate diplomacy level through the Nansen Principles, which, despite being non-binding, provide general recommendations for a political framework to address environmental-related migration. Also, in some climate change forums, environmental migration has started to be discussed (Ibarra Sarlat, 2021)

Table 2: International Instruments on Environmental Migration

Initiative/Instrument	Focus	Key Contributions	Limitations	Year
UNFCCC – Cancún Agreements	Climate change governance	Introduces human mobility as part of adaptation. Establishes a process to formulate National Plans of Adaptation	No legal protection or recognition of environmental migrants	2010
UNFCCC -Warsaw International Mechanism	Addresses loss & damage from climate change	Includes environmental migration in the discussion as part of the loss and damage, adverse effects of climate change	Lacks enforcement power or direct legal action recommendations	2013
UNFCCC- Paris Agreement	Global climate action	Refers to climate displacement covered by Article 8 under loss and damage	Displacement does not entail legal liability or compensation	2015

Nansen Initiative	Cross-border displacement in disasters	Promotes temporary protection, humanitarian visas, and regional cooperation	Non-binding, no legal obligation for States	2015
Protection Agenda ¹	Policy toolkit	Suggests policy intervention areas for managing environmental displacement	No legal status or guarantees for displaced persons	2015
Platform on Disaster Displacement	Monitoring of cross-border disaster displacement	Aims to follow up on the Nansen Initiative	Relies on voluntary cooperation and lacks legal force	2016

Source: Own illustration adapted from (Ibarra Sarlat, 2021)

Despite growing interest in environmental migration, several gaps remain. While much of the literature has focused on establishing the link between climate change and migration, less attention has been given to preparedness and response strategies. Empirical research on the impacts of environmental migration in destination areas is also limited. Moreover, the field continues to be shaped primarily by scholars from the Global North, with insufficient representation of perspectives and experiences from the Global South. Finally, there is a need to examine how environmental migration intersects with factors such as age, gender, and other dimensions of vulnerability, which are often overlooked in current research.

2.2 Environmental Migration in Mexico

Mexico is one of the most vulnerable countries to the effects of climate change due to its geographical location and socioeconomic characteristics. Mexico's location between the Pacific Ocean and the Gulf of Mexico, combined with its latitude and topography, makes it particularly vulnerable to hydrometeorological events. The geographical characteristics, combined with high poverty levels, increase the exposure of already vulnerable populations (Gobierno de México, 2016). To illustrate the vulnerability of the country to climate change, estimates show that the average air temperature has increased by 1.69°C since the beginning of the 20th century, compared to a global average of 1.23°C; also, the distribution of rainfall has become more extreme, with longer periods of drought, and increasingly extreme precipitation events (Estrada Porrúa et al., 2023). In a scenario where the Paris Agreement goals are achieved, the projected temperature rise could reach around 2°C; however, under a very high emissions scenario with no climate action, the temperature increase could reach 6°C by the end of the century, with devastating economic, social, and political consequences (Estrada Porrúa et al., 2023).

A recent report published by the Mexican government, which documents natural disasters between 1990 and 2022, reveals that flooding occurred in 27 of the 32 years analysed. Additionally, extreme temperatures were recorded in 12 years, underscoring the increasing frequency of heat-related hazards (Consejo Nacional de Población & Instituto Nacional de Ecología y Cambio Climático, 2023). These environmental and climatic pressures, combined with socioeconomic vulnerabilities, increasingly drive climate-related migration across the country. In this sense, different projections show that by 2050, there could be from 90,000 to 8 million climate migrants in Mexico (Saliba & Zanuso, 2022). While estimates vary widely depending on methodologies and assumptions, they underline the relevance and urgency of understanding climate-induced mobility in the Mexican context.

¹ Agenda for the protection of cross-border displaced persons in the context of disasters and climate change

Against this backdrop and in response to global trends, the literature on environmental migration in Mexico has also increased over the past 30 years. However, foreign scholars have written a significant portion of the literature exploring how climate or environmental events shape migration patterns from Mexico to the United States, even though most environmental migration typically occurs internally (Saliba & Zanuso, 2022). Nevertheless, more Mexican experts are now discussing this issue, with many discussing it from a legal perspective, reflecting a need for a more multidisciplinary approach.

Following Källin's typology and to contextualise environmental migration in the Mexican territory, Gouritin,(2021) offers a detailed exploration of the categories of environmental migration in Mexico, providing a framework to better understand its challenges and relevance. Regarding sudden-onset disasters, between 1999 and 2017, 91% of the financial resources approved for disaster response in Mexico were related to climate change. Additionally, the cost of climate-related emergencies was ten times higher than that of other types of disasters. Another relevant category is slow-onset environmental degradation. Mexico experiences prolonged drought periods, with an average trend of six months of drought followed by two months of intense rainfall each year. Recent droughts have affected more than 50% of the national territory, resulting in devastating consequences for agriculture and livestock. Water scarcity is also a pressing issue; in 2016, 14% of the country's hydrological basins exhibited a water deficit. Additionally, biodiversity loss is widespread, with all ecosystems in Mexico showing signs of degradation and damage.

Regarding the sinking of islands, Mexico has more than four thousand islands, most of which are inhabited. However, on its mainland, Mexico has approximately 11,122 kilometres of continental coastline, with 17 of Mexico's 32 federal entities having access to the sea (Secretaría de Medio Ambiente y Recursos Naturales, 2018). Vulnerability studies suggest that, under a pessimistic sea-level rise scenario, Mexico could lose 4.3% of its exclusive economic zone in the Caribbean, and between 1% and 3.8% of its national territory could be submerged in the long term (Gouritin, 2021). Concerning the category of high-risk designated areas, in response to environmental threats, various municipal governments have recently proposed measures to reduce irregular settlements. In some cases, they have also proposed relocating populations as a preventive measure to mitigate the risks associated with living in high-risk zones. Moving to the last category, decrease in resource availability, Gouritin discusses how periods of drought in Mexico have coincided with or preceded significant social movements. For instance, some historians argue that the severe drought of 1910 was a major contributing cause of the Mexican Revolution.

In addition to the previously discussed categories that explain the triggers of environmental migration, Gouritin (2021) proposes a sixth category: renewable energy projects, primarily hydroelectric dams, which, on the one hand, are part of Mexico's strategy to mitigate climate change. On the other hand, in 2012, five renewable energy projects resulted in the displacement of more than 58,000 people from their lands. This category highlights the paradox of how climate change mitigation efforts themselves can generate new forms of environmental displacement, further complicating the relationship between development, environmental protection, and human mobility.

Aragónés,(2016) states that despite the large number of scholars who have explored the Mexican migration phenomenon, the effects of environmental degradation and disasters on migration flows are still pretty much unexplored, especially regarding internal migration. Nevertheless, since the 1970s, some experts have pointed out how desertification has pushed rural migration into urban areas. In her review, Aragónés (2016) explores the effects of hurricanes Stan and Wilma in 2005 on migration in southern Mexico, finding that a poor disaster management

system from the Mexican government exacerbates unequal development across different areas of the country, where the most economically developed, and touristic regions, receive more and quickest support for prevention and response to disasters, while peripheral zones must work with minimal resources and support, which intensifies the vulnerabilities of already vulnerable communities, making them more susceptible to migrate, by intensifying the effects of environmental stressors.

Deheza & Mora, (2013) agree that the effects of climate change are unevenly distributed and worsen existing social inequalities, posing new demands on government institutions for disaster response, recovery and adaptation measures. However, Mexico still needs to foster cooperation among different government agencies and with civil society.

2.3 Institutional Capacity

To understand how different entities in Mexico respond to the challenges posed by environmental migration, this section draws on the concept of institutional capacity as a tool for examining the abilities of various institutions that operate and manage this complex socio-environmental phenomenon. In this sense, institutions can be defined from different perspectives. Hodgson, (2006) mentions that there is no universally agreed-upon definition of what institutions are or how they can be defined. For example, the Cambridge Dictionary defines an institution as an organisation serving a public purpose. Still, it can also be understood as a long-standing custom or practice that is acknowledged as a significant aspect of society (Cambridge Dictionary, 2025). Reflecting on this fundamental notion of institutions, North, (1990) perceives them as “the rules of the game in society”. Similarly, Ostrom, (2005) explains that institutions are the principles that society uses to arrange structured and repetitive interactions, such as those taking place in families, communities, businesses, and governments. In light of this, this research adopts a broad understanding of institutions, encompassing knowledge-generating institutions, government entities, and civil society organisations.

Moving from the definitions to a more practical aspect, it is also important to understand how institutions operationalise these rules to deliver outcomes and respond to challenges. In this sense, the institutional capacity theory intends to assess the ability of institutions to respond to and manage complex issues effectively. Willems & Baumert, (2003) understand capacity as the ability to perform functions, resolve issues, and establish and meet goals. For its part, Kelly & Ketu (2024) see institutional capacity as the institutions' faculty to foresee, address, and overcome obstacles. Domorenok et al., (2021) emphasised understanding capacity as a set of skills and resources. Bhagavan & Virgin, (2004) state that institutional capacity is a blend of functions, abilities, and resources. Despite the different focus, where some definitions put more emphasis on the resources, while others on the abilities, all of them agree that these elements shape the adequate or inadequate, sufficient or insufficient performance and delivery of institutions. In other words, developing capacity is a learning process that involves adjustments to institutional and governance structures to adapt to changing conditions (Cid et al., 2020).

Willems & Baumert, (2003) follow a three-level framework where capacity can be developed at: 1) a micro-level – referring to how individuals perform their roles. This involves clearly understanding their tasks and work, having the proper technical knowledge and abilities to deliver, and having incentives. 2) a meso level refers to organisations setting clear and defined goals and possessing the tools and management techniques necessary to perform, and 3) a macro level refers to the broad institutional context. Even if some organisations perform well alone, nationwide policies require the cooperation and coordination of numerous entities. Similarly, Domorenok et al., (2021) classify the levels of analysis as individual, organisational, and systemic.

Table 3: Levels of Institutional Capacity

Levels of Capacity	Description	Formal Characteristics	Informal Characteristics
Macro/ systemic	Overarching norms and rules that enable coordination across sectors and levels of governance.	Policy programmes and plans that involve coordinated intervention across different policy sectors and throughout the policy cycle.	Shared values, principles, and administrative cultures.
Meso/organisational	Coordination mechanisms that support cooperation within and between institutions.	Task forces, coordination committees, and interdepartmental bodies.	Inclusive practices and collaborative routines that foster cross-sector engagement.
Micro/individual	The capacities of the actors to contribute to different processes.	Cross-sectoral training and technical knowledge	Leadership, professional awareness, and expert knowledge.

Source: Domorenok et al., (2021)

Beyond the various levels of analysis, different elements build upon institutional capacity. For instance, Cid et al., (2020) first divide the analysis into two categories: specific capacity and generic capacity. The first refers to short-term adjustment measures to overcome a risk or adverse effect. The second one is defined as long-term measures that address future trends and resource availability, aiming to modify or reduce the risks and disturbances.

Within the categories proposed by Cid et al., (2020), they identify five determinants of institutional capacity:

- Human resources: individuals' skills, knowledge, and experience within an institution. This category includes skills, availability, and the number of trained labourers.
- Physical resources are tangible assets necessary for operating and delivering the work. This includes infrastructure, equipment, and facilities.
- Financial resources are available funds for operations, programs, and projects.
- Administrative resources: systems, structures, policies, and procedures that allow an institution to manage and coordinate its activities efficiently.
- Mobilisation of resources: ability to effectively access, organise, and utilise human, physical, financial, and administrative resources.

In addition to these determinants, Cid et al., (2020) propose six dimensions where the previously mentioned resources should be present to develop institutional capacity, particularly referring to governmental institutions, and that becomes crucial when discussing environmental migration, considering the pivotal role and responsibility of the government to implement and monitor policies, but also to ensure certain living conditions for its citizens :

- Planning instruments: regulations and measures aiming to reduce risk exposure and increase the capacity of vulnerable communities
- Administrative capacity: a combination of human, financial, and physical resources with managerial and technical skills
- Public services: measures taken by local governments to ensure that the population's basic needs are met
- Political and institutional coordination: mechanisms and frameworks that facilitate coordination and avoid duplication of efforts among actors

- Transparency and accountability: monitoring and assessing planning, execution and the adaptability to implement arrangements
- Citizen participation: tools and procedures that allow citizens to participate in the development, execution, and assessment of initiatives, policies, and strategies. It aims to promote a more horizontal governance structure.

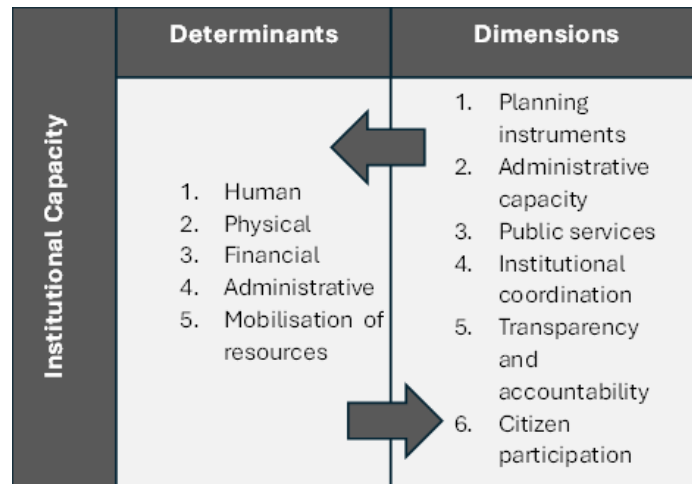


Figure 4: Key Elements of Institutional Capacity
 Source: Own elaboration based on (Cid et al., 2020)

Different scholars have transferred the institutional capacity framework into the context of climate change. To mention a few, Gupta et al., (2010) state that in the face of climate change and its constant and sometimes unpredictable changes, institutions must support society to build adaptative capacity. In this sense, they develop an Adaptative Capacity Wheel to evaluate how institutions promote adaptative capacity. Shakya et al., (2018) explore institutional capacity building in developing South Asian countries, prompting the need for a long-term participatory approach that builds on shared visions and iterative learning and expands external networks. Romero-Lankao et al., (2015) focus on the multilevel governance and institutional capacity for developing and implementing mitigation and adaptation policies in Latin America, concluding that the main barriers to developing capacities are a lack of resources, path dependencies, and inadequate legal frameworks. They also coincide with Shakya et al. discussion of the importance of community engagement and participatory approaches. For his part, Oberlack,(2017) identifies common patterns of institutional barriers, including limited cumulative learning, research fragmentation, and diverging findings on appropriate responses to challenges. He concludes that institutions significantly influence climate change adaptation by enabling, constraining, and shaping responses.

More recently, another group of scholars have explored some case studies of institutional capacity in the context of environmental migration. For example, Warner, (2010) studies the governance challenges of environmental migration, identifying that the key gaps are the lack of institutional responsibility and international frameworks. Geun Ji (2019) comments on how environmental migration is becoming a growing issue in Bangladesh. However, institutional weaknesses have led to unplanned migration and related social problems, such as the growth of urban slums. McMichael et al., (2019) focus on the responses to environmental migration in some Pacific Island countries, finding that in most cases, the government is adopting a positive view towards migration as adaptation and as a strategy for risk reduction, where already some

relocation plans have been implemented, and a migration with dignity policy is under development. Junod et al., (2023) analyse the institutional capacity to effectively receive and support environmental migrants after hurricanes and flooding in the US, focusing on employment opportunities, financial accessibility, housing access, and health care services for climate-displaced people, highlighting the importance of developing institutional relationships and collaboration before the displacement takes place. In this case, the authors found that access to transportation was a key element to promote the adaptation of the environmental migrants to the new place, as most relied on scarce or distant public transportation options that obstructed their ability to integrate into the community or access job opportunities. Lastly, Kelly & Ketu, (2024), assess the institutional preparedness in Sub-Saharan Africa, finding that the climate adaptation plans often neglect climate displacement and the important role of early warning systems, with scarce resources being one of the key barriers.

In the case of Mexico, a few authors have addressed institutional capacity around risk management. For instance, Ruiz-Rivera & Melgarejo-Rodríguez, (2017) identify a significant inequality in access to resources and institutional capacity across the country. While municipal governments are at the forefront of emergency and risk response, they also face political inequality and institutional vulnerability, meaning heterogeneous access to different types of resources, particularly when comparing urban and rural areas. Cid et al., (2020) explore the institutional capacity for climate change adaptation, finding an absence of integration across different government levels. They agree that local governments face more challenges in accessing resources and capacities. Despite having political and planning instruments intended to deal with the risks associated with climate change, they do not address the structural mechanisms that influence how resources are distributed and accessed by local governments and vulnerable groups. In a different project, Cid et al., (2024) explore the role of collaborative networks to address risk management in Mexico City, underlining the relevance of implementing a multilevel governance approach that promotes a horizontal integration of local government, communities, and civil society organisations. Their research identifies that climate action can be hindered by prioritising other pressing issues affecting access to resources and knowledge for climate change adaptation. Furthermore, in a centralised country like Mexico, local governments rely on national and subnational governments to scale up their capacities and access financial resources.

Moving to specific literature exploring institutional capacity in the context of environmental migration in Mexico, Pires Ramos et al., (2023) review how human mobility is included in the national adaptation plans of different Latin American countries. The findings from Mexico show that despite not covering human mobility, the National Strategy on Climate Change and the Special Climate Change Programme include elements aimed at reducing communities' vulnerabilities and strengthening resilience and adaptation processes. For its part, Montalvo Romero & Román Hernández, (2020), consider that the institutional framework needs special attention, as it is still being developed. Without clear policies addressing this issue, specific institutional actions are not possible. Lastly, Itzcoatl, (2024) diagnoses the federal government's current capacities regarding collecting and analysing data on the nexus between migration, the environment, and climate change. Among the key areas hindering institutional capacity, he identified limited coordination between different government agencies, a need to strengthen technical skills and analytical tools for a more refined examination of the information, and the integration of data and evidence into the policymaking process.

Despite a growing body of literature on environmental migration and institutional capacity, several gaps remain, including the limited exploration of capacities beyond traditional government structures and the potential effects of environmental migration on receiving communities.

2.3.1 An Adapted Framework for Analysis

Based on the theoretical framework and the initial review of the semi-structured interviews, case study, and official documents, the information was classified into eight themes to organise and facilitate the analysis. The proposed categories of analysis are based on the work from Cid et al., (2024) and then adjusted and complemented through the analysis of the interviews conducted, identifying new categories that are not traditionally included in the institutional capacity framework, such as climate justice, or public participation, that if well, it appears in some of the literature, is not a primary or consistent variable in the literature review, but appropriate for the context, and identified through the interviews and the review of the case study.

1. *Planning instruments*: This category encompasses the legal and regulatory structures that enable or constrain responses to environmental migration, including the existence or absence of laws, mandates, and other instruments.
2. *Technical and human capacities*: This category refers to the abilities to plan, coordinate, and implement effective responses through trained personnel, clear procedures, analytical tools, know-how, and interdisciplinary mechanisms.
3. *Financial resources*: This theme captures the availability and allocation of resources. It includes how funding is planned and distributed, as well as budgetary constraints and dependency on external funding.
4. *Political will and prioritisation*: This category examines the extent to which environmental migration is recognised and prioritised within the political agenda.
5. *Coordination and Integration*: This theme examines the mechanisms by which responsibilities are distributed among the parties involved, the presence or absence of coordination frameworks, and the vertical and horizontal governance structures.
6. *Public Participation and Agency*: This theme refers to the involvement of communities, academia, and civil society in the design, implementation, and response to policies and mechanisms addressing environmental migration.
7. *Knowledge, research, and data*: This theme concerns the production, dissemination, and application of expertise in the policymaking process, as well as in the participation of civil society and academia.
8. *Climate Justice*: This category captures the recognition of structural inequalities and the need to guarantee the rights and access to services for migrants and displaced people.

3 Research Design, Materials and Methods

This chapter covers the research's methodological design. It first presents an overview of the research structure (Section 3.1), followed by the data collection process (Section 3.2) and the methods employed to analyse the information (Section 3.3).

3.1 Research Design

A research process starts with identifying the components or elements that could help answer the research question and understanding how those elements can be integrated (A.Maxwell, 2022). In this sense, Flick (2022) suggests that when designing research, it is important to answer three questions: what will be studied, why it will be studied, and how it will be studied. In this research, the first two questions have already been answered. Answering the *what* question, the institutional capacities in Mexico to address environmental migration are the object of study. Regarding the *why* question, exploring this topic is relevant because Mexico faces significant institutional challenges in managing environmental migration. Regarding the *how* question, this chapter is dedicated to the research methodology.

This study aims to explore the institutional capacities in Mexico to address environmental migration. Given that this is an emerging topic in the Mexican policy agenda, with limited but growing attention, comprehensive policy documents or institutional evaluations remain scarce. Considering this, a qualitative approach was considered the most appropriate to explore the research questions. Following Tenny et al. (2025), qualitative research focuses on capturing experiences and perspectives to identify themes and patterns that help to answer the how and why of an issue of interest. In this sense, Creswell & Creswell, (2018) identify different approaches to conducting qualitative research, such as case studies, interviews, and documentary analysis. In a qualitative study, the researcher has a central role, where he or she interacts as a tool who gathers, interprets, and reflects on the data (Creswell & Creswell, 2018). While this interpretative role can lead to biases, those can be mitigated through different methods, such as triangulation, which involves using multiple sources or types of data to enhance the validity and credibility of the findings (A.Maxwell, 2022).

This research is divided into three main sections based on the above-mentioned considerations. First, a literature review was conducted to establish the topic's conceptual and theoretical foundation. This literature review contextualises environmental migration in both a global and a Mexican setting. The research employs a case study approach to contextualise environmental migration within the Mexican institutional landscape, further examining the first case of climate displacement in Mexico that the government has recognised. This section also informs on the analytical framework used throughout the study. Second, to answer RQ2, a series of semi-structured interviews was conducted to capture first-hand insights into the current institutional setting, the perceived challenges, and opportunities for capacity building in the context of environmental migration. Third, to answer RQ1, a documentary analysis was performed to assess how environmental migration is addressed in official documents issued by government agencies and international organisations. Combining these three components allowed for a triangulated and comprehensive examination of the topic of environmental migration in Mexico.

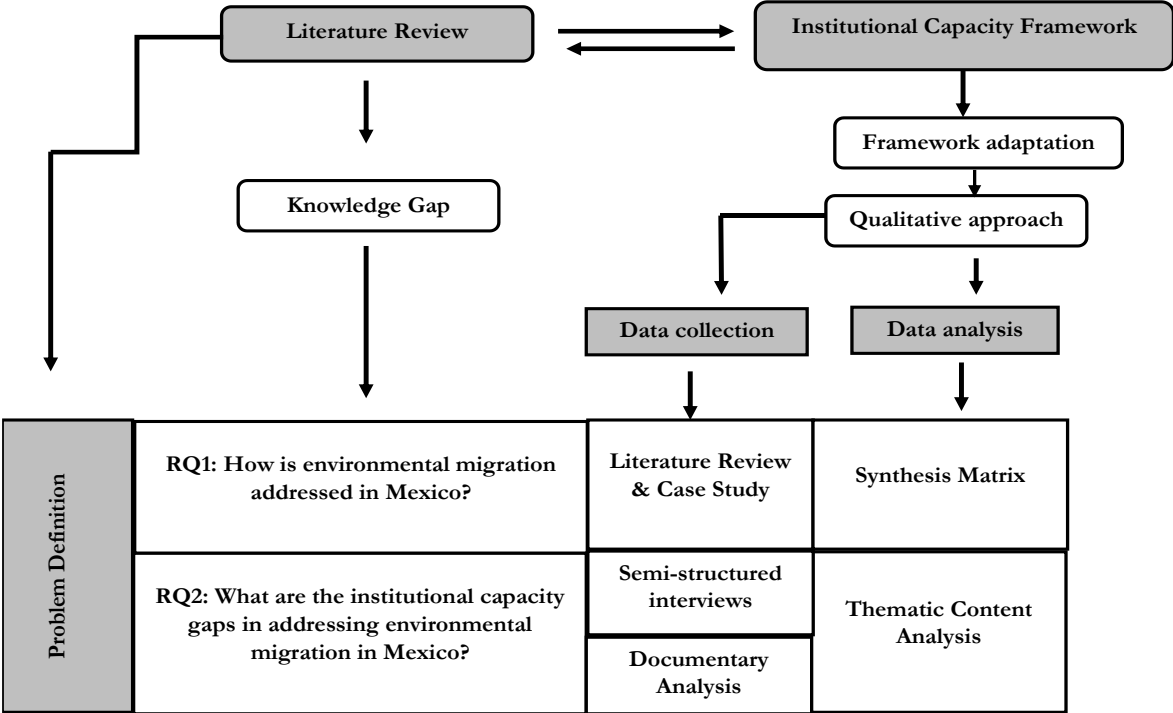


Figure 5: Research Design
Source: Own illustration

3.2 Data Collection

This subsection covers the process of gathering primary data through semi-structured interviews and the insights captured through the content analysis of secondary data. The combination of these two approaches enabled the triangulation of information, diversifying sources and minimising potential biases in the researchers’ perspectives and the participants’ views.

3.2.1 Literature Review

The literature review is divided into two sections. The first one provides an overview of the scholarly literature on environmental migration. This section is, in turn, subdivided into a general panorama, followed by a review of Mexico-specific literature. To select the literature exploring the general panorama, I relied on a thesis pre-study where I identified 13 documents covering the topic of environmental migration at a global level. The search was conducted using Google Scholar and the Lund University engine search using the following search strings: climate migration, environmental migration, climate mobility, climate displacement, migration and climate change, and migration and the environment. For the Mexico-specific literature, two sources were used: the first one is the CliMig database, and the second one is a summary of environmental migration literature created by the IOM Mexico Office (Organización Internacional para las Migraciones, 2024). Both data sources were contrasted, resulting in a total of 106 articles covering 30 years of research from 1994 to 2024. The selection criteria were as follows: 1) the sources that did not explicitly mention the key search strings used before either on the title or the abstract were dismissed, 2) preference was given to those articles where Mexico was the only case study, 3) novelty of the publication, considering only those published from 2013 onwards, 4) thematic diversity, trying to balance sources to show different perspectives, from policy, adaptation, legal aspects, etc. 5) Finally, preference was given to those

articles, that additionally of fulfilling previous criteria, were included in both data sources. After applying the criteria, 13 articles were selected.

Regarding the second part of the literature review, which concerns the theoretical framework, a new search was conducted using Google Scholar and the Lund University bibliographic search engine, using the following search strings: institutional capacity, developing institutional capacity, institutional capacity and climate change, institutional capacity and environmental migration, and institutional capacity and Mexico. A total of 30 articles were identified, and after reviewing the abstracts and conclusions of all of them, 15 articles were selected and included in this thesis.

3.2.2 Case study

In addition to the literature review, this research integrates an in-depth case study of the community of El Bosque in the municipality of Centla, Tabasco. The purpose of this case study is to move beyond policy reports and academic analyses, providing a grounded illustration of how environmental migration is manifesting in Mexico and how institutional actors respond to it.

Case studies are a recognised method in qualitative research for examining a phenomenon within its real-world context, enabling the researcher to explore interactions between multiple actors, processes, and socio-political dynamics (Yin, 2017). They are particularly valuable for linking empirical realities to broader theoretical and analytical frameworks, in this case, the adapted institutional capacity framework outlined in Section 2.3.

The selection of El Bosque was informed by both its national relevance and analytical value. It is the first community in Mexico to be officially recognised by the federal government as experiencing climate-induced displacement, attributed primarily to rising sea levels and accelerated coastal erosion in the southern Gulf of Mexico (Ibarra Sarlat & Toledo, 2024). The case has been evident in national media and advocacy campaigns and has involved the active participation of civil society organisations, local and federal government agencies, and the community itself.

This case also exposes critical challenges that mirror broader issues faced across the country: fragmented governance, the absence of a clear legal framework for climate displacement, limited preparedness in both at-risk areas and relocation sites, and the complexities of coordinating multi-level institutional responses.

By examining El Bosque through the lens of the adapted institutional capacity framework, this study aims to assess:

- a) The adequacy and coordination of institutional responses,
- b) The alignment (or misalignment) between policies and community needs, and
- c) The lessons that can be applied to strengthen preparedness, resilience, and rights protection in future cases of environmental migration.

The inclusion of this case study, therefore, serves not only as an illustrative example but also as an analytical tool to evaluate how theoretical concepts of institutional capacity play out in practice within the Mexican context.

3.2.3 Semi-structured Interviews

Semi-structured interviews were the chosen approach to explore RQ2, which focuses on identifying perceived institutional capacity gaps and opportunities to address environmental migration in Mexico. This method offers a flexible but systematic way to capture expert knowledge and experience-based insights often unavailable in public reports or scholarly publications (Brinkmann & Kvale, 2015). Unlike structured interviews or surveys, semi-structured interviews allow for probing and follow-up questions tailored to the interviewee's background, enabling the exploration of both anticipated and emergent themes in depth (Creswell & Creswell, 2018). This approach is particularly appropriate when the subject matter involves complex governance processes and institutional arrangements, which require contextualisation and may differ significantly between actors and levels of government (Bryman, 2016)

To capture the views of experts and other relevant stakeholders on the topic, 14 semi-structured interviews were conducted between the 7th of March and the 8th of April 2025. The interviews were conducted in Spanish. The interviewees come from different backgrounds, with participants from the public sector, international organisations, civil society, and academia. All the interviews were conducted online using Zoom in sessions lasting approximately 60 minutes. Each participant received a copy of a consent form (see Annexe I) via e-mail informing them of the purpose of the research, the voluntary nature of their participation, the use of data, the anonymous character of the information provided, and requesting their consent to record the audio of the meeting for transcription purposes. Transcriptions were made using Word 360 and verified by the researcher to ensure accuracy. In this sense, and to ensure the anonymity of the participants, all identifying information was removed from the transcriptions and subsequently referred to by codes. Audio recordings, transcripts, and consent forms were stored in a computer folder accessible only to the researcher.

To select the participants, a mapping of government agencies and civil society organisations working on migration, the environment, or both was conducted, followed by a search for individuals collaborating within these institutions. With a list of potential people of interest for the research, 25 individuals were contacted through LinkedIn or email, resulting in 18 responses and 14 scheduled interviews. Each interview was tailored to the interviewee's background, with some key questions standardised and following the Institutional Capacity framework. Of the 14 interviewees, eight are women, and six are men. Nine of the interviewees are Mexican, and four have a different nationality but work in Mexico or have been involved in environmental migration within the Mexican context. The interviews cover the perspectives from four different sectors: civil society, academia, government, and international organisations, as seen in Figure 6. However, it is important to acknowledge a disbalance in the representation of government officials in contrast to the interviewees from civil society. This imbalance is addressed through a documentary analysis to triangulate the information and provide stronger validity of the findings captured in the interviews.

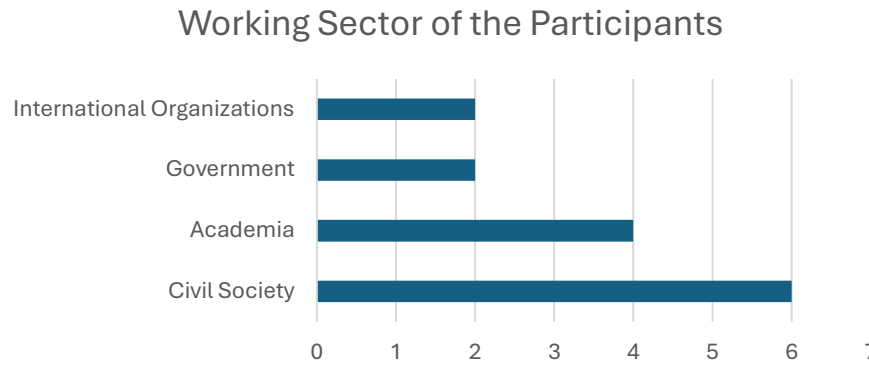


Figure 6: Distribution of interview participants by sector
 Source: Own illustration

Semi-structured interviews enabled the coverage of a broader range of perspectives within the landscape of institutional capacities and responses to environmental migration in Mexico. However, semi-structured interviews also present some limitations, one key constraint being the potential biases from both the researcher and the interviewees (Flick, 2022). Moreover, the interpretation of qualitative data is inherently subjective, and the researcher's positionality can shape how responses are understood and presented (Creswell & Creswell, 2018). To mitigate those drawbacks, triangulation was employed through the complementary use of documentary analysis, enhancing the credibility of the findings (Bowen, 2009; Flick, 2022).

3.2.4 Documentary Analysis

A documentary analysis was conducted as a supplementary method to gain a more comprehensive understanding of how environmental migration is addressed within Mexico's institutional and policy landscape. This method was particularly relevant for answering RQ1, which examines the extent to which existing institutional arrangements and policies engage with environmental migration.

Documentary analysis is a qualitative research method that systematically collects, reviews, and interprets relevant documents to gain contextual understanding and evidence that supports or contrasts with other data sources (Bowen, 2009; Flick, 2022). This method is particularly valuable for triangulating data and reinforcing the credibility of the findings, allowing the researcher to explore broader contexts and discourses that might not be fully captured through interviews (Bowen, 2009). Nevertheless, as with other qualitative methods, documentary analysis also has limitations. Documents may reflect institutional biases, and the selection of documents is subject to the researcher's interpretation and may also be influenced by the accessibility and availability of sources (Flick, 2022). Despite these limitations, documentary analysis is a reliable and time-efficient method for gaining insights from different periods and institutional contexts. When combined with other qualitative research methods, it helps triangulate and validate information (Bowen, 2009).

The selection of documents was done through two complementary strategies: 1) a systematic search of publicly available sources from government institutions, international organisation, and relevant NGOs, using keywords such as environmental/climate migration, climate displacement in Mexico, and 2) targeted recommendation from interview participants, which were particularly valuable given the scarcity of official government publications explicitly addressing environmental migration or environmental displacement.

Through the selection strategies, ten documents were identified as potentially applicable for the research purposes. The final selection was made following an inclusion criterion:

- Relevance to environmental migration as either the primary focus or a substantial thematic component.
- Institutional significance, meaning that the document was produced or commissioned by a government agency, international organisation, or a credible research entity.
- Potential to inform the institutional capacity analysis either by describing current frameworks, identifying policy gaps, or offering recommendations.
- Publication date, prioritising documents published only after 2012, when Mexico launched its Special Program of Climate Change 2009-2012, ensuring relevance to the current policy context, but also providing a view of the topic development in the last decade.

Following the selection criteria, five documents were analysed, including government bulletins and notes, a law proposal, and reports developed by third parties.

Table 4: Selected documents for analysis

Title	Institution	Year	Rationale
Climate Change, Migration and Security: Best-Practice Policy and Operational Options for Mexico	UK Foreign and Commonwealth Office (FCO) through the British Embassy in Mexico	2013	This report is one of the earliest to explicitly link climate change, migration, and security in the Mexican context. It provides a baseline for understanding how the issue entered the policy agenda, and outlines recommendations that can be contrasted with more recent institutional developments.
General proposal to request a general law initiative on forced internal displacement	National Human Rights Commission	2018	This law proposal is key for examining the legal and human rights dimensions of displacement in Mexico, including environmental causes. While it focuses on internal displacement more broadly, it offers insights into institutional debates on creating a national legal framework to address displacement.
Storms, flooding, droughts. Climate change as a factor for human mobility	Migration Policy Unit- Ministry of the Interior	2020	This document represents one of the few governmental acknowledgements of climate change as a driver of migration.
Climate change, environmental degradation and international migration: concepts and some figures for Mexico	National Population Council (CONAPO) and National Institute of Ecology and Climate Change (INECC)	2023	Produced by two key federal agencies, this report provides updated data, conceptual framing, and statistical insights. It is a critical document for understanding the current state of the government's knowledge production, data availability, and understanding of environmental migration.
Assessment of institutional capacities to collect and analyse data on migration, environment and climate change in the federal government of Mexico	International Organisation for Migration	2024	This is the only document found that directly addresses institutional capacity. The focus is on evaluating institutional capacities in the area of data collection and analysis, providing an external perspective that complements government self-assessments.

Source: Own illustration

3.3 Methods for Data Analysis

The analysis of the data collected through the semi-structured interviews and the documentary review followed a thematic content analysis approach, which is appropriate for identifying and interpreting patterns or themes in qualitative data (Creswell & Creswell, 2018). The first step involved managing and preparing the data. The interviews recorded were transcribed using Word's transcription tool, and a subsequent check was performed to ensure accuracy and coherence. Then, the interviews and documents were imported into NVivo 14, which was used to facilitate the systematic organisation and coding of the data. Both deductive and inductive coding were applied to the coding process. Deductive codes were derived from the institutional capacity framework and used in planning the interview questions. The deductive coding approach is supported by creating an initial structure and categories relevant to the analysis. However, new themes emerged through the analysis, meaning that inductive codes were developed directly from the data and allowed for the inclusion of more perspectives, thereby enriching the research. In this sense, an adapted framework was developed from the literature review and the interview findings, identifying eight thematic categories to analyse the institutional capacity in the context of environmental migration in Mexico.

4 Study Results and Analysis

This chapter presents the key findings and results of the analysis of the interviews and other data sources. The structure of this chapter is as follows: first, an analysis of the semi-structured interviews and the documentary analysis is presented. Then, a review of the El Bosque case study is conducted to provide further context on the current scenario of environmental migration beyond the academic sphere, identify institutional capacity gaps, and evaluate positive aspects that can inform the development of action and capacities based on this previous experience. The findings are organised according to the eight thematic dimensions of the framework: (1) planning instruments, (2) technical and human capacities, (3) financial resources, (4) political will and prioritisation, (5) coordination and integration, (6) public participation and agency, (7) knowledge, research and data, and (8) climate justice.

The findings reported in this section also inform the answers to the research questions: RQ1: How is environmental migration addressed in Mexico? RQ2: What are the institutional capacity gaps in addressing environmental migration in Mexico?

4.1 Interviews and Documentary Review Insights

Planning Instruments

All 14 interviewees agreed there is a lack of adequate planning and coherent legal and policy frameworks to address environmental migration. This lack of policy structure hampers the establishment of institutional mandates and responsibilities for managing this issue. Most participants mentioned that a good first step could be to establish a clear legal definition of environmental migration, thereby clarifying the state's responsibility to secure and protect the rights of internally displaced people who move for environmental reasons. However, three participants disagree with this view and consider that environmental migration should be expanded to encompass a broader understanding of migration, regardless of the motives behind migration, with a focus on guaranteeing rights and services to all displaced people, regardless of the cause. In this regard, a common ground point could be to start by acknowledging at the federal level the nexus between climate change and migration as a starting point for developing a strategy. Half of the participants considered that Mexico already has some instruments that could be adapted or integrated into a broader law or instrument for addressing environmental migration, especially considering the cross-sectoral and multidisciplinary characteristics of migration. For instance, the civil protection frameworks or the risk diagnostics conducted across the country could play a critical role in having a preventive and planning perspective instead of a reactive response approach. Nevertheless, the lack of clear rules of the game and a lack of leadership are significant obstacles to implementing planning measures.

Across the reviewed documents, the integration of planning instruments to address environmental migration in Mexico appears uneven, and in most cases, it is either limited or not mentioned at all. Apart from the documents elaborated by CNDH and IOM, the rest of the documents adopt a more conceptual approach rather than a practical one. The CNDH proposal presents a structured outline for a future Law on Internal Displacement, including the distribution of responsibilities and mechanisms for the prevention and protection of displaced people. Although this is a general proposal to address different causes of internal displacement, it explicitly mentions displacement caused by environmental and climate-related factors. It recognised the absence of national legislation as a significant institutional gap. It highlighted that only two states, Chiapas and Guerrero, have actively engaged in enacting local laws on internal forced displacement. However, without a national framework or general legal rules, responses

will remain fragmented and uneven, as populations can be displaced across the country and not just within a specific state's jurisdiction.

Similarly, the IOM report identifies the lack of formal policy instruments as a key limitation to the government's response, highlighting the absence of integrated planning mechanisms that bring together the work on migration issues with the work on environmental issues. Although the document primarily focuses on the capacities to collect and analyse data, it also emphasises the importance of embedding these efforts within broader public policy instruments that can inform planning decisions.

The FCO report, although published over a decade ago, already mentions the lack of coordination and planning around climate-related migration as an institutional weakness in Mexico. It emphasises the importance of integrating migration into climate adaptation strategies. Although it acknowledges a growing interest and awareness of this topic among different government agencies, the development of planning instruments or policies remains insufficient.

In contrast, documents such as the one from CONAPO or the bulletin published by SEGOB, which are the only two reviewed documents published by the Mexican government, acknowledge that environmental factors can drive migration but do not go beyond that nor propose any planning instruments showing that the government is still on a stage of defining and understanding the problem rather than taking action.

In general, the documents confirm and reinforce the interview findings regarding a lack of planning mechanisms, as well as a lack of a planning or preventive mindset, as reflected, for example, in the elimination of the natural disasters fund. Although the CNDH law proposal is an important step, it appears to be more aspirational than a genuine institutional commitment by policymakers to legislate around it.

Technical and Human Capacities

Technical and human resource limitations were commonly mentioned in the interviews, regardless of the participant's sector. Although there are some experts in the field and individuals with good technical skills, the capacity of the personnel is limited. Some government research is carried out by small teams, or individual work is conducted in addition to the main tasks of these public servants. There is also a disparity in the access to and development of capacities between the federal and local levels, where subnational governments are dependent on the national government to access specialised trained personnel, standardised protocols, etc. The lack of capacity at the local level seems to be a direct result of the centralisation of administrative power in Mexico City and other major urban areas.

From a civil society perspective, in Mexico, there is a solid understanding and tradition of organisations working on migration issues. Today, there is a growing group of NGOs pushing efforts regarding environmental aspects. However, there are limitations in human resources. With scarce personnel and multiple tasks, civil society is unlikely to be as active as it was in the El Bosque case in other environmental migration cases.

Academics, for their part, consider that more research on the topic is being conducted and that today, more local researchers are exploring it. However, there is a need to strengthen collaboration with the government, as it is responsible for collecting data, while researchers could collaborate on the interpretation and analysis from different disciplines.

There is a common agreement among the reviewed documents regarding the limited technical and human capacities within Mexican institutions to address environmental migration effectively. The diagnosis carried out by IOM raises concerns about methodological inconsistencies, lack of inter-agency coordination, and the availability of enough specialised personnel. This document focuses on capacities for data collection, showing that despite existing technical knowledge across the different government agencies responsible for collecting and analysing data, there is no standardised methodology that allows for a more integrated analysis of the available information. Another significant limitation is the limited trained staff available to work across sectors. For its part, the government acknowledges in the CONAPO report the need to establish and develop more robust methodologies to provide more substantial evidence and data, showing a clear and consistent link between environmental events and migration. Despite efforts to collect data, the report shows that, even though there is a growing interest in the topic, technical capacities are still limited and under development. Similarly, the bulletin by SEGOB emphasises the importance of capturing environmental variables in migration surveys to collect more data. However, there is no ongoing or structured institutional effort to monitor climate-related migration in a sustained manner; instead, it is mainly triggered by sudden natural events, such as hurricanes. A crucial point is that migrants themselves often do not identify environmental factors as the primary reason for migration, which adds complexity to data collection efforts.

In general, there is a growing technical interest in further exploring the topic, but the capacity remains limited and uneven across different institutions. Efforts to collect and analyse data exist but are fragmented and often dependent on temporary initiatives or external funding and collaboration with foreign institutions. Moreover, the scarcity of specialised personnel and the existence of fragmented methodologies continue to hinder the development of a coherent knowledge base.

Financial Resources

Budget limitations appear to be a significant restriction across all sectors. In the case of public policy, there are competing needs with limited funds. In the past administration, the environmental sector experienced an allocation reduction, even with the disappearance of some of the emergency funds, and even misaligned priorities; participant 3 noticed that the last time that the budget for environmental issues increased in Mexico, most of it was destined to the construction of the Tren Maya, seen by the government as a flagship project of clean mobility. At the same time, other areas, such as adaptation and mitigation, have not received much attention. Another significant concern brought up by the participants is the challenges in international cooperation, mainly through the closure of USAID projects, as several NGOs count on foreign aid to carry, at least, some of their operations, and the same seems to be true for government, where some climate change projects are directly linked to international funding and cooperation. The reliance on external financing could lead to fragmented implementation based on the donor country's priorities, which may not align with national needs. In this sense, four interviewees agreed that the lack of an environmental migration law or an internal displacement law affects not only the leadership and responsibilities assignment but also the budget allocation; when you do not have a structured program, you cannot include it in the financial planning. The lack of planning and a reactive response also put budgetary pressures on the process and slowed it down.

Although financial constraints appear to be an important limiting factor, according to the documents reviewed, none of them provides further details about the financial aspect. Despite the recognition of a financial need to advance action, all the documents follow a logic of understanding or exploring the topic rather than proposing or developing a strategy. Even with

the CNDH proposal, there is no clarity on the amount of money that should be allocated, where that budget will come from, or how to balance the budget of other areas, such as civil protection, with the response to environmental and climatic hazards in the context of human migration.

Political Will & Prioritisation

More than half of the participants agreed that there is a growing interest in the topic and that even the government has started working on some documents addressing environmental migration. However, it remains politically irrelevant and is discussed only reactively. Two participants from civil society mentioned that they perceived the government's willingness to cooperate, but they were unsure of how to proceed. Participant 10 commented that without a political will, the case of El Bosque would have never progressed. Therefore, there has been a strong political will across all levels of government, from national to municipal. However, six participants attribute the government's response to exceptional circumstances, such as the strong involvement of civil organisations and the significant role of media in pressing for governmental action. Interviewee #4 describes the political will as “present but without direction”, reinforcing that even though officials may be willing to act, the lack of clear frameworks, resources, or leadership structures means the response will continue to be reactive and improvised.

Contrary to what some of the participants said, other respondents believe that there is no political will to push forward the topic of environmental migration and that the plain efforts from the government are only a response to external factors, such as the work carried out by the IOM, but not for a genuine interest or absolute acknowledgement of the urgency and importance of the topic. This discrepancy of views could be a result of different interactions between sectors. For instance, in academia, participants believe there is growing curiosity among government officers to learn and discuss research on this topic, but more so from technical roles rather than decision-making ones. While in civil society, interviewees involved in the El Bosque case appear more positive about political will; however, other civil organisations disagree.

Lastly, from the government's perspective, specific ministries are starting to take the topic more seriously, but it is not yet a priority. In this sense, participant #14 stated that migration is a highly politicised issue, viewed from a security or economic standpoint rather than as a human rights or security issue. Mexico has historically been an origin and transit country for migrants; however, we have been experiencing a shift in recent years. Mexico has also become a destination country for many migrants from Central America and the Caribbean. At the same time, Mexico is experiencing higher levels of internal migration. In this sense, our understanding of migration should be expanded to incorporate the different push and pull factors and to protect human rights regardless of the reasons that initiated the movement. Having a human security perspective on migration could help increase its priority and highlight the interconnections it has with other development areas. One example is having better planning to accommodate migrants and develop new hubs across the country, reducing pressures in centres such as Mexico City and Monterrey.

For their part, the documents reflect a growing recognition of environmental migration as a relevant policy issue in Mexico. However, they also support the claim that this recognition has not been translated into policy prioritisation or sustained institutional action. While the topic is increasingly present in official discourse, political engagement often remains limited to general acknowledgements rather than concrete directives.

The CNDH's proposal is the only document attempting to escalate the topic into the legislative agenda. It explicitly calls on federal authorities to adopt a general legal framework that includes, among other causes, displacement triggered by environmental factors. It frames this as a necessary step to uphold human rights obligations. The proposal recognises that the lack of a general law undermines the Mexican state's ability to respond comprehensively, particularly as displacement caused by violence, disasters, or development projects increases. In this sense, the document is a clear expression of political intent but still awaits uptake within the legislative branch. Similarly, the IOM notes that, although progress has been made in data generation and thematic awareness, no leading authority has coordinated actions or responses to environmental migration. The absence of institutional leadership from the government reflects the limited political prioritisation of the issue and results in fragmented efforts that are not integrated into the national planning and adaptation frameworks.

The reports issued by the government support a growing political interest in exploring the topic, albeit in a limited capacity. Both documents attest that climate change increasingly influences migration decisions, particularly in the context of droughts, floods, and other slow-onset events. Nevertheless, neither document addresses environmental migration as a strategic priority for the federal government. In this sense, the documents convey a sense of awareness but not urgency to act, with no indication that environmental migration is being considered or integrated into key policy areas, such as risk reduction or rural development.

Lastly, the FCO report identifies a gap or disconnection between scientific understanding of climate risks and the willingness of political actors to engage with their implications. The report notes that migration is often viewed as a security concern or a residual effect of climate change, rather than as a policy area that requires proactive planning. It also warns that the absence of political prioritisation can delay needed investments and coordination, ultimately undermining resilience and increasing vulnerability in the long term.

The documents suggest that the political will regarding environmental migration in Mexico is growing, but it is still in its early stages. This gap between recognition and implementation remains a central barrier to strengthening institutional capacity and ensuring timely and coordinated responses to climate-related displacement.

Coordination & Integration

Institutional fragmentation appeared to be a core barrier to building capacity. Among academia, the lack of interdisciplinary work was a recurrent topic. Interviewee #3 mentioned that the scientific tradition in Mexico has been disciplinary, where climatologists focus only on biophysical aspects, completely ignoring the social aspect. However, the same applies to migration experts, who have disregarded climatic variables. The same interviewee mentioned that this seems to be a generational issue, as more national researchers are now exploring multidisciplinary areas to address complex problems. Still, this trend is mainly observed among younger researchers, typically those under the age of 40. Participant #11 noted that experts with backgrounds in climate change or environmental sciences and those with backgrounds in social sciences often communicate in different languages, rather than collaborating.

The coordination between sectors could also be improved. Typically, the work carried out by scholars in the field of environmental migration occurs in isolation from the government; however, in practice, combining the skills and resources of both could help to close some capacity gaps. In this sense, it is key to promote multidisciplinary cooperation and open dialogue between different areas of action.

In the government, there is also a need for deeper integration between agencies. Although efforts are being made to establish inter-agency working groups, the lack of leadership results in responsibilities being passed between agencies, leading to inaction or significant delays in response and strategy implementation. This particularly affects the subnational governments that face limited decision-making autonomy due to the centralised nature of the Mexican government.

Several experts argued that the state should focus on articulating and integrating existing instruments rather than creating new institutions or programs. For example, programs for internal displacement due to violence could be expanded to include climate-related causes or existing housing and relocation mechanisms could be adapted through cross-sectoral protocols.

The findings from the documentary review show that while several agencies in Mexico have expertise in migration or environmental issues, collaboration between these areas remains weak or underdeveloped. The IOM identifies at least six different government organisations involved in the environmental migration nexus, highlighting a significant potential for intersectoral collaboration. However, coordination seems to be issue-specific, with no overarching policy framework, shared indicators, or standard definitions guiding joint action. Nevertheless, the report also acknowledges that some initiatives have been implemented, for instance, working groups, but these remain limited in scope and reach. In this sense, the IOM recommends developing formal mechanisms for coordination supported by clear mandates and resources.

The most prominent example of coordinated efforts is reflected in the CONAPO report, which was elaborated as a joint effort with the National Institute of Ecology and Climate Change, demonstrating that inter-ministry collaboration and knowledge production can be both possible and successful.

Overall, the review suggests that while multiple institutions are engaged with components of the environmental migration agenda, there is no formal coordination architecture capable of aligning their efforts toward shared goals. The result is a patchwork of isolated initiatives that lack continuity, scale, and coherence.

Public Participation & Agency

Communities and civil society have been instrumental in bringing environmental migration to the policy agenda. However, participation is often limited to consultative processes with little influence on outcomes. Communities often lack access to institutional channels and face barriers in navigating bureaucratic systems or influencing decision-making structures.

Nevertheless, several cases demonstrate the potential of bottom-up processes to shape institutional responses. In the El Bosque case, assemblies and participatory decision-making helped shift public discourse and mobilise support, showing that local agencies can produce institutional change, even without formal frameworks.

Despite this, civil society organisations often struggle with funding limitations and political resistance. Their involvement is sometimes viewed with suspicion, particularly at the municipal level, where collaboration can be perceived as politically motivated. The analysis highlights the need to formalise community engagement not as a symbolic gesture but as a structural element of climate governance.

This theme was one of the least developed across all the documents reviewed. Despite frequent references to vulnerability, exposure, and the differentiated impacts of environmental change

on specific populations, there is a striking absence of discussion around the active role of affected communities in shaping responses, policies, or narratives related to climate-induced migration. For example, the CNDH law proposal emphasises the State's duty to protect internally displaced people, acknowledging that some groups, such as indigenous communities, appear more vulnerable. However, the framing positions these vulnerable groups as recipients of protection rather than as acting agents. For the remaining documents, public participation and engagement are not mentioned.

This general absence of community participation reflects a broader institutional tendency to frame environmental migration as a technical or humanitarian issue to be addressed by experts, legislators, or agencies on behalf of affected populations. While this may be appropriate in contexts of emergency response or protection, it overlooks the knowledge, preferences, and adaptive capacities of the people who experience climate-related risks and displacement. It also risks reproducing top-down policy models that may be less responsive or inclusive in the long term.

Knowledge, Research & Data

While environmental migration is increasingly acknowledged within public discourse and even in strategic documents, a significant barrier to institutional action remains the lack of sufficient, disaggregated, and policy-relevant data. Many interviewees emphasised that although there is a general understanding within the Mexican government that climate change contributes to human mobility, this recognition has not been translated into systematic data collection or utilisation. Instead, information gaps are often cited as justification for inaction, reinforcing a cycle where the absence of precise evidence delays or dilutes the institutional response.

Participants also pointed to the external influence on knowledge production. Much of the early research on environmental migration in Mexico has been led by U.S.-based researchers and international organisations, often driven by a national security lens concerned with potential migration flows into the United States. While recent years have seen the emergence of more locally based research, an imbalance persists in both narrative control and research agendas, and important dimensions, such as the gendered or age-specific impacts of climate stressors, remain understudied.

Several interviewees emphasised that data needs to go beyond macro-level trends and capture the complexity of local dynamics. This would require more refined statistical skills, technical resources, and financial investment capacities, which are often unevenly distributed across institutions. In this regard, some participants expressed concern that pursuing highly detailed data may delay urgent action, especially when existing information is sufficient to begin planning and taking protective measures. One interviewee argued that instead of legally defining environmental migrants, institutions should concentrate on identifying vulnerable populations and understanding how best to support them.

A robust response to environmental migration requires better data and a strategic shift in how knowledge is produced, interpreted, and integrated into decision-making processes. This includes strengthening the interface between academic research and public policy, investing in interdisciplinary and locally grounded studies, and ensuring institutional learning becomes a formal and continuous component of governance practice.

All the documents analysed highlight the importance of improving national knowledge generation. However, like the case of technical capacities, there is a lack of knowledge integration and methodological inconsistencies, such as the lack of standardised indicators. Only

the CONAPO and FCO documents provide a statistical analysis, attempting to give evidence on environmental migration in Mexico through climate and census data. Nevertheless, qualitative data approaches are not mentioned in any of the documents. While quantitative data is important for planning purposes, the role of qualitative data could significantly enhance the information and understanding of environmental migration.

Climate Justice

A recurring topic was the acknowledgement of how climate change serves as a multiplier of vulnerabilities, how its impacts are uneven, and how communities have varying capacities to respond and adapt to environmental challenges. Several participants called for a shift in how migration is seen and started addressing it as a matter of justice and rights. Article 4 of the Mexican Constitution establishes the right to a healthy environment, stating that everyone has the right to an environment suitable for their development and well-being. In this sense, ignoring the climate crisis and not having a plan to address its effects further violates the rights of many communities to an adequate environment. It overlooks the government's responsibility to safeguard these rights.

The most affected groups are indigenous and rural communities, which often had agricultural livelihoods. However, they cannot sustain themselves due to the intensification of droughts and other climate change patterns. When migration is available, these people often end up in irregular or marginalised settlements in urban areas, with limited access to services, which can increase their vulnerabilities instead of alleviating them. This aspect raised concerns in two of the participants, who expressed how this can be beneficial for organised crime groups who are seeking to recruit vulnerable people.

Several interviewees view Environmental migration as an adaptation measure. At the same time, only one participant noted that, in many cases, climate-related displacement does not occur as an adaptation strategy but rather as a security concern. Not everyone has the capacity or resources to move, leading to trapped populations. In most cases, people do not want to leave their places of origin due to attachment to the land, their livelihood, and other reasons. In this sense, migration for environmental reasons is a matter of loss and damage. Planning should focus on enhancing community resilience, preventive and risk management measures, and monitoring tools in this context. From this perspective, migration is not simply a failure of adaptation but a consequence of unjust systems that deny communities the resources and protections needed to remain in place or move safely when necessary.

Adapting participatory processes and more horizontal governance structures is important from a climate justice perspective. It is essential to acknowledge the agency of impacted communities, particularly when designing relocation processes or adaptation measures, emphasising that justice extends beyond protection from harm to encompass inclusion in the decision-making process for decisions that directly affect the way of life of those communities.

According to Schlosberg & Collins, (2014), climate justice is a framework that seeks to address and remedy the unequal burdens of climate change on marginalised communities, demanding the recognition of community voices and their participation in climate governance. Although this concept is not explicitly mentioned, most of the reviewed documents emphasise the importance of paying attention to structural vulnerabilities and adaptive capacity. The document that most strongly addresses this issue is the one by the CNDH, which emphasises the human rights perspective on internal displacement. In the law proposal, displacement is seen not only

as a humanitarian issue but as a legal and ethical responsibility of the State to protect and guarantee the human rights of people who face displacement for any reason. For its part, the SEGOB document recognises that climate-related migration has unequal effects across different groups and that part of the complexity of collecting information about environmental migration is that vulnerabilities are compounded by different structural factors such as poverty or exclusion, making it harder to distinguish and make a connection between the migration movement and an environmental stressor.

In the different documents, Indigenous communities repeatedly appear as one of the most vulnerable groups. Nevertheless, the IOM diagnosis recommends a gender- and intercultural-sensitive approach in policy design to ensure more inclusive policy responses. While the CONAPO bulletin mentions that climate change can exacerbate existing inequalities, it stops short of suggesting action steps. Lastly, the FCO identified that climate change effects could potentially deepen social tension and undermine social stability, showing that without adequate responses to address environmental migration, Mexico will face humanitarian issues and security threats.

Despite a general recognition that climate change impacts are unequal, climate justice principles are mainly absent from the national government's institutional response. However, given that there is no specific policy addressing environmental migration, there remains a good opportunity to incorporate the lens of climate justice into the conversation.

Conclusions

The insights gathered from the 14 interviews offer a nuanced picture of how Mexico is, and is not, responding institutionally to environmental migration challenges. Across the eight thematic categories, it becomes clear that important efforts are being made, but also that many gaps remain. The lack of a clear legal framework, limited resources and technical capacities, fragmented institutional roles, and weak coordination mechanisms all contribute to a landscape where responses are mostly reactive and heavily dependent on external pressure or exceptional circumstances.

While there is growing recognition of the climate–migration link, especially among certain government agencies, this has not yet translated into a structured or long-term response. The discussion remains concentrated in specific circles, and responses are uneven, depending on who is involved and the level of visibility the case receives. The role of civil society and local communities has been crucial in bringing the topic to the forefront. Cases like El Bosque demonstrate how community organisation and media pressure can open doors, even in the absence of formal policy.

A few notes are needed to put these results in context. Most people interviewed work in academia or civil society, with fewer voices from government decision-makers. Many participants came from social science backgrounds, particularly law, while only a few had expertise in data analysis or environmental sciences. About 30% of the interviewees were born outside of Mexico. This reflects what has already been mentioned in the literature review, that much of the research and advocacy on this topic has been led by foreign experts. Today, more local voices are engaging in this field. However, there is still work to be done in building local technical expertise and conducting research that reflects the complexities of the Mexican context.

The documentary review reinforces many of the patterns identified through the interviews, particularly the absence of a coordinated, forward-looking institutional response. While the

documents acknowledge the relationship between climate change and migration, most remain conceptual in nature and fall short of proposing actionable frameworks or concrete mechanisms for addressing this issue. Only a few, such as the CNDH proposal and the IOM diagnostic, offer structured approaches that address planning, responsibility distribution, or legal reform. The rest either focus on definitions and international trends or highlight vulnerabilities without linking them to state responsibilities. Notably, the two documents published by federal agencies (SEGOB and CONAPO) acknowledge environmental factors as relevant to migration but do not extend beyond diagnosis. This indicates that, at the governmental level, the issue remains largely in a phase of reflection rather than implementation. In general, the review suggests that while institutional awareness is growing, most official responses remain fragmented, reactive, and disconnected from long-term planning and coordination strategies.

4.2 El Bosque – A Case Study of Climate Displacement

El Bosque is a small rural fishing community in Tabasco, one of Mexico’s most exposed regions to the impacts of climate change. With approximately 150 inhabitants, the community has historically depended on seasonal subsistence fishing. Its geographic location between the mouths of the Grijalva and Usumacinta rivers makes it highly vulnerable to hydrometeorological events, including sea-level rise, coastal erosion, and extreme flooding (Encyclopaedia Britannica, 2024). Tabasco is frequently cited as one of Mexico’s most climate-vulnerable states due to environmental exposure and social vulnerability: over 46% of its population lives in poverty, and more than 11% in extreme poverty (CONEVAL, 2023).



*Figure 7: Map of Tabasco.
Source: (Malkin, 2007)*

Sea-level rise and coastal erosion have progressively intensified in El Bosque since 2015, with a marked acceleration after 2020, with an initial coastline loss of 200 meters and the destruction of half of the houses in the community, where residents described the situation as “being chased by the sea” or “I am running away from the sea, and the sea comes after me”, “You can’t live here anymore” (EL PAÍS, 2022). As time passed, the living conditions of the inhabitants of El Bosque became increasingly precarious, with the loss of access to basic services such as housing, electricity, and potable water.

The El Bosque case was brought to the attention of local organisations that worked with the community to prompt a government response addressing the urgency and the need for those families to be relocated for safety reasons. The joint work resulted in the first case of climate

displacement recognised by the Mexican government. In this context, El Bosque represents a critical case for examining how institutions in the country are responding to environmental migration and identifying areas of opportunity.

As discussed in other chapters, climate change can exacerbate vulnerabilities. In the case of El Bosque, the community was already living in poor conditions. Fishing was the primary means of subsistence, and the community economy was organised around this activity. This was a key factor in people delaying moving until it was the last option available.

Institutional Response

The case of El Bosque illustrates the fragmented nature of institutional responses to environmental displacement in Mexico. While political will did emerge, especially following public pressure and media visibility, there was no pre-existing policy or legal framework to guide action. The state government of Tabasco had previously conducted erosion assessments but failed to communicate risks effectively or establish trust with the community. Civil society played a key role in building awareness by inviting a coastal erosion expert, organising assemblies, and helping residents understand the irreversible nature of the changes, thereby facilitating a process of collective decision-making around relocation.

At the time of this research, Mexico did not have a formal legal framework or planning structure to manage environmental-related migration and displacement. El Bosque became the first community officially recognised as displaced due to climate change reasons by the local congress of Tabasco. Although this does not immediately translate into a policy or law, it is a significant step in pushing initiatives further, as the government has now acknowledged climate change as one of the potential causes of migration. However, it is important to consider the particular context and circumstances around the El Bosque case, such as the fact that the former president was born in Tabasco and that the case was discussed in the Corte Interamericana de Derechos Humanos, the national and international press recognition, and that the topic was brought out directly to the former president during one of his morning conferences. In this sense, it is unlikely that future cases of environmental migration will receive the same level of media attention and pressure from other parties, prompting the government to act quickly. This highlights the need to establish legal recognition of environmental migration and develop a scalable, replicable national framework to facilitate and streamline responses in future events.

Despite a generally open and collaborative response from different government levels, there was an evident lack of knowledge about the topic, as well as training and procedural clarity, to respond to the situation, resulting in a reactive rather than a preventive or planned action. Some of the people involved in the case, from a civil society perspective, described the process as a policy improvisation, where actors were willing to respond but unsure of how to do so. In the end, the civil society identified all government programs that could be useful for relocating the community, including a housing program specifically planned for the relocation of communities living near the recently built Tren Maya, also in the southern part of the country. The fact that collaboration between civil society and the local government resulted in adapting existing programs for the specific context of El Bosque shows that institutional flexibility and political will can open opportunities for addressing environmental displacement, even in the absence of a formal policy framework. However, the ad hoc nature of the process also highlights the fragility of such responses, which rely heavily on individual initiative, interpersonal networks, and external visibility. Without clear protocols, leadership, or institutional learning mechanisms, similar cases may not receive the same level of attention or support. This experience illustrates both the potential and the limits of informal innovation in contexts where environmental migration is not yet fully recognised as a policy issue. It underscores the need for structured

planning instruments and cross-sectoral coordination to move from exceptional responses to systematic, rights-based approaches.

Budget constraints and competing priorities limited the speed and effectiveness of the response, as the government had to discuss and approve in Congress the resources needed to build new houses for all the affected people. However, without a clear budget for this purpose and without an emergency fund, this kind of reactive response could cause harm to the budgetary planning of other areas or programs in the long term. Additionally, the community lacked the resources to rebuild their homes or relocate elsewhere, making them dependent on external support and trapped until they received a response that took months. Some people were even considering getting a loan when they saw the delays in the government. From the civil society side, three different organisations collaborated in this case. However, they cannot get involved in all the instances of environmental migration that are emerging in other parts of the country.

While the federal government ultimately responded, the intervention was driven by external efforts and media coverage rather than a direct acknowledgement of the case's urgency or prioritisation on the political agenda. If well, the people involved agreed that considering the lack of clear rules and frameworks, the process evolved considerably fast, and that good result was only possible because of the direct mandate from the federal government that felt certain pressure by being exposed to the press and for the visibility that the case was getting in international forums such as COP27. These results show that political will alone is not enough to address environmental migration when there are no clear mechanisms or institutional pathways to follow.

Coordination among national, subnational, and local governments was complex, particularly due to the lack of clear and defined roles and responsibilities. Every step in the process was highly bureaucratic and required multiple negotiations and approvals, which delayed the process. There was a lack of leadership in the government, as no one wanted to be directly responsible for handling this issue. However, from a civil society perspective, coordination was much more integrated, with a horizontal approach to the community, organising assemblies and participatory processes to enhance the community's agency. In this sense, the government could adopt a slightly more bottom-up approach to better integrate the real needs of the impacted communities into the action plan.

Following the previous theme, the synergies between the local NGOs and the community created a horizontal structure where the community felt trust in the organisations supporting them. At the beginning of the process, there was initial resistance from the community to engage, particularly from men, who tended to avoid attending the assemblies. However, over time, participation increased from 5 to 40 participants when locals identified themselves as a key element of the process, and they also became more active in demanding the government's support and participating in interviews, sharing their experiences.

Although the state government conducted some risk assessments in the area, these were not updated, as some official documents even suggested that the community of El Bosque could gain ground at sea due to sedimentation. In this sense, there is an evident need to develop and update knowledge. Here, the role of civil society, academia, and the community itself could be a powerful tool in bridging this gap and bringing other expertise and understanding that can shed light on the institutional responses.

The official recognition of El Bosque as a community displaced by climate change marked a significant milestone in advancing climate justice in Mexico. The case shows how structural inequalities, such as poverty and limited livelihood options, can deepen the vulnerability of

certain groups in the face of environmental risks. More than just a relocation story, the process raised important questions about dignity, access to basic services, and other issues. It also showed how leadership and participation can take shape under pressure: women in the community played a key role in mobilising and sustaining collective action, gradually building trust and shaping the direction of the process.

The case of El Bosque showcases how environmental and climatic factors can make people migrate, but also shows that ecological migration, in many cases, is not a desired option but the only viable alternative that impacts mostly the most vulnerable groups that require support from the government and other institutions to guarantee their rights and basic needs. While the process of relocating the El Bosque community was reactive and even a bit improvised, and pushed by external and media pressures, it also shows that despite the lack of a structured regulatory framework regarding environmental migration, there are other existing mechanisms, that, with adequate cooperation and coordination could be a good starting point to address the issue and to develop national policies and programmes tailored to better address the impacts of climate change in all its different dimensions.

4.3 Assessing Institutional Response

The integrated analysis of the interviews, documentary review, and the case study of El Bosque provides a comprehensive overview of how Mexico is addressing environmental migration and where the main institutional capacity gaps lie. Using an adapted institutional capacity framework, eight thematic areas were identified to assess the strength, focus, and relevance of current responses. A radar graph was developed to visualise which themes emerged most frequently or were considered most important across the different sources of data.



Figure 8: Analysis Results
Source: Own illustration

The graph shows that planning instruments, coordination, and integration were the most mentioned and highly valued dimensions across interviews, documents, and the case study. These themes were consistently identified as both essential and lacking; they are seen as the backbone for building an anticipatory response, yet current efforts are fragmented and largely improvised. Political will, knowledge, data, and technical capacities also scored high in terms of relevance, indicating an awareness that better tools, leadership, and expertise are necessary to make progress. In contrast, financial resources, public participation, and climate justice were

less frequently discussed, although they are still important. Their lower visibility may reflect not only institutional neglect but also a lack of political or discursive space to address these areas directly.

These findings help to answer RQ1: How is environmental migration addressed in Mexico? The evidence shows that the topic is increasingly recognised, especially among academics, civil society actors, and specific government sectors. However, institutional responses remain highly reactive, uneven, and uncoordinated, with no dedicated legal or policy framework. Most actions are improvised, dependent on local actors, and lack a clear structure or long-term vision. The case of El Bosque illustrates how progress can be made through collaboration and institutional flexibility, but it also reveals the limitations of operating without formal mandates or protocols.

The RQ2: What are the institutional capacity gaps in addressing environmental migration in Mexico? One of the most critical gaps lies in the absence of planning instruments specifically designed to address environmental migration. Although existing tools, such as civil protection frameworks and national risk diagnostics, could be adapted, they are not currently structured to anticipate or respond to environmentally induced displacement. The lack of a clear legal definition or policy framework hinders the ability of government institutions to formulate mandates, assign responsibilities, and design consistent protocols. This gap contributes to an overall reactive approach, where institutional action is largely improvised and varies depending on visibility or political pressure. Closely linked to this is the weakness in coordination and integration. Migration and environmental risks are cross-cutting issues; yet current governance structures tend to operate in silos. There is limited horizontal coordination between ministries (e.g., environment, interior, development, and housing), and weak vertical coordination between federal, state, and municipal levels. The case of El Bosque demonstrates that while collaboration is possible, it is not institutionalised—it depends heavily on individual leadership and interpersonal networks rather than formalised mechanisms.

Another significant barrier is the limited availability of technical and human capacities. Local authorities often lack the training, tools, and guidance needed to respond effectively to emerging climate-displacement scenarios. Even when there is political will, the lack of knowledge on procedures, legal interpretations, and inter-institutional responsibilities results in policy improvisation, as observed in the case study. This is compounded by the chronic underfunding of institutions dealing with disaster response, social protection, or migration, making financial resources another critical constraint. The elimination of the national disaster fund, for instance, is emblematic of the shrinking institutional support for climate-related risks.

In sum, the institutional capacity to address environmental migration in Mexico is constrained by both structural and operational deficiencies across all eight dimensions. The gaps are not only technical or financial but also conceptual and strategic. Without a national vision that integrates environmental migration into broader development, climate, and mobility frameworks, institutional responses will continue to be fragmented, reactive, and dependent on exception rather than the rule.

5 DISCUSSION

The purpose of this chapter is to critically discuss the main findings of the research in line with the analytical framework, methodology, and scope. The findings of this research provide a deeper and more grounded understanding of how environmental migration is currently addressed in Mexico, revealing both the conceptual recognition of the phenomenon and the practical limitations that shape institutional responses. Drawing on interviews, document analysis, and the El Bosque case study, this research builds on previous work that has mapped the policy and legal landscape (Deheza & Mora, 2013; Gouritin, 2021; Ibarra Sarlat, 2021), but moves beyond the descriptive accounts by identifying concrete institutional challenges, such as limited planning tools, and insufficient coordination across agencies, and how those challenges have hindered action in a real case of climate-induced displacement. This represents a novel contribution, as the literature review found only one research study linking institutional capacity and environmental migration (Itzcoatl, 2024). Additionally, the contribution of Itzcoatl (2024) focuses on capacities regarding data collection and analysis, while this research provides a broader picture of the capacities needed in different stages of the policy planning and implementation processes.

The analysis of Mexico's landscape regarding environmental migration reveals a fragmented approach that faces some structural limitations but also presents growing opportunities. Despite increasing recognition of environmental migration as a crucial issue, it has not been perceived as politically urgent, resulting in isolated efforts rather than in the incorporation of environmental migration into a broader climate action strategy. This research provides further evidence that confirms the disconnection between risk recognition and concrete policy mechanisms is a structural issue, echoing Itzcoatl's (2024) conclusions, and extends these insights by demonstrating how such fragmentation manifests in practice, particularly when rapid response is required, as in the case of El Bosque.

The case of El Bosque illustrates the critical role of community agency, as well as the limitations it faces in escalating its concerns to senior government leadership positions. Despite the openness and willingness to help from the local government, the efforts were constrained by technical and financial limitations. In this case, it was the participation of the civil society and the media coverage that pushed a faster response, but still showed certain institutional improvisation, where responses were shaped by immediate necessity and available resources rather than with a long-term planning perspective, leaving uncertainty on how to act in a similar scenario in the future. At the same time, the response to the El Bosque case demonstrates that, despite its limitations, Mexico already possesses some tools and mechanisms that can be rethought and adapted in the context of growing climate change challenges.

On the one hand, this research identified positive progress, particularly a growing involvement from the government, as well as greater collaboration between agencies and civil society organisations. On the other hand, there are still technical, financial, and political barriers that perpetuate a reactive approach rather than a preventive one.

The findings are also aligned with the growing body of literature on the topic of environmental migration, where planning appears to be a key variable in several aspects, from reinforcing civil protection mechanisms to ensuring an easier integration of migrants in the receiving communities. Although a vast literature exists on environmental migration in Mexico (Cohen et al., 2013; Deheza & Mora, 2013; Gouritin, 2021; Nawrotzka & DeWaardb, 2016; Rubio Díaz-Leal, 2017), there is a notable lack of research on institutional capacity development, as it has primarily focused on disaster and risk management, as well as data collection and analysis. In this regard, this research underscores the absence of climate justice as a guiding principle in institutional responses. By integrating climate justice, this study adds a new analytical dimension

to the discourse on institutional capacity, highlighting the need to address underlying inequalities that amplify vulnerability.

The findings discussed in this thesis also align with those of other scholars studying institutional capacity in Mexico, who identify a gap between the financial and technical capacities at the local or subnational level and those of the national or federal government (Cid et al., 2024; Ruiz-Rivera & Melgarejo-Rodríguez, 2017). This suggests that institutional capacity gaps or limitations are not inherent to environmental migration or climate change, but rather structural issues affecting various policy areas.

Furthermore, this study suggests that institutional limitations are not only about a lack of resources or political coordination but also about the conceptual lenses through which environmental migration is understood. A recurring issue in both literature and practice is the treatment of environmental migration as either a technical or humanitarian problem, neglecting the structural and historical inequalities that make specific populations more vulnerable to displacement. In this regard, the concept of climate justice emerges as an essential analytical lens that is largely absent from institutional discourse.

One key limitation of this research is that it does not capture the perspectives of the affected communities. Throughout the literature review and interviews, two common topics emerged: the need to implement more participatory approaches and the relevance of considering environmental migration as a human rights issue. In this sense, although the participants of the interviews provided a wide range of views and perspectives, and some of them were closely involved with the development of the El Bosque case, including the thoughts of people who directly experience environmental migration could have brought new ideas and enrich the findings of this research and expand the concept of institutions beyond the government and academia. In this sense, the framework was too brief to analyse the dimension of migration or the lived experiences of people who have been displaced due to climate-related reasons. Considering this, it is important to reflect that even though through this research some important elements for a national policy on environmental migration were identified, a more inclusive, participatory and just policy will require giving more space to local communities to speak and participate, otherwise, the discourse will continue to be state-centred instead of opening to a more decentralised approach.

Despite the research limitations, it also offers a unique perspective on the Mexican context by applying and adapting the institutional capacity framework specifically to the issue of environmental migration. This topic has been barely explored in previous literature. While much of the Mexican scholarship on climate change focuses on adaptation planning, risk management, or territorial vulnerability (CENAPRED, 2025; Consejo Nacional de Población & Instituto Nacional de Ecología y Cambio Climático, 2023), relatively little attention has been given to how institutions frame and respond to human mobility linked to environmental pressures. In this sense, the research fills a gap by highlighting both the presence of fragmented institutional responses and the opportunities for transformation through greater policy coherence, community empowerment, and justice-based approaches.

Besides contributing to the existing literature, this research also introduces a new element into the discussion of institutional capacity related to climate governance, namely, climate justice. Despite justice being a topic mentioned in the reviewed papers (Comisión Interamericana de Derechos Humanos, 2013; Warner, 2010), it never appeared as a category of analysis. This indicates that, in addition to knowledge generation and the development of technical skills (Itzcoatl, 2024), incorporating the lens of climate justice into Mexico's environmental policy will

be a crucial element in successfully addressing environmental migration and other challenges associated with climate change.

Regarding the methodology, this research employed a qualitative approach that combined a documentary review with semi-structured interviews, allowing for the exploration of the topic from different perspectives and from individuals working in various environmental migration sectors. This approach enabled the collection of valuable insights into the topic's complexity. At the same time, the mix of data sources allowed for triangulating the information and providing deeper evidence and credibility of the findings of the semi-structured interviews. Nevertheless, there are a few methodological limitations that must be acknowledged. A significant part of the analysis focused on the policy perspective and planning from the government side. However, there was limited participation of representatives of government agencies, who could have strengthened the analysis and offered a more comprehensive view of institutional dynamics and gaps.

Another important consideration is that the analysis of this research is intended to be a generalisation of the Mexican context. However, the circumstances of environmental migration, as well as the institutional capacities, can vary depending on where in the country we focus, also remembering that certain areas are more exposed to climate-related hazards. Additionally, suppose the case study of El Bosque was selected to exemplify the policy response and institutional gaps. In that case, the results of El Bosque cannot be generalised, as the circumstances around it are unlikely to be repeated.

Despite these limitations, the chosen methodology was effective in uncovering patterns of institutional fragmentation, emergent practices, and structural constraints. The findings make a meaningful contribution to the literature on climate-induced migration in Mexico, providing a foundation for future research and policy reflection.

In summary, this research has revealed both conceptual advances and persistent structural challenges that shape Mexico's approach to environmental migration. While necessary steps have been taken towards recognising the phenomenon and fostering inter-institutional collaboration, institutional responses remain largely fragmented, underfunded, and reactive. The application of the institutional capacity framework helped uncover these gaps. However, the methodological approach presents one key limitation as it lacks the inclusion of the communities' perspective, which can be an interesting area to explore in future research.

These insights underscore the need to integrate more inclusive, participatory, and justice-oriented approaches in future policy and academic work. Ultimately, addressing environmental migration in a meaningful way will require not only technical improvements but also a transformation in how institutions understand and engage with mobility, vulnerability, and environmental change. The next chapter builds upon these reflections to present the concluding remarks and policy recommendations that emerge from this research.

6 CONCLUSIONS AND RECOMMENDATIONS

This final chapter summarises the key findings and outcomes of the two research questions, provides closing comments on policy recommendations, and outlines future areas of research.

6.1.1 Key Findings

Recapping, this research intended to explore how environmental migration has been addressed in Mexico and to identify the institutional capacity gaps that hinder the response. In a context where Mexico is highly vulnerable to climate change, structural inequalities persist, and cases of environmental migration continue to emerge. This research aimed to contribute to the development of a better understanding of how institutions can effectively engage with and adapt to respond to the challenges posed by climate change.

To achieve this, the research employed a qualitative approach that involved a comprehensive literature review, documentary analysis, case study discussion, and a series of semi-structured interviews, using an adapted version of the institutional capacity framework under eight dimensions: planning instruments, technical and human capacities, financial resources, political will and prioritisation, coordination and integration, public participation and agency, knowledge, research and data, and climate justice.

Revisiting the research questions, RQ1: How is environmental migration addressed in Mexico? This research found that although environmental migration is increasingly acknowledged in some official documents, it is not yet perceived as a priority within Mexico's climate or migration agendas. The response to the only acknowledged case of climate displacement was reactive and fragmented, heavily dependent on pressure from civil society organisations. The official government speech recognises that there is a link between climate change and human migration and acknowledges that climate change acts as a vulnerability multiplier (Gobierno de México, 2016). However, there is no specific strategy or plan on how to integrate environmental migration into a broader national strategy. The positive aspect is that the government is already exploring the topic and has even developed a report on this topic in collaboration with two different government agencies. In this regard, the interviewees' differing opinions suggest that the best approach would be to integrate this topic into a broader agenda on migration with a human rights perspective. This means that instead of creating a specific category of climate-related migration, we should expand and add flexibility to the understanding of migration to ensure the rights and protection of all migrants, regardless of the reasons behind migration. In this sense, the internal displacement law proposal presented by the CNDH is a great example of how to incorporate diverse displacement motives into a single umbrella.

Regarding RQ2: What are the institutional capacity gaps in addressing environmental migration in Mexico? The research identifies several key limitations across the different dimensions of institutional capacity. These include limited access to financial and technical resources, especially at the subnational level, but also a dependency on international funds to finance climate action in general, showing that the country, in general, depends on external priorities when implementing climate action projects, which has also led to a gap in the national knowledge development of environmental migration. Another significant gap is the lack of planning or a short-term perspective, which, to a certain extent, is related to the six-year political cycle. This lack of planning has resulted in weak coordination among government agencies, as well as between the government, academia and civil society. Despite perceiving a certain level of political will to work on the topic, there are no clear rules or leadership roles that push this topic forward into the policy agenda. From an academic perspective, there is also a sense of a miscommunication issue, where experts in climate change and migration scholars are not communicating or collaborating. Lastly, in a highly unequal and centralised country, it is essential

to start implementing multigovernance approaches that allow for the incorporation of the voices of local communities, who are ultimately the ones primarily affected by climate change.

The El Bosque case illustrates how these gaps manifest in practice. The local government demonstrated openness and concern but was constrained by a lack of planning tools, resources, and an institutional mandate. The response, triggered mainly by media pressure and civil society engagement, highlights the improvisational and ad hoc nature of current institutional action. Nevertheless, this case also shows that collaboration between different sectors can be powerful and effective. This case also proves that there is no need to create an entirely new policy schema, as existing programs can be adapted to the context of environmental migration.

6.1.2 Policy Recommendations & Practical Implications

Beyond its academic contribution, the findings of this research also serve as a guide to essential considerations for the various actors involved in environmental migration. While policy frameworks in Mexico have begun to recognise the issue, implementation remains weak due to technical, financial, and political constraints. To bridge these gaps, targeted actions are needed from national and subnational governments, civil society actors, and international partners alike. The following recommendations are tailored to these specific groups, aiming to translate research findings into meaningful and actionable guidance.

For policymakers

- Integrate a strategy on environmental migration as part of the national climate action plan. Clear institutional roles and responsibilities should accompany this strategy to ensure consistency, coherence, and transparency in the response plan.
- Strengthen subnational capacities by offering support and technical guidance to municipalities and other local governments to develop their skills and be less dependent on the national government.
- Promote inclusive and participatory mechanisms that empower and promote the agency of affected communities to contribute to creating dignifying relocation plans.
- Incorporate climate justice principles into the planning and implementation of policies addressing environmental migration while also addressing and acknowledging inequalities and differentiated vulnerabilities.

For civil society

- Advocate for implementing policies with a human rights perspective to ensure that climate-related displaced populations are protected not only as victims of sudden or slow-onset events but also as citizens with rights that the government should protect.
- Support community-led initiatives that foster resilience, disseminate knowledge and promote more horizontal and participatory approaches.
- Support the accountability of the process by documenting institutional gaps and inconsistencies while also recognising good practices.

For academia

- Promote interdisciplinary research that connects different knowledge areas, as well as other sectors outside academia.

For International Organisations

- Promote knowledge sharing to enable more just and equitable cooperation and learning.

Taken together, these recommendations emphasise that environmental migration is not only an environmental or logistical issue but a deeply political and social challenge. Addressing it effectively requires collaboration across sectors and disciplines, as well as a firm commitment to justice, participation, and long-term thinking.

6.1.3 Future Research

This research has contributed to expanding the understanding of institutional responses to environmental migration in Mexico; however, given the complexity, multidimensionality, and urgency of environmental migration, there are multiple avenues for future research.

One of the most pressing directions for future research is the need to incorporate the voices and experiences of affected communities and to explore whether there is a differential impact on different groups, such as children, older people, or women. Understanding how individuals and communities perceive, experience, and respond to environmental change and institutional support would provide a richer and more grounded perspective, helping to close the gap between policy discourse and lived realities.

Another important avenue lies in conducting comparative research across regions in Mexico or between countries in Latin America, particularly when considering international environmental migration. Such studies could illuminate how different governance structures, resource allocations, and socio-political contexts shape institutional capacity and response mechanisms. These comparisons would also help identify best practices and opportunities for cross-learning, particularly in contexts where environmental migration is already a recurrent challenge.

As a social phenomenon, migration can be explored through different lenses, and the institutional capacity is only one of them. In this sense, future work could analyse and complement this framework using other approaches, such as political ecology or other frameworks of climate justice, which could allow for expanding the understanding of structural inequalities, power dynamics, and vulnerabilities that are identified but not deepened with the institutional capacity framework.

Taken together, these future research directions aim to deepen the understanding of environmental migration not only as a technical and policy issue but as a deeply social and political phenomenon.

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Appendix I – Interview Consent Form

Note: The original form was written in Spanish. The translated version presented here is for the reader's reference.

Project Title: Building Institutional Capacity for Addressing Environmental Migration in Mexico (working title)

Researcher Information: Luz Adriana Hernández Orozco

MSc Student in Environmental Sciences, Policy, and Management

Lund University

luz.hernandez@mespom.eu

Project Description:

This study is part of a research project at the International Institute for Industrial Environmental Economics (IIIEE) at Lund University. The study aims to explore Mexico's institutional capacity to address the challenges and opportunities posed by climate change and environmental stressors on human mobility.

Purpose of the Interview:

This interview aims to gather expert insights on institutional capacity related to environmental migration. Your participation in the study will contribute to the advancement of knowledge in this field. The interview consists of a semi-structured interview conducted via video call that will last between 45 and 60 minutes.

Confidentiality and Voluntary Participation:

The interview will be recorded (if consent is given) for transcription purposes. The recordings and transcripts will be securely stored and anonymised in the final report. Your participation in this study is voluntary, and you may choose to withdraw at any time without any consequences. The information provided will be confidential and used solely for academic research.

Consent Statement:

By signing this form, I agree to voluntarily participate in this interview to contribute to the final master's thesis project. I acknowledge that I have read and understood the study's purpose, and I consent to the interview being recorded.

Participant Name:

Researcher's Name: Luz Adriana Hernandez Orozco

Signature:

Signature:

Date:

Date:
