Caring for the Margins: Gendered Responses to Climate Challenges

A Case Study from Medellín's Hillside Settlements

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Abstract

This thesis explores how *lideresas*, women leaders, in marginalised neighbourhoods of Medellín, Colombia, respond to environmental and social challenges, contributing to climate justice. It asks: How do these women navigate everyday risks, what strategies and knowledge do they employ, and what lessons can be drawn for broader climate justice frameworks in Latin America? Grounded in theories of care and relational autonomy, the study analyses how leadership emerges through interdependence, situated knowledge, and everyday practices of care. Fieldwork was conducted in Medellín's hillside areas, Comuna 3 and Comuna 8, using qualitative interviews, workshops, and field visits. The findings show that *lideresas* take on informal leadership roles, acting as social workers, engineers, and educators, without formal recognition. Their strategies include community-based environmental education, place-based pedagogies, and collective responses to climate risks. These actions reflect 'resilience from below'and challenge dominant, individualistic approaches in planning and climate adaptation. The thesis contributes to debates in feminist urbanism, climate justice, and Global South research by showing how care and relational autonomy can be used both as analytical tools and political strategies. It calls for more inclusive, gender-sensitive policies that recognise and support the transformative potential of grassroots, care-based leadership.

Key words: Care, Case study, Climate change, Relational autonomy, Female leadership, Informal neighbourhoods, Latin America, Medellin, *Lideresas*

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Table Of Contents

Abstract 1
Preface: Acknowledgments 2
Glossary 5
1 Introduction 7
1.1 Problem Statement and Purpose of Thesis 7
1.1.1 Personal Background 7
1.1.2 Introducing the Topic 8
1.1.3 Knowledge Gap and Research Aim 10
1.2 Scholarship Contribution 10
1.3 Thesis Outline 11
2 Theoretical Framework 12
2.1 Care as a Political, Emotional, and Situated Practice 12
2.2 Defining Autonomy 14
2.3 Bridging Care and Autonomy 15
2.4 Three Interpretations of Care and Autonomy 16
2.4.1 Care as Empowerment 16
2.4.2 Care as Knowledge 17
2.4.3 Care as Political Action 18
2.5 Reflections on the Framework 19
3 Methodology and Case Study 21
3.1 Case Study: Informal Hillslopes of Medellín 21
3.2 From Displacement to Urban Informality 23
3.3 Urban Transformation in Medellín: Innovation in the Face of Inequality 24
3.4 Environmental Vulnerabilities and Risks 24
3.5 Gendered Vulnerabilities and Women's Agency 25
3.6 Methodology 26
3.6.1 Ontological and Epistemological Positioning 26
3.6.2 Qualitative Research Design 27
3.7 Methods 27
3.7.1 Case Selection and Sampling Strategy 27
3.7.2 Interviews 29
3.7.3 Participation in Workshops, Gatherings and Field Visits 29
3.7.4 Data Analysis 31

3.7.5 Positionality and Reflexivity 32
3.7.6 Ethical Considerations 33
3.7.7 Limitations: Language, Access, and Trust in the Field 34
4 Results and Discussion 37
4.1 Navigating Female Leadership 40
4.1.1 Micro-Geographies of Leadership and Relational Autonomy 40
4.1.2 'Resilience from Below': Collective Adaptation and Place-Based Solutions 44
4.1.3 Urban Gardens as Sites of Relational Autonomy and Environmental Care 48
4.2 Local Knowledge and Strategies as Embodiments of Care 49
4.2.1 Waters of Care: Embodied Learning and Ecopedagogy in Comuna 3 49
4.2.2 Grassroots Classrooms: Escuela Popular and Climate Learning in Comuna 8 53
4.2.3 Care Across Generations: Semilleros as Sites of Environmental Education 54
4.3 Justice and Recognition 56
4.3.1 When it Rains Inside: Emotion, Risk, and the Politics of Place 57
4.3.2 Growing From the Wounds: Displacement and *Re-Existencia* 58
4.3.3 The Body is the First Territory: *Cuerpo-Territorio* and Embodied Climate Care 60
5 Conclusion 62
5.1 Synthesis of Main Insights 62
5.2 Final Reflections: Thinking and Feeling With the Field 63
5.3 Implications and Contributions; Reflections for Policy and Practice 65
6 Reference List 67
Appendix 73

Glossary

This glossary includes Spanish terms used throughout the thesis reflecting the cultural and linguistic context of fieldwork in Medellín. Terms are included for their frequent use or conceptual importance.

Lideresa – Feminine form of *líder* (leader). Refers to women in Comunas (urban areas) who lead community projects and neighbourhood strategies.

La Junta Comunal /La Juntancia – Community organisations of local residents in Colombia addressing neighbourhood issues and promoting social development. They foster participation and improve living conditions despite limited resources and recognition. *La Juntancia* is an informal term for the collective spirit, informal gatherings, or close collaboration within these groups.

Huerta/Huerteros/Huerteras - Huerta is a small vegetable garden for consumption or sale, often located on comuna hillsides. Huerteros (m) and huerteras (f) are those who maintain these gardens and engage in green community initiatives.

Geomantle – A nature-based solution: a thin, flexible cover for slopes or eroded soil that reduces rainfall impact and promotes vegetation growth.

Semillero – Literally "seedbed," refers to informal learning collectives, often with youth, for reflection, learning, and knowledge sharing, in this thesis especially in environmental education.

Escuela Popular – Community-led informal education aimed at collective learning and empowerment of marginalised groups. In this thesis, it denotes local efforts in Medellín around climate change and social justice.

Comuna – Administrative city district in Colombia encompassing several neighbourhoods (*barrios*).

Convite – A gathering of community members to carry out infrastructure work such as building stairs, floors, roofs, streets, or maintenance actions like cleaning streams and other tasks.

Paisa - Cultural and linguistic identity of people from Antioquia, including Medellín. Used in the methodology chapter to discuss regional Spanish nuances.

Páramo - Unique high-altitude Andean ecosystem vital for water and biodiversity, found in Antioquia. Referenced regarding environmental knowledge and climate change.

Cuerpo-territorio - Epistemological and methodological concept linking body and territory, emphasising embodied, situated knowledge in care and political action

Re-existencia - Concept describing how displaced Latin American women rebuild life and meaning after violence through care as resistance and territorial protection.

"Care is a species activity that includes everything that we do to maintain, continue and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, our selves and our environment, all of which we seek to interweave in a complex, life-sustaining web"

Fisher & Tronto (1993, p.40)

1 Introduction

1.1 Problem Statement and Purpose of Thesis

1.1.1 Personal Background

Last year, during my time in Mumbai and Mexico City, both coinciding with the monsoon season, or *la época de la lluvia* ('the rainy season'), as it's called in Spanish, I found myself reflecting deeply on issues of climate change and marginalisation. These thoughts were shaped not only by my experiences of travel and university exchange, but also by a course I had taken on urban planning in the Global South earlier that year.

In Mexico, as I got to know local people and learned more about the country's colonial history and its long-lasting patterns of marginalisation, I became increasingly interested in the vulnerability of cities and the urban poor in Latin America. There was not a single defining moment, rather, it was the combination of experiences: volunteering with female immigrants in Sweden, deepening my Spanish skills, and engaging with the power dynamics and histories of Latin America. These all made me reflect on how I, as a researcher, could contribute to a deeper understanding of marginalised communities, particularly women, in a continent deeply affected by machismo and patriarchy.

Growing up in Stockholm, I often visited my maternal grandparents who lived in a rural agricultural village in northern Sweden. It was through these visits and my mother's own rural upbringing that I absorbed important values of care, sustainability, and ecology. While I cannot personally relate to the violence or everyday machismo experienced by many Latin American women, I frequently reflect on the stories of rural settlers being pushed into urban peripheries. Perhaps it is my own sense of dislocation and constant search for belonging that draws me to Latin America. After all my travels and exchange experiences, it is there that I have felt most at home.

As a woman with strong values rooted in care, sustainability, and environmental awareness, and with a background in urban studies, studying climate change in Medellín, an emblematic urban case known for repeatedly reinventing its public image, felt like a natural step. Volunteering with female immigrants in Sweden taught me much about care, empowerment, and visibility, as well as the concept of relational autonomy: the idea that by supporting one another, even in adulthood, through shared acts like biking or learning together, we can create alternative futures based on practices of care.

These questions, of care, climate change, and marginalisation, have stayed with me since my time in Mexico and Colombia. Now, I am proud to share this case study and the narratives I have done my best to convey. I hope this thesis contributes in both small and significant ways to the ongoing conversations around these urgent issues. I dedicate this work to all the women who continue to fight for the environment, for future generations, and for meaningful change.

1.1.2 Introducing the Topic

Urbanisation is accelerating rapidly, especially in the Global South, where climate change exacerbates vulnerabilities, disproportionately impacting already marginalised communities (Fattah & Walters, 2024; Olazabal et al., 2021). Over half of the global population now resides in this region (Fattah & Walters, 2024), and by 2050, an estimated 3 billion people will be living in informal settlements (Bai et al., 2018).

This trend underscores a crucial intersection of socio-economic inequality and climate vulnerability, which are intricately linked (Fattah & Walters, 2024; Lizarralde et al., 2021; Olazabal et al., 2021). However, despite this pressing reality, mainstream knowledge frameworks often exclude 'subaltern' knowledge, defined as the urban poor living in the Global South, whose voices and knowledge are excluded from dominant discourses. Their perspectives, grounded in local and informal contexts, are often politically marginalised and disconnected from formal planning processes (Bai et al., 2018; Fattah & Walters, 2024; Olazabal et al., 2021). This exclusion maintains a major knowledge gap that makes it difficult to develop effective responses to sustainability issues in the Global South (Nagendra et al., 2018). Bridging this gap requires centring the voices and lived experiences of those on the ground, including grassroots initiatives and urban subaltern perspectives. This approach not only fosters a more inclusive understanding of urban sustainability but also emphasises the critical role of social responses in advancing climate justice (Fattah & Walters, 2024; Lizarralde et al., 2021).

In Latin America, rapid urbanisation has resulted in over 80% of the population residing in urban areas, making it one of the most urbanised regions globally (Colak & Pearce, 2015; Garcia Ayllon, 2016). In Colombia, the vulnerability to climate change is deeply tied to unsafe living conditions, shaped by historical forces of marginalisation, colonialism, segregation, and exploitation. As a result, populations living in precarious environments are disproportionately affected by natural hazards, which are increasingly intensified by climate change (Lizarralde et al., 2021).

Reinforcing this problem is internal displacement, driven by decades of armed conflict in the country, which has led to the growth of informal neighbourhoods, particularly on hillsides in the cities. These areas expose residents to even greater risks, particularly as climate-related events intensify (Colak & Pearce, 2015; Garcia Ferrari et al., 2018). Within these marginalised neighbourhoods, women bear the brunt of climate impacts and displacement, often facing harsher urban conditions than their male counterparts (Maclean, 2017). Although women in urban areas may generally have more advantages compared to rural women, gender disparities in power and rights remain significant, particularly in the Global South. Empowering women in urban governance is essential for achieving gender equality and advancing climate justice, an idea reinforced by the social responses discussed earlier. However, women in marginalised urban areas face unique challenges, underscoring the heterogeneity within this group (Chant, 2013). In Colombia, despite formal policy changes, women continue to experience resistance and negative treatment when asserting their rights or seeking positions of power in society (Maclean, 2017).

Furthermore, all Colombian municipalities face climate risks, but women, who make up 52% of the population, are particularly vulnerable (IDEAM, PNUD, MADS, DNP, & Cancillería, 2017. Likewise, the IPCC (2018) emphasises the need for a gender focus, highlighting that women are disproportionately affected by climate change and underrepresented in global policy processes.



Figure 1. Map of Colombia with Medellín highlighted. Medellín is the capital of the Antioquia department, located in the Aburrá Valley of the Andes Mountains in northwestern Colombia. Adapted and edited by Hanna Marshall from *Mapa Físico de Colombia* (Esri, n.d.)

1.1.3 Knowledge Gap and Research Aim

Few studies have examined how women in marginalised neighbourhoods respond to climate challenges in rapidly transforming urban contexts such as Medellín. The city is the second-largest city in Colombia and the capital of Antioquia (see map, Figure 1), is often celebrated as a *"success story and international benchmark for urban transformation and social innovation"* (Purwar et al., 2024, p.498). However, it remains a highly unequal city, with informal and marginalised neighbourhoods facing significant risks from landslides and flooding (Purwar et al., 2024).

The city has experienced a remarkable shift from being labeled the "most dangerous in the world" during the 1990s to becoming a global hub for tourism, business, and investment (Colak & Pearce, 2015; Garcia Ferrari et al., 2018). Yet, this dominant narrative has been critiqued for exacerbating neoliberal inequalities. Despite its recognition as the "most innovative city" in 2013, Medellín's urban development has largely prioritised economic growth and security over environmental sustainability (Colak & Pearce, 2015).

Focusing on the gendered dimension, women living in informal settlements in Medellín face compounded vulnerabilities due to gendered socio-economic disparities (Alzate-Navarro & Castro-Díaz, 2024; Saldarriaga Escobar & Rivera Flórez, 2025). A recent study highlights that these vulnerabilities are further intensified in areas exposed to flooding and landslides (Alzate-Navarro & Castro-Díaz, 2024).

This thesis aims to addresses the gap in understanding how women leaders, known locally as *lideresas* (see Glossary), navigate environmental challenges, contribute to community resilience, and advance climate justice in a city marked by both innovation and persistent inequality. The Spanish term *lideresas* is used throughout the thesis to reflect the specific experiences of women leaders living in marginalised neighbourhoods. Specifically, the study thus explores how these *lideresas* respond to environmental and social challenges, the knowledge and strategies they adopt, and the lessons their experiences offer for advocating a more democratic and inclusive model of urban governance, particularly within the Global South and the Colombian context. The following research questions guide this study:

1. How do women leaders, *lideresas*, in marginalised neighbourhoods in Medellín navigate and respond to the environmental and social challenges in their everyday lives?
2. What forms of local knowledge and/or strategies have they adopted to address these challenges?
3. What lessons can be drawn from their experiences to inform broader frameworks of climate justice in Latin America?

1.2 Scholarship Contribution

This master's thesis was planned, conducted, and written between January and June 2025 as part of the 'Minor Field Studies' (MFS) scholarship programme, funded by the Swedish International Development Cooperation Agency (Sida). Sida is a government agency dedicated to improving living conditions for people affected by

poverty and oppression, with its activities financed by Swedish tax revenue (Sida, 2024). The scholarship is administered by Stockholm University and enables bachelor's and master's students to conduct fieldwork on topics aligned with one or more of Sida's seven priority areas: poverty reduction, health improvement, freedom promotion, climate aid, gender equality, migration coordination, and humanitarian support (Stockholm University, n.d). In applying for this scholarship, I reflected on the United Nations Sustainable Development Goals and ensured that the research aligned with the MFS priorities. This thesis contributes to Goal 5 (Gender Equality), Goal 11 (Sustainable Cities and Communities), and Goal 13 (Climate Action), addressing the priorities of empowering women and girls and expanding climate aid.

1.3 Thesis Outline

The following thesis will guide the reader first through a theoretical framework, focusing on care-based theories that inform the analysis. Chapter 3 presents the methodology and builds on the fieldwork, which includes qualitative methods such as interviews, and participation in meetings and workshops. This part also includes reflections on ethics, positionality and fieldwork strategies. Chapter 4 will discuss these empirical findings, in relation to the theoretical framework, organised around three sub-chapters. Finally, chapter 5, will conclude on how this data and its arguments can inform policies and contribute to the debate on urban informality, gender and climate justice.

2 Theoretical Framework

This chapter outlines the theoretical framework guiding my analysis of female leadership in climate-vulnerable informal settlements in Medellín. I conceptualise this leadership through a lens of feminist care ethics and relational autonomy, which I argue provide crucial tools for understanding everyday practices of resistance and adaptation under conditions of marginalisation. I use these frameworks to analyse how *lideresas* organise and mobilise care practices, revealing alternative forms of agency, knowledge, and power that are central to climate justice. I organise this chapter in two sections. First, I discuss feminist contributions to thinking care as a political, emotional, and environmental practice. Then, I outline the concept of relational autonomy and its relevance for understanding women's leadership in marginalised urban settings. Together, these literatures help centre my analytical categories of care as empowerment, care as knowledge, and care as political action.

2.1 Care as a Political, Emotional, and Situated Practice

Care is a relational, political, and ethical practice. In climate justice debates, care ethics challenges technocratic and neoliberal models by centring interdependence, responsibility, and emotional engagement. It is not just about individual acts of kindness but about how societies organise resources, power, and responsibility (Davoudi & Ormerod, 2025; Harcourt & Bauhardt, 2018; Lawson, 2007; Tronto, 1993). Care is political because it involves decisions over public resources and exposes how obligations, justice, and equity are experienced and negotiated in daily life (Lawson, 2007). As Lawson notes, care demands attention to emotions, such as love, concern and connection, because power is embedded in these relational ties. In this sense, care becomes a terrain of political struggle.

Tronto (1993) offers a foundational framework for care ethics, identifying four elements: attentiveness, responsibility, competence, and responsiveness. These elements emphasise that good care requires listening to others' needs and responding in meaningful, context-sensitive ways. A just and ethical society, therefore, must integrate care into both human and environmental relationships.

Yet, care remains undervalued, delegated to the private sphere, feminised, and rendered apolitical (Davoudi & Ormerod, 2025; Tronto, 1993). In capitalist and patriarchal systems, care work, especially that carried out by women, is often invisible or devalued (Harcourt & Bauhardt, 2018). Puig de la Bellacasa (2017) critiques the assumption that care is always reciprocal, arguing instead that it is asymmetrical and embedded in power relations.

To ground this conceptualisation in climate change debates, Nicoson (2024) frames care as a political, transformative, and situated practice. She identifies three forms of care in climate contexts:

1. Care in the current situation – grounded in relational knowledge and lived experience.
2. Care through a change process – shaped by affect and reciprocity during adaptation.
3. Care for a vision of the future – an imaginative act of creating just, sustainable alternatives.

Nicoson's (2024) work in Puerto Rico shows how people's responses to environmental crises are shaped not only by technical knowledge but by emotional and interdependent ties. She argues that situated knowledge, formed through care, is central to how communities imagine and enact alternative futures.

Bond and Barth (2020) make a similar case in their study of a flood-prone community in New Zealand. They propose a 'care-full' approach to climate adaptation, arguing that justice alone is insufficient unless it is enacted through care and responsibility. Structural injustice persists when adaptation strategies protect the privileged and displace the vulnerable, "*the rich get seawalls, the poor get moved*." (p.1). For justice to be meaningful, they argue, it must be grounded in relational care, co-produced with affected communities.

This echoes Davoudi and Ormerod's (2025) critique that while justice has entered political discourse in planning debates, care continues to be marginalised, seen as emotional or feminine, rather than strategic. They call for a shift toward 'care-full' planning and 'caring cities', where relational ethics are central to imagining resilient futures. They challenge dominant masculinist visions of justice that overlook the embodied, emotional, and social dimensions of lived experience.

Gregoratti et al. (2024) build on this by urging a rethinking of resilience through care. Rather than opposing concepts, care and resilience should be seen as intertwined. They distinguish between:

- Care and 'resilience from above', often unpaid, volunteer-based environmental work that is essential but undervalued.
- Care and 'resilience from below', community-based practices that actively support both resilience and gender equity.

Together, these works argue that resilience must not be about bouncing back or placing the burden of adaptation on already vulnerable communities. Instead, resilience with care requires addressing structural inequalities and centring relational, affective, and embodied knowledge in adaptation.

As the quote on 'wounded cities' (Till, 2012) suggests, *"attending to, caring for, and being cared for by place and those that inhabit place are significant ethical and political practices that may work to constitute more democratic urban realms"* (p. 257). This reminds us that care is not a private or passive act, it is a political force that can reconfigure how we relate to one another, to place, and to the future.

2.2 Defining Autonomy

To analyse the agency of *lideresas* in this study, I draw on the feminist concept of relational autonomy. This framework critiques the traditional liberal notion of autonomy as individual independence. Instead, it sees autonomy as something developed through and within relationships (Mackenzie & Stoljar, 2000). This offers a more nuanced understanding of how people exercise agency under marginalisation.

The idea of autonomy has been widely debated in ethics and politics, but no clear consensus exists. In medical ethics, it often refers to informed consent over one's body. In economics and decision theory, it relates to rational choice. In liberal political theory, it is about individual freedom. Despite these variations, all rely on the idea of the autonomous individual (Mackenzie & Stoljar, 2000).

This traditional view assumes people are rational and free to act on their own terms (Mackenzie & Stoljar, 2000; Nedelsky, 1989). Autonomy is seen as independence, while dependence is often viewed as weakness or submission (Giraud, 2021). The stereotype is captured in the image of the "self-sufficient, rugged male individualist" (Mackenzie & Stoljar, 2000, p. 5). This model has been criticised for ignoring the influence of social structures, suggesting that people are entirely responsible for themselves, as if external factors are irrelevant. As Nedelsky (1989) writes: "*Part of the critique is directed at the liberal vision of human beings as self-made and self-making men." (p.8).*

Feminist theorists critique this view but do not reject autonomy entirely. Instead, they propose a relational approach that recognises interdependence, care, and emotion. Relational autonomy emerged to address the limits of the traditional model, which fails to account for inequality, marginalisation, and the role of social context (Mackenzie & Stoljar, 2000). It acknowledges that people are not only rational agents, but also shaped by emotions, memory, imagination, and social ties.

This framework sees autonomy as shaped by relationships, including those marked by power. It recognises that people's beliefs about themselves are influenced by cultural norms and social expectations. If these beliefs come from oppression or harm, they cannot be seen as truly autonomous (Mackenzie & Stoljar, 2000). Westlund (2009) supports this view but warns against portraying people as passive victims of their context. She argues for a balanced view, where autonomy is relational but still allows for critical reflection and resistance.

Relational autonomy is not a single idea, but an umbrella term that includes various interpretations. What unites them is the view that people do not exist in isolation. Our identities and actions are shaped by the social world. Factors such as class, gender, and race all affect how autonomy is experienced and expressed (Mackenzie & Stoljar, 2000).

In this thesis, relational autonomy offers a lens to understand how women's leadership, especially in marginalised communities, emerges not despite interdependence, but through it, grounded in care, responsibility, and collective action.

2.3 Bridging Care and Autonomy

Having outlined the definitions of care and autonomy, framing the latter in both traditional and relational terms, I now turn to how these concepts intersect. This section explores how our understanding of care changes when autonomy is redefined from individualistic independence to relational interdependence. Traditionally, autonomy has been positioned in tension with care. Rooted in liberal ideals of self-sufficiency and independence, this view sees care as a burden, something that compromises individual freedom (Davis, 2022; Tronto, 1993). Within this framework, dependence is stigmatised, and care is devalued and relegated to the private sphere.

This narrow conception of autonomy overlooks the realities of human vulnerability and interdependence. As Tronto (1993) notes, the assumption that all individuals are equally capable of independence excludes care from political and public discourse. It falsely implies that needing care is a personal failure, rather than a universal human condition. When autonomy is framed as independence, care becomes incompatible with the ability to act. However, this tension dissolves when autonomy is understood relationally. Syhre and Brückner (2018) in their feminist analysis of urban agriculture in Nairobi, show that autonomy can emerge through relationships, not despite them. Their work illustrates how interdependence fosters capacity for action, rather than undermining it.

Davis (2022) builds on this by arguing that care and responsibility are not obstacles to autonomy, but integral to it, so long as autonomy is viewed as relational. Care, she argues, is a dynamic interaction between caregiver and care-receiver. The conflict between care and autonomy stems less from the nature of care itself and more from how care has been devalued.

Similarly, Giraud (2021) challenges the notion that care necessarily results in dependency, arguing instead that care can foster autonomy in the recipient, and that autonomy itself reflects the quality and skill of the care provided. In other words, care enables autonomy. People become autonomous not in isolation, but because they have been supported, nurtured, and cared for. When seen through a relational lens, care is not the opposite of autonomy, it is its foundation.

This challenges neoliberal and liberal ideals of autonomy grounded in individualism. As As Lawson (2007) argues, individuals are not isolated beings but interdependent subjects whose lives are shaped by the ongoing and often invisible demands of care. Relational autonomy acknowledges this shared vulnerability and mutual responsibility, allowing us to see care as both a personal and political practice. This perspective, where care and autonomy are seen as mutually reinforcing, underpins the following three sections of the thesis, where care will be explored as empowerment, knowledge, and political action.

2.4 Three Interpretations of Care and Autonomy

This section presents three interlinked interpretations of care**,** which are central to this theoretical framework. Each interpretation draws on both previously discussed key authors, including Davis (2022), Gregoratti et al. (2024), Lawson (2007), Puig de la Bellacasa (2017), and Tronto (1993), and as well as additional literature that will be introduced and analysed here.

The first interpretation, care as empowerment, builds on the work of Syhre and Brückner (2018) and Dizon and Ortega (2024). The second, care as knowledge, is informed by Greenwood (2013), Gruenewald (2008), and McInerney et al. (2011). Finally, the third interpretation, care as political action, draws on Glockner et al. (2024), The Care Collective (2020), Tronto (2013) and Zaragocin and Caretta (2021), and together, these perspectives offer a comprehensive lens through which care can be understood and applied in this study.

These three interconnected interpretations are presented to help bridge the concept of care with relational autonomy, as discussed earlier, and to support the reader's understanding of the empirical fieldwork data in the results and discussion section. They are based on a view of care as a relational, political, and ethical practice, and of autonomy as inherently relational, highlighting how both concepts emerge together.

2.4.1 Care as Empowerment

Care as empowerment aligns with the principle of autonomy through interdependence. Rather than being a passive or domestic task, care becomes a strategic means of organising, mobilising resources, and navigating relationships to build collective resilience. This reflects what Gregoratti et al. (2024) describe as 'resilience from below', a form of endurance and transformation cultivated through everyday care practices, particularly outside formal institutions.

In this framing, care is not simply reactive; it is a generative force that reshapes life in the face of adversity (Gregoratti et al., 2024). Women's care practices in marginalised communities often extend beyond state programs, grounded instead in local knowledge, resourcefulness, and relational networks. For example, Syhre and Brückner's (2018) study on urban agriculture in Nairobi illustrates how cultivating land functions as an act of care that links the self with family, community, and the environment. One participant emphasised that being an urban farmer involves a strong sense of responsibility and attentiveness, underscoring how urban agriculture becomes a source of resilience and empowerment.

Gregoratti et al. (2024) argue that centring care in daily life challenges neoliberal understandings of resilience as an individual, self-managed recovery. Instead, care-based resilience depends on trust, interdependence, and shared responsibility, foundations that reflect feminist values of collective empowerment (Gregoratti et al., 2024; Lawson, 2007). While neoliberal discourse often relegates care to the private realm, feminist scholars demonstrate how care operates in public spaces, through

agroecology, grassroots organising, and urban gardening, as acts of resistance and survival (Syhre & Brückner, 2018). These relationships, built on trust and mutuality, constitute vital forms of social capital in times of crisis (Lawson, 2007).

Dizon and Ortega (2024) further illustrate how women activate these networks to organise collectively and confront threats to their livelihoods. These struggles produce 'resilience from below', grassroots strategies for confronting structural inequality. Particularly in the Global South, care work led by marginalised women becomes a shared strategy of empowerment, enabling collective capacity for action. In this light, care is not a withdrawal from autonomy but a foundation for it. Through mutual responsibility and transformative solidarity, care fosters the conditions in which people, especially women, can act and organise collectively.

2.4.2 Care as Knowledge

Critical pedagogy of place is a concept directly connected to care as knowledge. This concept aims to reimagine the ecological relationship between humans and places, and it includes a strong focus on decolonisation (Greenwood, 2013; Gruenewald, 2008). Gruenewald (2008), challenges the idea that education should primarily support individualism, an idea that critical pedagogy seeks to transform. Whether it's referred to as community-based education or environmental and ecological education (Greenwood, 2013; Gruenewald, 2008; McInerney et al., 2011), critical pedagogy of place values *"learning from and nurturing specific places, communities or regions"* (Gruenewald, 2008, p.309). This recognition of the specific needs of others; particularly those of places, communities or regions, forms part of the ethics of good care (Puig de la Bellacasa, 2017; Tronto, 1993). Good care centres on responsiveness, where attending to needs form the foundation for future action (Davis, 2022).

A central idea within this pedagogy is reinhabitation, which aims to restore and reimagine people's relationship with their environments through a decolonial lens (Greenwood, 2013). Reinhabitation calls for new models of engagement with places we inhabit and those we pass on to future generations. As Davoudi and Ormerod (2025) argue, care is a practice grounded in justice, relationships, and mutual responsibility. These values resonate with the critical questions posed by critical pedagogy of place, essential for cultivating place-based awareness (Greenwood, 2013; Gruenewald, 2008):

"What happened here (historical)? What is happening here now, and where is this place heading (socioecological)? What should happen here (ethical)?" (Greenwood, 2013, p. 218)

Reflecting on the interconnections of past, present, and future enhances our awareness of generational legacies and our responsibilities to those yet to come. This temporal orientation resonates with Davis's (2022) notion of nurture in care ethics, an ethic that emphasising tangible care responses oriented towards future needs.
For example, McInerney et al (2011) demonstrate in an Australian context how environmental and community-based education enhances children's awareness of

local environmental and social issues, situating them in *"a political process of understanding and shaping communities."* (p.12).

Similarly, Greenwood (2013) stresses the importance of learning to listen, to human and nonhuman voices, histories, and ecologies, arguing that modern society has largely lost this capacity. This capacity to listen is fundamental to care as knowledge, as Davis (2022) emphasises: good care arises from discovery, understanding, and responding to needs from the bottom up, rather than assuming or imposing predetermined solutions. This aligns with Greenwood's (2013) assertion that attentive listening is vital to realising critical pedagogy of place. Puig de la Bellacasa (2017) further expands this ethic to include both human and nonhuman beings, highlighting the collective and complex nature of care ethics. The educational challenge is thus to develop the ability to listen attentively to both human and nonhuman worlds (Greenwood, 2013).

Finally, Tronto's (1993) assertion that care *"also has a context and a location"* (p. 154) reinforces that care is always embedded in material, social, and cultural settings. Care is enacted differently across diverse circumstances and practices, reflecting the situatedness or essential component of place and locality to care as knowledge.

2.4.3 Care as Political Action

Care is not a passive or private act but a transformative, inherently political practice demanding collective responsibility. Both The Care Collective (2020) and Tronto (2013) emphasise that care involves relationships we all depend on, regardless of economic status. Yet, society tends to conceal care work, even as the wealthy depend deeply on it. This paradox arises because autonomy is culturally framed as masculine and highly individualistic, opposing care's relational, interdependent nature. Consequently, care is often relegated to the private, domestic spheres (The Care Collective, 2020; Tronto, 2013).

Tronto (2013) argues that care should become a central concern in democratic governance. Recognising care as political action means expanding its visibility and value beyond individualistic, profit-driven ideals, allowing societies to create more time and space for care. In doing so, people, places, and institutions can be viewed as agents of care, actively fulfilling tangible responsibilities.

In the context of this case study, focusing on informal, marginalised neighbourhoods in Medellín, home to many displaced residents due to Colombia's long-standing violence, I apply the concept of care as political action to women and displacement.

Glockner et al. (2024) examine a Mexican region deeply affected by displacement from violence. They argue that care becomes a form of political resistance in such contexts. Echoed by The Care Collective (2020), they assert that care must be pushed out of private realms into the shared environments we all inhabit. For these displaced Latin American women, care is political in all its forms, expressed through the concepts of *re-existencia* and *cuerpo-territorio*. The former captures how these women rebuild life and meaning after violence, using care as an

alternative to domination to protect their territory (Glockner et al., 2024). The latter functions both as a method and an epistemological approach grounded in situated, embodied knowledge (Zaragocin & Caretta, 2021).

Cuerpo-territorio, originating from Latin American feminist praxis, the concept integrates epistemology and method by emphasising the inseparable relationship between body and territory (Zaragocin & Caretta, 2021). This approach decolonises geographic epistemologies by centering local, lived experiences and communal knowledge, highlighting how care extends beyond the personal to collective territorial struggle.

Care here is territorial, intertwining body, land, and community, and serves as a tool for mobilisation. Women confront power and inequalities through 'micro-geographies': small, everyday acts of care and resistance that rebuild connections. Glockner et al. (2024) describe this as communal practices that fuel demands against the state, its institutions, and dominant norms.

This narrative emphasises that care is neither passive nor confined to the private sphere, but inherently political. The resilience manifested in *re-existencia* illustrates how everyday practices of care contribute to the construction of alternative futures that resist perpetuating cycles of violence, violence that these women have personally endured. For instance, Glockner et al. (2024) highlight a case of a woman who, despite experiencing domestic, sexual, and economic violence, actively resisted by cultivating spaces of safety and care for herself and her children amidst persistent hardship.

Ultimately, care and collectivism represent a radical alternative to violence for displaced women. Care demands political transformation and must be made visible, debated, and integrated into public life, no longer confined to private spheres.

2.5 Reflections on the Framework

This theoretical framework has conceptualised care as a political, relational, and situated practice, often confined to the private and apolitical sphere, yet crucial in reimagining climate planning. In contexts of marginalisation and structural inequality, a 'care-full' approach to resilience emphasises the transformative power of everyday acts of care. Drawing on feminist perspectives, autonomy is understood as relational: the ability to act emerges through networks of interdependence, rather than in isolation. This reframing aligns care and autonomy, suggesting that interdependence can be a source of strength and action.

The intersection of care and autonomy has been explored through three lenses. First, care as empowerment highlights how resilience can emerge from bottom-up, everyday practices. Second, care as knowledge, rooted in critical pedagogy of place, emphasises reinhabitation and a decolonial reimagining of human-environment relationships. Third, care as political action, as articulated by displaced Latin American women, reclaims care from the private realm, asserting it as a transformative political force. Here, autonomy must be freed from its masculine, individualistic framing to recognise the embodied, territorial struggles encapsulated

in the concept of *cuerpo-territorio*. Finally, the idea of *re-existencia,* the ways in which marginalised women rebuild life and meaning after violence, offers a powerful entry point for empirical analysis. This framework will guide the interpretation of female leadership, knowledge practices, and daily strategies for navigating environmental risks and climate injustice.

3 Methodology and Case Study

The main aim of this research is to investigate how *lideresas*, who live in informal and marginalised neighbourhoods of Medellín, navigate environmental and social challenges. To investigate this topic I chose to conduct a field study in Medellin, Colombia. For almost three months, I was in the field, using qualitative methods to further deepen my understanding of their leadership, roles, practices and environments of knowledge and strategies. Below I present the method, by first outlining the context and background, by dwelling deeper into the case of the hillslopes of Medellin.

3.1 Case Study: Informal Hillslopes of Medellín

This case study is situated in the informal, higher-altitude hillslope areas of Medellín, specifically Comuna 3 and Comuna 8, in Colombia. In this geographical context, residents, particularly women, have long faced layered challenges stemming from violent displacement, socio-economic marginalisation, and environmental and climate-related risks. As this thesis explores how *lideresas* in these marginalised neighbourhoods navigate everyday vulnerabilities and environmental threats, the following section provides a concise historical, political, environmental, and gendered overview of Medellín. This contextual grounding is necessary to understand the methodological approach and, later, the findings and analysis.

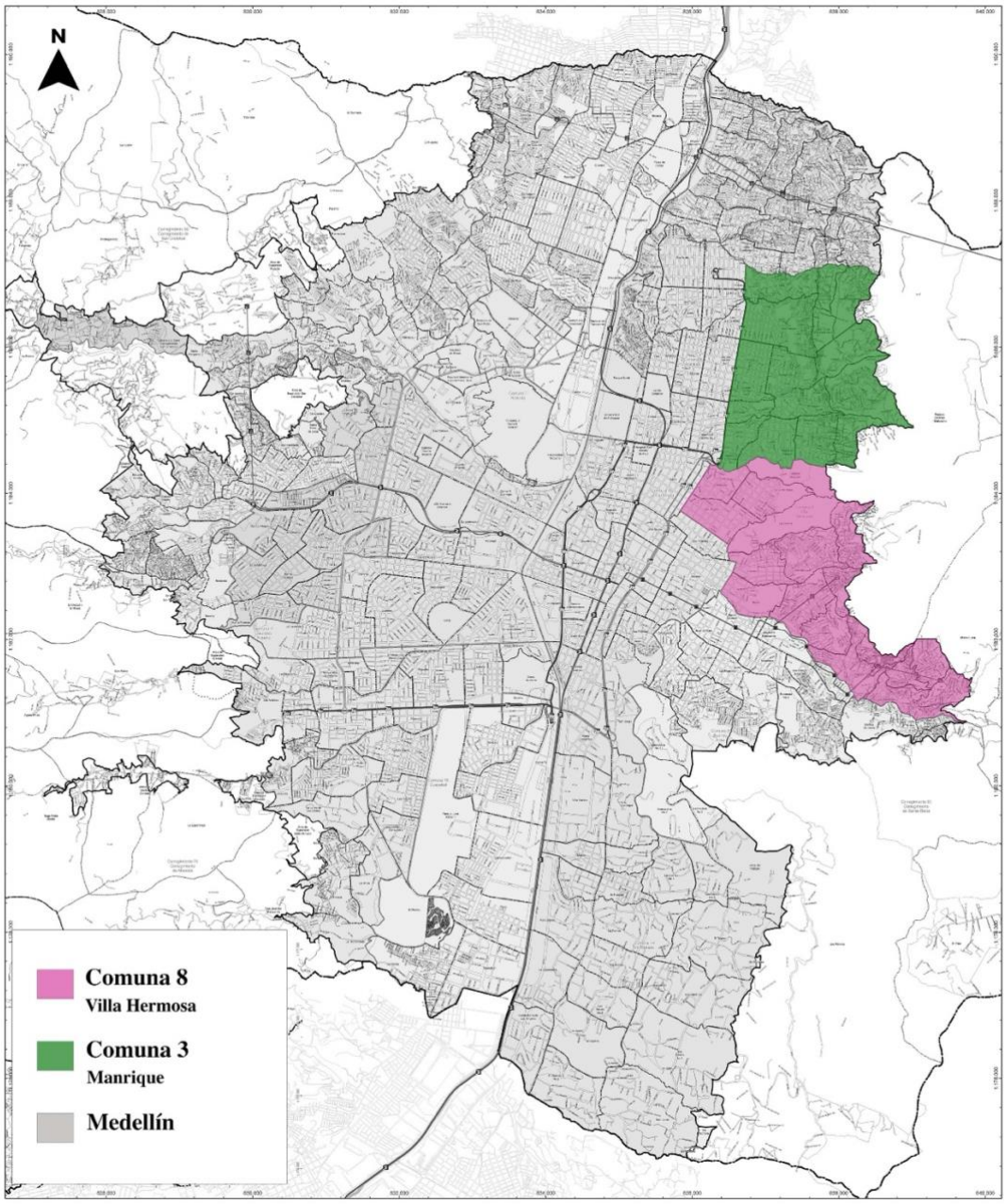


Figure 2. Map of Comuna 3 and 8 in Medellín. Adapted and edited by Hanna Marshall from *División Político Administrativa Urbana Distrito de Medellín 2023* (Alcaldía de Medellín Geoportal, 2023).

3.2 From Displacement to Urban Informality

Colombia has a long and complex history of internal displacement, primarily caused by decades of armed conflict involving guerrilla groups, paramilitaries, and the national army (Internal Displacement Monitoring Centre, 2020; López, 2019; Mojica & Eugenia, 2013; Ocampo-González et al., 2018). By 2021, Colombia had the second-highest number of internally displaced persons (IDPs) in the world, with an estimated 5.6 million people affected (Internal Displacement Monitoring Centre, 2020).

Medellín, today a city of approximately 2.75 million people (Municipality of Medellín, 2024), has become a major receiving city for displaced populations, absorbing a large share of those fleeing rural violence. Estimates suggest that between 400,000 and 500,000 IDPs currently reside in the city (López, 2019; Municipality of Medellín, 2024), with around 89% of all IDPs in Colombia having migrated to urban areas (García Ferrari et al., 2018; Internal Displacement Monitoring Centre, 2020).

Unable to access formal housing and services, many displaced families settled on Medellín's steep hillslopes, constructing homes through informal means. These self-built neighbourhoods thus emerged very fast, often without adequate infrastructure or state support, which contributed to urban sprawl, while deepening inequality, and reinforcing socio-economic marginalisation (Mojica & Eugenia, 2013; Ocampo-González et al., 2018). A comparative study of one informal and one formally recognised neighbourhood in Comuna 8 highlights that although the city administration and public utility providers have extended essential services, such as electricity, water, and wastewater systems, to many informal hillside communities, the coverage and quality of these services have not kept pace with the neighbourhoods' rapid growth, particularly in high-risk areas. Furthermore, the study shows that while the formal neighbourhood also faces risks of flooding and landslides, it benefits from full access to critical infrastructure, whereas the informal neighbourhood lacks basic services such as water and sanitation. This contrast illustrates the structural inequality in service provision: despite facing similar environmental hazards, the level of infrastructure remains starkly divided (Purwar et al., 2024).

This dynamic is particularly visible in **Comuna 3 (Manrique)** and **Comuna 8 (Villa Hermosa),** the areas explored in this study. Both comuna's are home to large populations of displaced residents and are composed of 20 and 18 neighbourhoods respectively (Patiño-Jaramillo, 2017; Purwar et al., 2024). These areas face high levels of poverty, informality, and climate-related vulnerabilities, making them critical sites for understanding the intersections of displacement, marginalisation, and community-based resilience.

3.3 Urban Transformation in Medellín: Innovation in the Face of Inequality

Since the height of cartel-related violence in the 1980s and 1990s (Garcia Ferrari et al., 2018), Medellín rebranded itself from the 'murder capital' to the 'most innovative city' (Franz, 2017; López, 2019; Valencia Londoño et al., 2023). This transformation has been driven by a strong political will to radically reshape the city through urban planning, security, and economic revitalisation (Franz, 2017; Garcia Ferrari et al., 2018). However, this shift toward a financialised, market-oriented model of urban development has prioritised economic investment over social equity and environmental sustainability (Franz, 2017; Garcia Ferrari et al., 2018).

Despite international recognition, structural inequalities persist. As of 2012, over 27% of the population lived below the poverty line, making Medellín the most unequal city in Colombia (Franz, 2017). While affluent districts benefit from targeted investments, hillside comuna's, home to working-class and displaced populations, remain marginalised and underserved (Franz, 2017; Romero Sánchez & Romero Sánchez, 2019). Economic growth has primarily benefited the city's elites, while structural social and environmental concerns remain unaddressed (Ariza-Montobbio, Carrión, & Delgado-Ramos, 2022; Franz, 2017).

Residents of informal, high risk areas are often excluded from resilience planning due to lacking legal recognition, all while authorities favour private-sector partnerships (Ariza-Montobbio et al., 2022) This has reinforced a growth-oriented agenda that sidelines dignified living conditions for the urban poor. Disaster risk management in the city has been criticised as reactive, with relocation strategies potentially disrupting ecosystems and social ties. As a more just and sustainable alternative, Ariza-Montobbio et al. (2022) advocate for inclusive climate education that enables all stakeholders to communicate risks and responses more equitably.

Ultimately, Medellín's celebrated transformation masks the continued structural inequalities. While praised for innovation, its strategies often overlook the historical and systemic conditions shaping everyday life in marginalised communities, exposing a critical gap between the city's marketed image and its lived realities.

3.4 Environmental Vulnerabilities and Risks

Climate change is a major driver of disaster risk in Latin America, where over 80% of the population lives in urban areas and more than one-fifth in precarious informal dwellings (García Ferrari et al., 2020; Purwar et al., 2024). These conditions have contributed to a disproportionately high number of climate-related disaster deaths in the region. In Medellín, where more than half the population live in informal neighbourhoods (Hernández-García & Beza, 2022), the risk of landslides is especially acute. Between 1880 and 2007, over 6,750 landslides were recorded (Nieto et al., 2025), and as of 2012, more than 44,600 informal households were identified as being at risk (Smith et al., 2020).

Heavy rainfall and flooding further exacerbate environmental vulnerabilities, particularly in informal neighbourhoods with limited access to critical infrastructure. A comparative study of landslide and flash flood responses in formal and informal neighbourhoods, including Comuna 8, found that while the formal settlements benefited from greater mobilisation and infrastructure support, informal areas were more self-reliant yet constrained by resource scarcity (Purwar et al., 2024). To further exacerbate the environmental vulnerability and marginalisation, residents in informal risk-prone neighbourhoods are frequently excluded from disaster planning, due to a lack of legal recognition, this has led to reactive disaster management, which has been critisied for failing to integrate both ecological systems and the community's social networks (Ariza-Montobbio et al., 2022)

3.5 Gendered Vulnerabilities and Women's Agency

Gender is a central factor in debates of climate change and its consequences. The impacts of climate change are not gender-neutral; women have been shown to experience disproportionate effects. In Latin America, gender inequality manifests in multiple ways, including limited participation in decision-making and unequal access to resources (Flores et al., 2025). Without gender-responsive climate policies, these inequalities are likely to worsen (Fruttero et al., 2024). In Colombia, the integration of gender into climate policy remains limited (Mahecha Groot et al., 2024).

Importantly, the framing of gender in climate policy matters. Simply including a gender perspective does not ensure that policies will sustain life or support just climate action. What is needed is a broader political and socio-economic transformation, one that challenges the dominant development paradigm of sustainable development (Gr Jurado, 2021). In understanding climate vulnerability in relation to women living in informal hillslope settlements, a recent study in Medellín found that female-headed households were more socially vulnerable in neighbourhoods already exposed to flooding and landslides (Alzate-Navarro & Castro-Díaz, 2024). Moreover, in cities such as Medellín, young and older women from marginalised neighbourhoods still show a strong defence of their neighbourhoods, by improving construction or fighting for water and electricity. A recent study investigated the upper part of the hillslopes of Comuna 8 in Medellín due to the presence of grassroots organisation among women's collectives, work that often remains in the shadows of male-dominated practices. The study found that gendered inequalities were nuanced, with older women without formal education and young mothers facing greater barriers than other women with access to higher education or more stable life conditions (Saldarriaga Escobar & Rivera Flórez, 2025).

This background has outlined the historical, environmental, and gendered dimensions shaping the informal hillside neighbourhoods of Medellín. These intersecting issues, displacement, informality, environmental risk, and gender inequality, form the foundation for the fieldwork described in the following section, which begins with a discussion of my ontological and epistemological positioning.

3.6 Methodology

3.6.1 Ontological and Epistemological Positioning

My ontological position is grounded in feminist social constructivism, which I adopt as a critical lens for understanding how meaning, knowledge, and social realities are co-produced through lived experience, discourse, and power relations. From this perspective, reality is not passively received but actively shaped by interpretation, perspective, and context. A helpful metaphor is that of a balloon: what reality contains depends on what we fill it with, technologies, language, norms, and values, all shaped by social and political forces (Wenneberg, 2001).

At the same time, this research acknowledges the material realities that shape the lives and leadership practices of the *lideresas* at the centre of this study. Elements such as flooding, steep and eroding mountain slopes, and the lack of critical infrastructure are not merely background conditions, they actively structure and constrain daily life. Recognising these material conditions alongside social constructions calls for a more integrative feminist ontology, one that allows materiality to take space in the analysis rather than be treated as external or secondary.

Thus, this study adopts a feminist social constructivist ontology, in which the physical and the social are seen as co-constitutive. Drawing on Harding's (1993) work, I understand epistemology as situated knowledge, where both natural and social relations must be examined to make sense of complex phenomena like climate change and environmental vulnerability in informal neighbourhoods of Medellín.

From a feminist epistemological standpoint, researching the lives and leadership of women in marginalised urban spaces contributes to a more plural and inclusive understanding of knowledge (Harding, 1993). The concept of epistemological pluralism, as discussed by Nightingale (2015), is especially relevant. She argues that climate change adaptation requires attention to both biophysical processes (e.g., increased rainfall, eroded hillslopes) and socio-political dynamics (e.g., informal governance, marginalisation). While much research tends to foreground biophysical dimensions, Nightingale (2015) highlights the impossibility of fully disentangling the material from the social. Climate change must be understood as both a physical and a political phenomenon.

This approach calls for methodological openness to different ways of knowing and frames the experiences of marginalised communities not as peripheral but as central to understanding adaptation and resilience. Feminist perspectives thus provide a valuable ontological and epistemological grounding for research that seeks to illuminate how climate change is experienced, interpreted, and acted upon by *lideresas* in contexts of socio-environmental vulnerability.

In summary, this research draws on feminist and constructivist standpoints to recognise both social and material realities as constitutive of everyday life. This dual lens enables an exploration of *lideresas* not as isolated anecdotes but as essential contributions to understanding how climate change is conceptualised and responded

to. Their insights, shaped by both their lived physical environments and their socio-political contexts, offer knowledge about capacities for action that are often overlooked by dominant narratives.

3.6.2 Qualitative Research Design

The decision to use qualitative methods reflects a broader choice between depth and breadth. While quantitative methods often prioritise generalisability, qualitative methods, such as interviews, field visits, and participation, offer a depth of understanding that surveys alone cannot achieve. These methods allow participants to guide and shape the conversation, facilitating a more nuanced exploration of their perspectives (Kaijser & Öhlander, 2011).

A qualitative approach is grounded in situated and contextual knowledge, providing space for unexpected themes to emerge and specific stories to unfold, while also allowing for a flexible research structure. Its epistemological foundation is based on dialogue, talking and listening, forms of interaction that quantitative methods cannot generate. This research aims to explain social change, organisation, and the processes of female leadership in climate change, which requires a deep understanding of complex topics within their contextual realities (Mason, 2002).

3.7 Methods

3.7.1 Case selection and Sampling Strategy

A case study design involves analysing a specific case, through what this constitutes can vary depending on the research focus. Often the cases are defined by geographic boundaries such as a community or a neighbourhood (Clark et al., 2021). In this study, the case consisted of several neighbourhoods primarily located in Comuna 8, Medellin with one neighbourhood located in Comuna 3. These neighbourhoods lie in Medellin's "urban-rural" border zone/area (see Figure 2)

Case studies typically rely on qualitative research methods, as does this study. In Medellín, data were collected through interviews, participation in gathering and workshops and informal field visits. While findings from case studies are typically not generalisable to broader populations, they provide rich, in-depth insights and allow researchers to develop theory based on the data. (Clark et al., 2021, p.350, 357).

Given the timeframe for the fieldwork, it was necessary to make strategic and deliberate choices about the number of interviews and events I could attend. This selectivity aligns with the study's qualitative and case-based focus.

As Mason (2002) emphasises, sampling in qualitative research is both strategic and practical. The sample must enable collection of relevant data and provide a meaningful empirical foundation. Purposeful selection and clear justification of choices are therefore essential. From a social constructivist perspective, the empirical world consists of people, groups, organisations, and their activities (Mason, 2002). Since this study aims to explore *lideresas* perspectives, an explicit gendered lens guided the sampling, making gender the primary selection criterion. However, the sample is not intended to be representative or for broad generalisation. Instead, it was

designed to capture a relevant range of experiences and perspectives within the broader social context (Mason, 2002). It is important to note that access and opportunity shaped the sampling frame. Defining this frame and selecting participants was challenging, especially as an outsider without many pre-existing contacts.

To reach the *lideresas*, I used snowball sampling. Initially, a PhD student, Luis Alejandro Rivera Flórez, with long-term experience in a neighbourhood in Comuna 8, introduced me to his former professor Lina María Saldarriaga Escobar, who then connected me with a *lideresa*. The same PhD student also facilitated contact with a trusted local organisation Corporacion Juridica Libertad, which introduced me to several other *lideresas*. Later during fieldwork, I met two local engineering students, a woman and a man, Estefania Quintero Saldarriaga and Miguel Angel Castaño Benítez, both raised in Comuna 8, who helped me gain access to informal gatherings, meetings, and field visits. They accompanied me to workshops and introduced me to additional female leaders. My participation in a workshop series in Comuna 3 was made possible by a woman, Laura Maya Restrepo, working at a local organisation. After inviting me to visit a neighbourhood in Comuna 3, she put me in contact with another team of facilitators who welcomed me to all three sessions of the workshop series.

I ground my research in feminist social constructivism, which shapes how I understand knowledge, meaning, and social realities. In this context, it is crucial to acknowledge that I could not have carried out the methods that follow; interviews, workshops, field visits, without the support and trust of key individuals who acted as gatekeepers. As Caretta (2025) emphasises, access is never automatic. It is relational and depends on trust, mutual respect, and ethical responsiveness.

These gatekeepers not only made snowball sampling possible but also opened doors to more intimate spaces and gatherings that I would not otherwise have reached. Entering the field, and at times choosing not to, was a reflexive and relational process. It aligns with what Skop et al. (2021) describes as a feminist ethos of care in fieldwork: a recognition that access is co-constructed through trust, dialogue, and ethical responsibility. Following this approach, I see these individuals not as neutral facilitators but as collaborators who helped shape this research.

With their consent, I have chosen to name them here in recognition of their care, their trust, and their presence throughout the process. This choice reflects the call by Skop et al. (2021) to "*foster and sustain more equitable relationships in our research collaborations"* (p. 2) and supports their vision of an ethos of care, where values such as friendship, connection, and responsibility are made visible and integral to the research process.

Lastly, before explaining the methods used, I would like to describe how I identified the *lideresas,* women holding informal leadership roles, as part of the case selection and sampling process. These women were located through local recommendations and by maintaining close contact with my local networks, including those aforementioned, as well as others, throughout the fieldwork period.

3.7.2 Interviews

Qualitative interviews offer a flexible and dynamic format, often allowing interviewees to shape the direction of the conversation, while researchers can show *"a greater interest in the interviewee's point of view"* (Clark et al., 2021, p. 425). This approach also permits adapting the interview guide as the discussion progresses, often resulting in richer and more detailed responses (Clark et al., 2021, p.425).

There are different ways to conduct interviews, and Clark et al. (2021, p. 426) distinguish between two main types: semi-structured and unstructured interviews. Semi-structured interviews provide some flexibility but follow a set of predetermined questions to ensure key topics are covered, resembling a natural conversation. In contrast, unstructured interviews are more open-ended and are frequently used in ethnographic research.

In my research, I used a flexible interview 'checklist', focusing on specific themes without rigidly asking every question to all participants. This approach can be described as a hybrid between semi-structured and unstructured interviews, leaning towards the unstructured end of the spectrum. I encouraged participants to share their lived experiences freely, which led to interviews exploring diverse themes in depth, for example, some conversations centred more on organic urban agriculture, while others focused on flood risks, water management, poverty, or local governance. Clark et al. (2021, p.427) emphasise that these interview types are not strict opposites but exist on a continuum that allows for adaptability.

When selecting participants, I was intentional in highlighting the importance of their voices, grounded in their personal experiences and roles within the neighbourhood. Whenever possible, interviews were conducted in participants' own environments to create a comfortable atmosphere and accommodate their needs. However, this was sometimes challenging due to noisy surroundings and the difficulty of finding quiet spaces. These practical considerations, clarifying participant relevance and fostering a calm setting, are crucial for building trust between the researcher and the participant (Clark et al., 2021, p. 431).

This flexible, context-sensitive approach, combining elements of both semi-structured and unstructured interviews, enabled me to capture diverse narratives rooted in lived experience, consistent with the feminist and place-based perspective of the research. The interviews were recorded with participants' verbal consent, nevertheless I also took notes during the interviews as a backup in case of technical issues, especially given the sometimes noisy environments. Recording allowed me to focus fully on the conversation, which was particularly important since Spanish is my third language.

3.7.3 Participation in Workshops, Gatherings and Field Visits

"To be present in peoples everyday life, and observe different environment and what people say and do are elements of the observational method"

(Kaijser & Öhlander, 2011, p.113)

This quote highlights the importance of direct, on-the-ground engagement in qualitative research. Curiosity plays a crucial role in qualitative research, particularly in fieldwork. It becomes part of the data collection process, as it drives the researcher to explore and understand the world through direct engagement. Observational methods are particularly useful for gaining knowledge about everyday life, about routines, interactions, and how spaces are organised and navigated in specific contexts. According to Kaijser and Öhlander (2011), this type of situated, embodied knowledge would likely be inaccessible without the researcher's presence and willingness to explore.

In this study, observational and participatory methods were used as a complement to the primary method of semi-structured and unstructured interviews. These methods provided insight into everyday practices, activities, and initiatives within Comuna 3 and Comuna 8, elements that may not have emerged as clearly in interviews alone (Kaijser & Öhlander, 2011).

A key strength of this approach is the opportunity it provides to be present across multiple field sites within the same case study (Kaijser & Öhlander, 2011). During my fieldwork, I was invited to join various community activities and workshops, which became valuable sites of data collection.

In **Comuna 3**, I was invited by Laura Maya, a local contact I met through university networks, to attend a series of workshops focused on the water cycle, local ecosystems, and local environmental knowledge. These workshops, attended by *lideresas* (though open to male participants), provided valuable insights into how environmental education intersects with female leadership.

In **Comuna 8**, the snowball sampling strategy connected me with key gatekeepers (see 3.3.1 'Case Selection and Sampling Strategy'), which lead to broader access. I participated in informal gatherings on urban agriculture, field visits to community gardens, *huertas*, and a formal municipal workshop. This resulted in a richer, and more varied empirical data in Comuna 8, though it introduced a degree of imbalance in the volume and diversity of the data collected between the two comunas.

Together, these events constituted a form of participatory data collection, aligned with the research aim of exploring the roles of *lideresas* in responding to environmental challenges and contributing to climate mitigation, adaptation, and justice. Through active participation, I was able to observe how these women engage with environmental issues in practice, beyond the narrative accounts provided in interviews.

One key advantage of this activity-based approach is its naturalistic emphasis. Unlike interviews, which typically remove participants from their everyday contexts, observational participation allows the researcher to engage with people in their usual environments (Clark et al., 2021). It also creates space for exploratory discovery, where unexpected moments can arise, and the researcher must use judgement to decide what is relevant. This is what Kaijser and Öhlander (2011) refer to as pragmatic systematisation, a conscious form of improvisation guided by curiosity and openness.

I attempted to embody this by not only observing the *lideresas* but also engaging with their environments, the vegetable gardens, community centres, local streets, and even the sudden heavy rains during field visits. I also paid close attention to the *lideresas* themselves, observing their roles, actions, and presence in these community spaces.

Participant observation involves what Clark et al. (2021) call the embodied nature of experience, where the researcher becomes physically and emotionally involved through their continued presence in the field. This became particularly evident toward the end of my fieldwork when I was invited to a *convite,* a community volunteering day, in a neighbourhood in Comuna 8. I joined local residents in maintaining their vegetable garden and reforesting a nearby area. Although no *lideresas* were present that day, the experience marked a moment where I realised how deeply embedded I had become in the field.

3.7.4 Data Analysis

3.7.4.1 Transcription and Translation

In qualitative research, particularly when using interviews and participatory methods, language itself becomes a form of data. However, the process of transcription and translation is rarely straightforward. It involves navigating ambiguities and making interpretive decisions that influence how findings are analysed and presented (Lingard & Klasen, 2025). Translation is not a neutral or purely technical task; it requires cultural sensitivity and reflexivity. This became evident in my own research, where questions about whose knowledge is represented, and for whom, became particularly evident.

As I conducted interviews without an interpreter, I had direct access to participants' responses. However, as a European researcher, I recognise the limits of my cultural lens. While I understood the language, I could not always fully grasp the contextual and cultural nuances embedded in what was said. However, Hawkins et al. (2025) argue that bilingual or trilingual researchers often have an advantage, as they are better positioned to interpret data from within, rather than from the external perspective of a translator.

In multilingual research contexts like mine, decisions about how to transcribe and translate data are critical. Although tools like AI can enhance efficiency, Lingard & Klasen (2025) caution against over-reliance on them. Automated translations can miss meanings, subtleties, or culturally embedded expressions, and thus should be used with caution and complemented by human interpretation.

In my case, I used a combination of ChatGPT, DeepL, and my own knowledge of Spanish and English to translate and analyse the fieldwork materials. Interviews were first transcribed using the software "Transcriptor." I then carefully anonymised the content by removing personal references and place names before processing them through AI tools. For the workshop and participatory sessions, where fieldnotes were often written in a mix of Spanish, English, and Swedish, I relied more heavily on my personal understanding and contextual interpretation. I revisited and cross-checked translations by re-listening to the recordings to validate the meaning. Since I was both an interviewer and a translator, I took responsibility for interpreting the material with as much care and cultural awareness as possible.

3.7.4.2 Analytical Approach: Inductive

Analysing the fieldwork data was challenging, as it encompassed nearly three months of interviews and participatory activities. This complexity aligns with Nowell et al. (2017), who argue that data analysis is often the most complex phase of qualitative research.

I applied a combined inductive and thematic approach to the analysis. After initial rounds of reading, listening, and familiarisation with the raw material, I began identifying recurring patterns, particularly within the interview data, guided by themes linked to my research questions: Leadership Roles & Practices, Climate & Social Vulnerabilities, Local Knowledge & Strategies, Reflections on Justice & Recognition, and Care/Responsibility. This approach reflects the principles of thematic analysis, which offers flexibility across different epistemological frameworks and is often recommended for early-career researchers (Nowell et al., 2017).

To organise the data, I used colour coding to categorise transcripts and created digital mind maps to structure material from participatory events. Immersing myself in the data this way helped me identify connections to the concepts of care and autonomy, though the theoretical framework itself was developed after completing the fieldwork,

Following Clark et al. (2021, p.350, 357), an inductive relationship between data and theory is a key characteristic of qualitative research. Rather than applying a predefined theoretical lens, insights emerge during data collection and analysis. Theory, in this sense, does not only precede the research process but evolves alongside and after it. This inductive approach felt appropriate for my project, as I allowed the material to "tell a story" before drawing theoretical conclusions.

Moreover, the analysis was informed by a triangulated research design, incorporating multiple sources and methods. Triangulation, is based on the idea that researchers can combine different methods in order to confirm and support each other (Clark et al., 2021, p. 556, 558). In my case, triangulation involved combining interview data with insights from workshops, field visits, and informal meetings to address the research questions in a more comprehensive and grounded way.

3.7.5 Positionality and Reflexivity

When we accept that knowledge is socially constructed (as presented in my ontological introduction to this methods chapter), we begin to notice that knowledge is situated This is relevant to acknowledge when one does research of the voices of "others". (England, 1994; Rose, 1997). Therefore, in this ethical section of the methods, I present a reflexive section of my positionality and how I reflected on it throughout the fieldwork.

I entered the field in Medellín with limited familiarity with Colombian culture and history. Prior to arriving, I had spent six months in Mexico as part of a university exchange, where I began learning Spanish for the first time. With only half a year of formal and informal language exposure, I arrived in Medellín as a young, white, European master's student, shaped by Swedish and European academic traditions. Although I initially expected that a shared gender identity might foster connection

with the *lideresas* I met, I soon realised that our differences, cultural, linguistic, social, and historical, were more pronounced than I had anticipated.

Throughout my fieldwork, I developed a close and supportive relationship with an experienced female professor from Medellín. Our ongoing conversations became an important space for reflection, especially regarding the power dynamics and cultural gaps that shaped my interactions. We spoke openly about how I perceived the *lideresas*, as resilient, knowledgeable, and inspiring, yet also as "subjects" of my study, and how they, in turn, might have viewed me: foreign, academic, and institutionally supported.

One reflection she shared left a particular impression on me: that many women in these communities do not recognise their contributions to climate adaptation and resilience, in part because they remain less visible than men, who often take more prominent, technical, or formal roles. Yet, through actions such as intergenerational knowledge sharing or everyday care practices, women play vital roles in community resilience (Field notes, 15 February 2025).

This reflection resonate with Masson's (2014) fieldwork in India, where she examined local perceptions of climate change. Reflecting on gender and positionality, she posed a critical question: "*Are female researchers more legitimised to study women's issues simply because they are women?" (p.* 171). This dilemma becomes even more complex in cross-cultural research, particularly when Western female researchers engage with women in the Global South.

When I first arrived in Medellín, I carried with me experiences from gender- and migration-focused community work in the Netherlands and Sweden. At the time, I understood gender as a key lens for analysis. However, over the course of my fieldwork, my perspective shifted. I came to recognise how deeply interconnected gender is with other dimensions such as ethnicity, race, displacement, and class, factors that profoundly shape both identity and access to opportunities.

3.7.6 Ethical Considerations

Social research must adhere to core ethical principles, with the protection of participants from harm, whether physical, psychological, or emotional, being paramount (Swedish Research Council, 2017). In this study, I prioritised confidentiality by not including any names or even pseudonyms, choosing instead to fully anonymise the *lideresas* and their contributions. Field notes were stored digitally on a password-protected university cloud, while handwritten notes were kept securely at home. Although transporting the physical notes from Colombia was necessary, I took precautions to ensure they were not lost or accessed during travel.

Confidentiality, however, poses particularly challenges in case study research. Because I refer to specific areas of Medellín, there is a potential risk that participants might be indirectly identified through contextual information. To mitigate this, I avoided including any personal identifiers and was cautious in how I described local context, aiming to balance rich description with the ethical obligation to protect participants' identities.

Researcher safety was also a central ethical concern, particularly when conducting fieldwork in environments where personal risk was present (Clark et al., 2021). As a scholarship recipient through Sida, I signed a contract committing to prioritising my own safety while in the field. This sometimes meant declining invitations to events or meeting when I could not be accompanied. Such situations reflect the risks of lone working, (Clark et al., 2021), where researchers are more vulnerable in the absence of a team. To minimise risks, I ensured I was always accompanied by a trusted local Colombian contact, either a local student, researcher or community workers, who was familiar with the areas and its dynamics. Their presence offered both practical support but also increased safety.

In addition to confidentiality and safety, informed consent was an essential ethical principle in my research. Informed consent entails ensuring that participants understand the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any point without consequence (Clark et al., 2021).

However, obtaining informed consent is not always straightforward, especially not when participating in larger gatherings and group settings. In my case it meant attending events or activities or workshops with a large or shifting groups of actors. While I made a point of introducing myself, and my purpose to those I directly engaged with, it was not always possible to communicate these details to all attendees, due to the nature of the environment, for example in larger meetings. In smaller, more intimate settings, such as the regular workshop series in Comuna 3, typically involving 8-10 *lideresas*, I had the opportunity to introduce myself individually, and more personally. For the interviews, I obtained verbal consent after outlining the research aim, their rights and the voluntary nature of their involvement. I also made it clear how I was affiliated with Stockholm University and the support from Sida.

I deliberately chose not to request written consent, recognising that in a context marked by extreme historical violence, displacement, and distrust, the act of signing a document could evoke suspicion, particularly given my position as an inexperienced European researcher. Instead, I sought to reduce this suspicion and build trust through verbal consent and more relational engagement. This approach was further supported by the fact that I was introduced to participants through trusted local actors. As Sultana (2007) argues, ethical fieldwork is always contextual, relational, and embodied, guided by the specific dynamics of the setting and the people involved.

3.7.7 Limitations: Language, Access, and Trust in the Field

All research carries limitations. In this case study, many stemmed from my positionality as a researcher navigating a new linguistic and cultural context. As introduced earlier in the methods chapter, the most significant constraints related to language, access to participants, and building trust in the field.

The language barrier proved to be one of the most persistent challenges. As a native Swedish and English speaker, I had only recently begun learning Spanish during a six-month university exchange in Mexico. There, I was introduced to both formal

academic Spanish (which I refer to as "Spanish Spanish") and informal, everyday Mexican Spanish. When I arrived in Medellín, I was confronted with a new linguistic shift: the local *Paisa* dialect spoken in the Antioquia region. This transition reminded me of Gent's (2014) reflections on learning to adapt across regional varieties of Spanish during her fieldwork in Nicaragua:

"Learning how to speak Nica Spanish, which differs greatly from Spanish Spanish and again from Honduran Spanish, has been a challenge" (Gent, 2014, p. 49).

Just as Gent had to adapt from Honduran to Nicaraguan Spanish, I had to shift from my experience of formal and informal Mexican Spanish to understanding and communicating in Paisa Spanish. Despite these challenges, I chose to conduct interviews in Spanish to limit dependence on translation and foster more direct relationships, an approach also advocated, to emphasise the value of immersion in the local language for qualitative research (Clark et al., 2021).

However, my limited fluency inevitably influenced the depth of some interactions and, at times, may have hindered my ability to grasp subtle expressions or emotional nuances. This concern about representation is widely acknowledged in qualitative research involving second (or third) languages. As Gent (2014) notes, translation in research raises critical questions about responsibility and accuracy. During analysis, I decided to translate all my material into English, as I felt working directly with the Spanish transcripts would be too overwhelming given my limited training and solo research setup. While this helped me manage the workload, it likely reduced my capacity to fully interpret contextual meanings embedded in the original language.

Access and trust were also shaped by deeper cultural assumptions and power dynamics. One issue I encountered was related to perceptions of socio-economic background. Some participants assumed I came from a wealthy background or had been funded privately to conduct research in Colombia. I was transparent about my student status and explained that I had received a scholarship on the same terms as my peers. These candid conversations often helped shift perceptions and build trust, as they allowed participants to see me as an independent, resource-limited researcher rather than an outsider with privilege and a significant financial support.

Finally, it is important to reflect further on the challenges of access and trust, particularly when working with hard-to-reach populations, as I experienced throughout my fieldwork in marginalised communities. Building trust and rapport in such contexts can be complex, especially when the research involves communities marked by histories of oppression, displacement, or structural disadvantage. Gaining trust requires making participants feel respected and accepted, something that must be built gradually through personal and sustained interactions.

One way to facilitate this process is through the involvement of gatekeepers, individuals who can help researchers access marginalised groups (Lata, 2020). About halfway through the fieldwork, I mapped out my existing contacts and realised how crucial the support of local professors and students had been in enabling connections with the *lideresas*. In my fieldnotes from week five, I reflected on the difficulty of establishing myself as a young, foreign, European student. I felt I was constantly

navigating between different networks, while negotiating issues of trust, safety, and power dynamics.

Because of these challenges, I broadened my focus to include *lideresas* from additional neighbourhoods. For instance, I interviewed a *lideresa* from Comuna 8 who no longer lived in the area but had years of experience working there. After discussions with the female professor (as referenced in "Positionality and Reflexivity"), I came to understand that some of the tension I experienced was not only due to my outsider status and non-Latin American background, but also related to the broader social and historical context. These neighbourhoods carry legacies of displacement and marginalisation, which shape how outsiders are perceived, an insight also emphasised by Lata (2020).

This section has outlined the methodology and method of the case study in Medellin, presenting and reflecting on the two main qualitative methods, namely interviews and participatory fieldwork activities. A large emphasis was placed on the reflection on positionality, ethics and language, concerning data analysis, sampling and trust building with participants. In the following section I will begin presenting the results of the case study, combining the findings with interpretations, discussing the results in relation to the theoretical framework.

4 Results and Discussion

Before presenting the analysis, the table below offers a general overview of key fieldwork activities carried out in Comuna 3 and Comuna 8. This context helps situate the findings and support the interpretation that follows.

The table (see Table 1) shows a higher number of activities in Comuna 8, largely due to broader access enabled by snowball sampling. Eight interviews were conducted in Comuna 8, compared to one in Comuna 3. A full list of the interviews is available in Appendix A.

In Comuna 8, fieldwork included visits to several neighbourhoods, semi-structured interviews with *lideresas*, and participation in both formal and informal community gatherings. One *lideresa* had relocated from the comuna but was included due to her longstanding leadership experience and difficulty in accessing other participants. The fieldwork focused on upper-elevation neighbourhoods, which face heightened environmental risks such as landslides and flooding.

In Comuna 3, the primary focus was on a series of three participatory workshops held at a local community house, organised by a local NGO. These workshops addressed themes such as the water cycle, local ecosystems, and rainfall through interactive formats like group discussion, drawing, and visual media. I introduced myself to the *lideresas* and facilitators during the first visit and had initially planned to attend four sessions, but the final one was cancelled due to illness. Despite intentions to conduct follow-up interviews, the cancellation made this impossible.

Moreover, while a small number of men participated in community meetings and gatherings, the consistent and prominent presence of *lideresas* emerged as a clear pattern throughout the fieldwork. This justified the focus on female leadership in the analysis, not because men were entirely absent, but because *lideresas* were the primary actors shaping local adaptation efforts. For example, although both men and women were invited to participate in the workshop series, only *lideresas* attended.

This research is based on a single case study of two urban comunas in Medellín, Comuna 3 and Comuna 8. Their internal variation strengthens the case by highlighting diverse community dynamics and leadership responses to climate vulnerability. The findings are drawn from workshops, meetings, field visits, conversations, and interviews, analysed through the theoretical lenses of care, relational autonomy, and care as empowerment, local knowledge, and political action.

The analysis is structured into three sub-chapters addressing the following research questions:

1. How do women leaders, *lideresas*, in marginalised neighbourhoods in Medellín navigate and respond to the environmental and social challenges in their everyday lives?
2. What forms of local knowledge and/or strategies have they adopted to address these challenges?
3. What lessons can be drawn from their experiences to inform broader frameworks of climate justice in Latin America?

The following sub-chapters are structured around the themes that emerged from the data: “Navigating Female Leadership”, “Local Knowledge and Strategies as Embodiments of Care”, and “Justice and Recognition.”

Table 1. Fieldwork Timeline and Key Activities in Comuna 3 and Comuna 8 (Feb–March 2025)

Date	**Comuna**	**Activity**	**Location/Context**
February 8-March 21, 2025	Comuna 8	8 Interviews with 9 *lideresas*	After or before different gatherings, workshops, at a library. Negotiated access through key gatekeepers
February 21, 2025	Comuna 3	Field visit	Walking around, talking to the *lideresas* and one woman working closely with them, from an NGO. Same people and location as workshop series in the Comuna
February 25, 2025	Comuna 8	Meeting between local authorities and *La Junta Communal* on climate crisis and reconstruction	In one of the neighbourhood's local *Junta Comunal's* meeting space.
March 4, 2025	Comuna 3	Workshop 1 of the workshop series	Workshop series on the water cycle, local ecosystems, and rainfall. Activities included group discussions, drawing, reading, vocabulary building, and viewing visual materials (short clips and photographs).
March 11, 2025	Comuna 3	Workshop 2 of the workshop series	Content and format as in Workshop 1
March 15, 2025	Comuna 8	*Encuentro de los huerteros y las huerteras*	A community, informal gathering for *lideresas* involved in organic urban agriculture
March 18, 2025	Comuna 3	Workshop 3 of the workshop series	Content and format as in Workshop 1 & 2
March 18, 2025	Comuna 3	Interview	With a *lideresa*, who also attended the workshop series

March 21, 2025	Comuna 8	*Huerta* field visit	Local organic garden visit via a *lideresa* met during other activity
March 21, 2025	Comuna 8	Convite of urban agriculture and forest work	Participated in neighbourhood event with local students and resident researcher.
March 22, 2025	Comuna 8	Workshop of "SIATA"	Geoportal workshop, not women-only, but women made up nearly all attendees.

4.1 Navigating Female Leadership

Female leadership in climate-vulnerable and marginalised neighbourhoods illustrates how resilience is practiced from below through everyday acts of care. In this sub-chapter, I present my interpretation of how female leadership is enacted in the studied neighbourhoods, based on the reflections, actions, and expressions shared during fieldwork. I understand this leadership as shaped not only by necessity and emotion, but also by a deep relational autonomy, an autonomy rooted not in individual detachment but in collective responsibility and place-based ethics of care (Davis, 2022; Giraud, 2021; Lawson, 2007). In contexts where formal governance is absent or inadequate, such leadership becomes a form of political and emotional labour that responds to community needs, building resilience through embodied, everyday practices rather than institutionalised power. Drawing on the concept of 'resilience from below' (Gregoratti et al., 2024), I explore how care becomes leadership, anchored in the micro-geographies of daily life and sustained by an ethic of relational empowerment.

The everyday acts of effort, what Glockner et al. (2024) refer to as 'micro-geographies' or small practices, alongside the roles assumed by *lideresas* living in marginalised neighbourhoods, are crucial to understanding the dynamics of climate change. These women often take on leadership out of necessity, responding directly to the pressing needs around them. This responsiveness aligns with what Tronto (1993) identifies as a key component of the ethics of care: understanding and responding to the needs of others, rather than projecting one's own desires onto them. It involves actively listening and engaging with what others express and experience, a form of responsiveness that lies at the heart of care practice.

4.1.1 Micro-Geographies of Leadership and Relational Autonomy

The concept of 'micro-geographies' highlights how everyday, situated practices of care confront power structures and inequality. These practices strengthen the core of relational autonomy, the understanding that individuals do not act in isolation, but through networks of interdependence (Glockner et al., 2024; Mackenzie & Stoljar, 2000; Nedelsky, 1989). Within this framework, care is not the opposite of autonomy but its condition (Davis, 2022; Giraud, 2021; Lawson, 2007; Tronto, 1993;). Receiving care is not a sign of failure, but a necessary foundation for one's ability to act (Giraud, 2021). As Puig de la Bellacasa (2017) notes, care is often asymmetrical and not always reciprocal, but as long as it does not silence or erase the care-receiver, it supports a meaningful form of autonomy.

One *lideresa*, formerly a resident of Comuna 8 but now displaced due to urban violence, described how women have "*brought their struggles into the city's conversation"* (Interview 2). In a neighbourhood with less than 30 years of history, she explained how *lideresas* have taken on informal roles as geologists, engineers, architects, and social workers, solving problems by building roads, paths, parks, and educational spaces. "*Through empirical knowledge, we have transformed our territory,*" she said. She also framed how planning from the city's official discourse is very "horizontal", expanding by critiquing how its "produce, produce, produce". What stood out most was her insistence that planning must also "*recognise those who are already inhabiting [the territory].*"

This example illustrates how this female leadership challenges the individualistic framing of autonomy. I see their actions as relational and rooted in collective knowledge. By criticising top-down planning logics and affirming lived experience as a valid form of expertise, the women leader (Interview 2) positions care and recognition as essential to just urban development. Her narrative shows that autonomy does not mean acting alone, but acting together, and that emotional and territorial investment are crucial to grassroots action.

The same *lideresa* (Interview 2) introduced the concept of *la juntancia,* a form of informal, community-based governance that I encountered throughout the fieldwork. Through this model, *lideresas* collectively confront climate-related risks, inequality, and institutional neglect. Another *lideresa* from Comuna 8 (Interview 1), whose neighbourhood suffered a torrential flood in 2020, recounted how she lost everything material, surviving her third displacement, first due to conflict, then violence, and now environmental disaster. She received limited government support, only a slightly elevated minimum-wage job. In response, the local *junta* mobilised to provide housing and assistance, demonstrating care as both emotional and material support.

Another woman reflected on her role within the *junta comunal:* "*I'm not lazy about going to the council, to the departments, knocking on doors, and bringing help back here."* (Interview 4). She explained how women raise funds by selling food, mobilising resources through informal channels when institutional support fails. These stories reflect how 'micro-geographies' of leadership operate not through formal authority, but through persistent, caring action in the face of hardship.

To understand the emotional and personal foundations of this leadership, it is essential to recognise that many *lideresas* are also heads of household, often navigating leadership in the absence of male partners. During a visit to a local organic garden, one *lideresa* described this reality and how it shapes her role in the community (Interview 9). In another interview, another *lideresa* stated: "*Once you have a child, it kind of wakes you up… I have to get out of this, for the children… it makes you move"* (Interview 3). These statements reveal how care responsibilities are deeply entwined with political action. For many of these women, motherhood becomes a catalyst for community engagement and leadership. Their caregiving extends from their families into the broader community, reinforcing leadership not as authority, but as emotionally driven responsibility.

These three empirical cases show how female leadership in Medellín's marginalised neighbourhoods has evolved over time. *Lideresas* have assumed unofficial roles, acting as geologists, urban planners, and architects. They also organise collectively through *la juntancia*, an informal form of governance rooted in relational autonomy and shared responsibility.

This form of leadership challenges dominant planning paradigms. Rather than following the *"horizontal"* logic of institutional planning, focused on production and growth, it is grounded in care for those already inhabiting the territory. Through everyday acts of maintenance, advocacy, and material support, these women enact 'micro-geographies' of leadership that bring community concerns into the city's public conversation. Their leadership becomes especially visible when formal institutions fail, such as in the aftermath of environmental disasters, where they mobilise resources, provide shelter, and

rebuild collectively. I interpret their leadership thus emerging from necessity but being sustained by care. It is not only a response to absence, but a proactive, place-based practice that redefines what it means to lead under conditions of vulnerability and exclusion.

To expand on the notion of leadership and relational autonomy, but in relation to responsiveness, an element constituting ethics of care (Tronto, 1993) and the idea of 'resilience from below' (Gregoratti et al., 2024), I argue that responsiveness, essential for good care, requires good listening and responding to others needs in accordance with the context, thereby aligning with the relational thought of the capacity to act, autonomy, as grounded in interdependence (Mackenzie & Stoljar, 2000; Tronto,, 1993).

When discussing the idea of 'resilience from below', proposed by Gregoratti et al. (2024), as a way to work through care to reach resilience, by supporting gender equality through community-based practices. This essentially captures the element of responsiveness from the ethics of care, attending to the idea that it is through the interdependency that we become able to act, and achieve autonomy. This concept is important in the understanding of female leadership in marginalised neighbourhoods affected by worsening climate change impacts, as it helps us to build deeper on how resilience can be viewed differently than the idea of 'bouncing back' to cope. Rather acts of care and relative autonomy come into play, to understand the daily realities of leadership for these women.

I conceptualise these ideas, by presenting a few empirical data that highlight 'resilience from below' and responsiveness, in accordance with the notion of autonomy as relational.

The concept of responsiveness and 'resilience from below' becomes evident when discussing the impact of climate change adaptation in the local and everyday context. What may appear as *"20 millimeters of rainfall"* in a scientific paper, can in reality mean flooded houses, and in the context of marginalised neighbourhoods, contamination and difficulties with emergency evacuation, become daily threats (Purwar et al., 2024).

When I attended a semi-formal workshop, arranged in collaboration with the local municipality, only one male local leader attended, the rest, around eight were *lideresas*. The workshop centered around a geoportal tool named SIATA (SIATA, n.d.), designed with the purpose for local citizens to monitor climate and weather events. The facilitator showed the geoportal on a tablet, guiding through exercises on their phones and through his device. The goal of the workshop was to enable them to interpret rainfall forecasts and develop a clearer idea of what action steps to take in an emergency, in the case of flooding. These steps consisted of alerting their neighbours and others who are affected but were not present at the workshop. It also included contacting local authorities through a 24/7 hotline. Discussions touched on barriers to evacuation, such as limited street access for fire trucks. Although there was interest in replicating these types of workshops, the facilitator emphasised that high participation is essential for developing similar initiatives in the future. He identified participation as a key challenge.

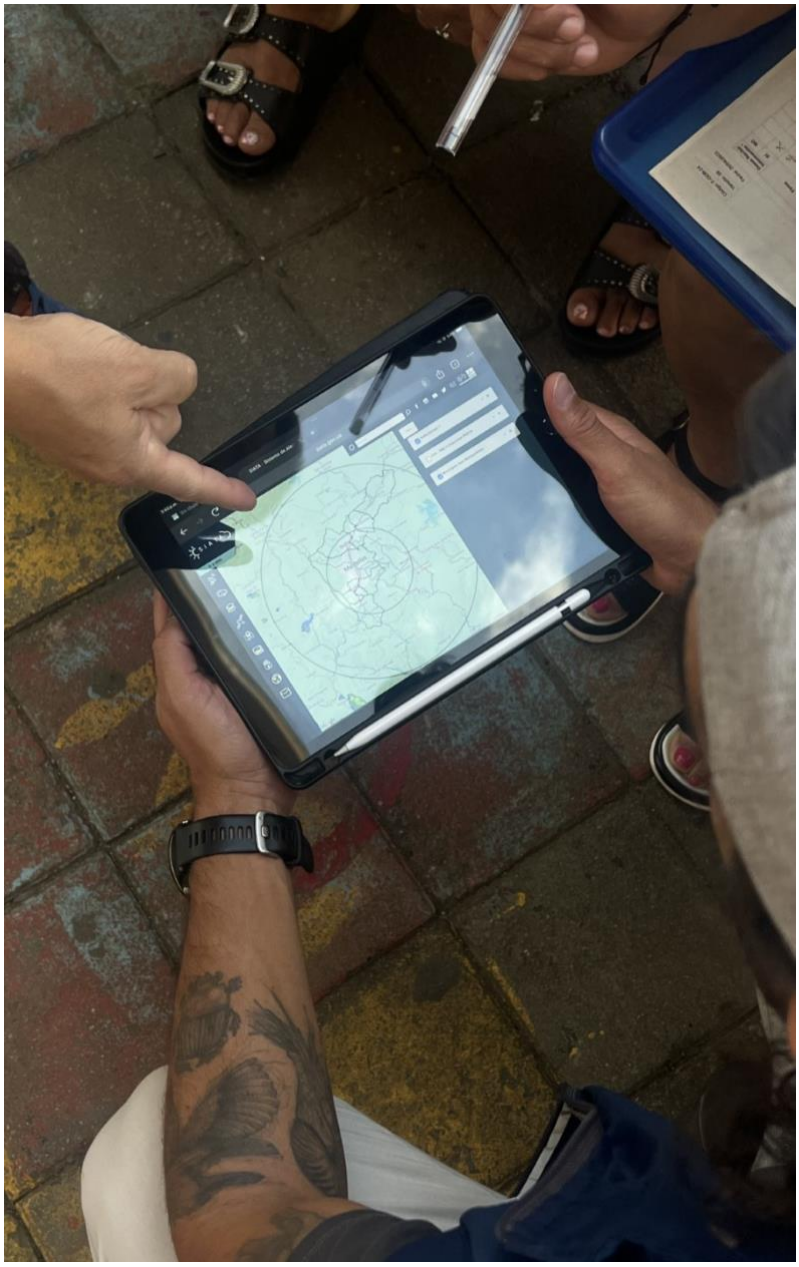


Figure 3. Workshop Geoportal Discussion. Photograph by Hanna Marshall, 2025. Comuna 8, Medellín.

This workshop highlights the everyday female leadership in terms of climate change adaptation and emergency response action. It illustrates relational autonomy (Mackenzie & Stoljar, 2000; Tronto, 1993) as grounded in relationships and the ability to act and take action through interdependency, as *lideresas* are together in charge of capacitating, so their neighbours and fellow beings are better informed of what to do in events of heavy rain and floodings. Further, it illustrates how climate change is negotiated in everyday life and how *lideresas* engagement show how they are protagonists of resilience, showcasing what Gregoratti et al., 2024, calls the 'resilience from below', when the leadership we see emerge from the workshop example, illustrates a resilience of

community-based practice. It can support resilience and adaptation, but also allows for *lideresas* to grow together in times of crisis.

As Gregoratti et (2024) argues, there remains a big knowledge gap, in terms of understanding how 'resilience from below' is enacted and mobilised in local context. This section therefore allows us to understand how this concept is practiced from below, in the context of a local workshop of weather monitoring and emergency action steps, with local *lideresas* leading the path forward. This empirical example is therefore important in terms of broadening our understanding of how *lideresas* in Medellín's marginalised communites navigate and respond to daily environmental challenges, contextualised by everyday action, outside scientific reports of climate change prognosis.

4.1.2 'Resilience from Below': Collective Adaptation and Place-Based Solutions

A further illustration of 'resilience from below' appeared during my visit to a community house in Comuna 3, which served as the base for the NGO organising the workshop series. One of the organisers gave me a tour and brought me to the side of the building, where she showed me a small-scale climate change mitigation effort led by *lideresas* in the neighbourhood. They had installed a *geomantle,* a type of nature-based solution consisting of a fabric designed to stabilise soil and reduce erosion. This *geomantle* was secured to a small hillslope directly behind the house to protect it from landslides.

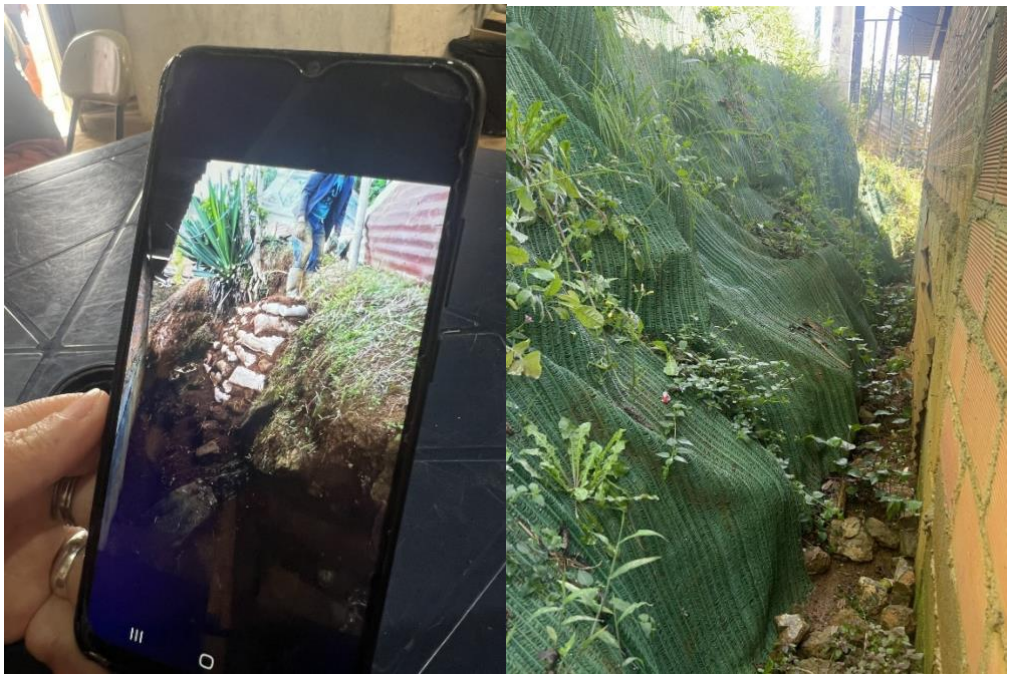


Figure 4. *Example of planning and preparing the local small-scale mitigation and its final outcome.* Photograph by Hanna Marshall, 2025. Comuna 3, Medellín.

She described the intervention metaphorically as "sowing," linking it to *"custom sewing a dress,"* with the *geomantle* representing the dress and the hillside as the body. After installing the fabric, the *lideresas* had planted vegetation so that the plant roots would

grow through the fabric, anchoring the slope. As the *lideresas* showed me photos of the process (see figure 4), I sensed a clear sense of pride in this collective achievement.

This locally rooted initiative reflects both relational autonomy and 'resilience from below'. Through collective knowledge and mutual responsibility, the women developed a low-tech, nature-based solution to mitigate an environmental risk. Their actions highlight how place-based care can foster female leadership by experimenting with practical responses to climate threats. While modest in scale, the project demonstrates how environmental vulnerability is addressed not only through policy, but through embodied, community-driven practices that transform both the landscape and the autonomy of the *lideresas.*

Understanding the workshop on the geoportal and the *geomantle* mitigation project requires situating these initiatives within the broader context of environmental vulnerability faced by the marginalised neighbourhoods where the fieldwork took place. These neighbourhoods are disproportionately exposed to flooding, landslides, and infrastructural neglect, conditions that heighten their vulnerability to climate change. One woman expressed this uncertainty: "*...when it rains, we all just go into our homes"* (Interview 7), referencing the absence of any official evacuation strategy. Food security and sovereignty efforts were also mentioned in the topic of severe flooding. These reflections echo findings from studies across the Global South, which show how informal or non-recognised neighbourhoods face intensified exposure to environmental risk (Atkinson, 2024; Peters et al., 2022; Puente-Sotomayor et al., 2021; Valencia Londoño et al., 2023).

The marginalised neighbourhoods I visited during fieldwork are located in a highly mountainous region, making them particularly prone to landslides. In Medellín alone, over 44,600 households in these informal settlements were reported as exposed to landslide risk in 2021, a number projected to rise to 57,600 by 2026 (Garcia Ferrari et al., 2021; Puente-Sotomayor et al., 2021). These risks were made visible during my field visits.

In one neighbourhood in Comuna 8, residents showed me areas that had been destroyed during a major flash flood in 2020. In Comuna 3, *lideresas* shared numerous videos documenting the impact of recent heavy rains (see Figure 5)

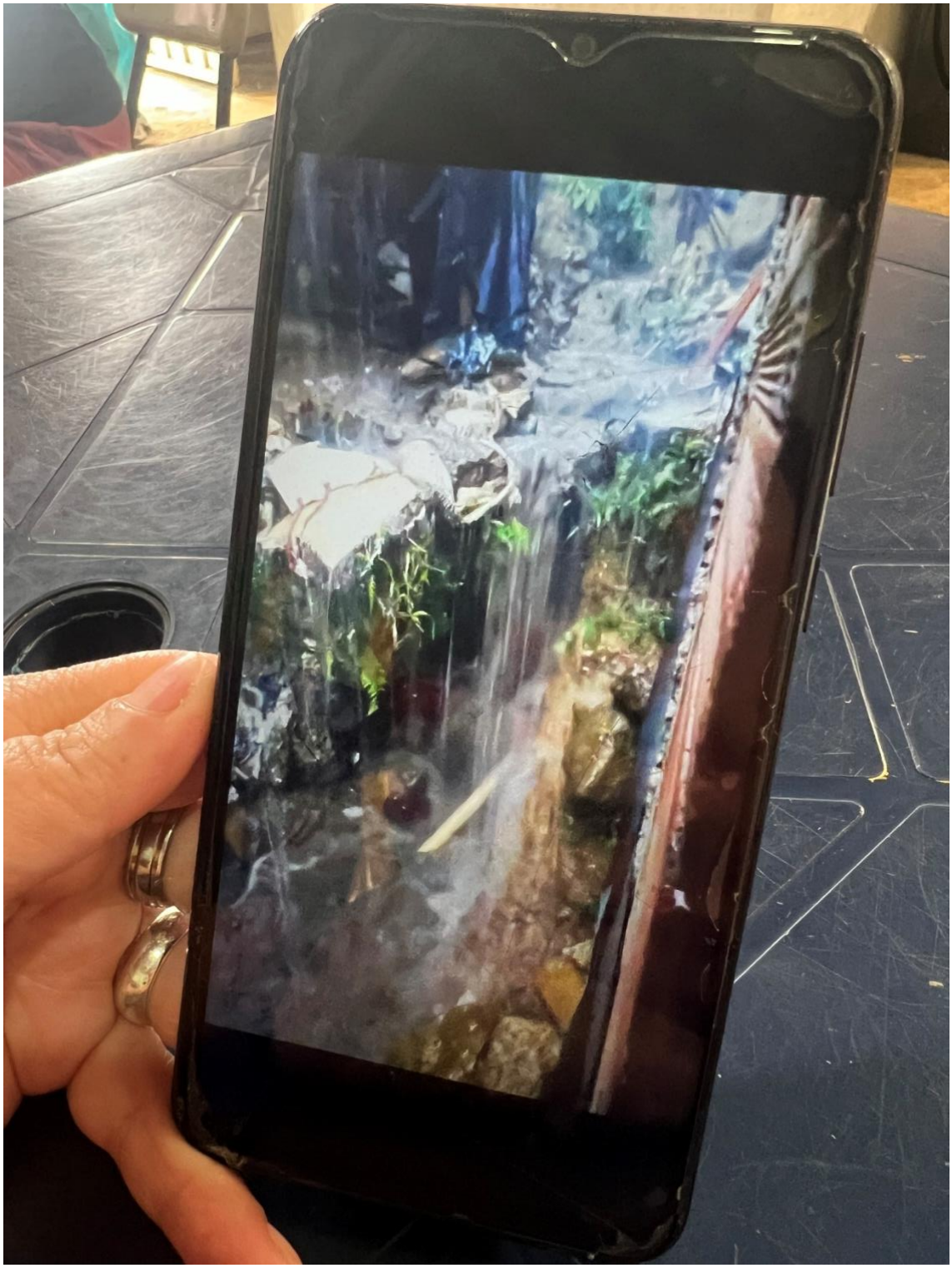


Figure 5. Recent heavy rainfalls shown by one of the *lideresas.* Photograph by Hanna Marshall, 2025. Comuna 3, Medellín

Since returning to Sweden, I have continued to receive updates from local actors via WhatsApp messages and voice notes (personal communication, April 2025).

When asked about the most pressing environmental risks, several *lideresas* cited flooding and landslides (Interviews 1, 3, 5, 8, 10). One woman from Comuna 8 explained that without proper drainage or sewage systems, rainwater cannot flow, causing repeated damage. Her account aligns with broader studies showing that the most vulnerable areas are those without access to basic infrastructure. In Purwar et al.'s (2024) comparative study of formal and informal settlements in Medellín, the informal neighbourhood suffered far more during a flash flood, not only in the immediate event, but in its long-term effects. The same *lideresa* stressed that the true issue is not just climate change itself, but the persistent absence of "public" and critical infrastructure services.

These testimonies point to a key finding: climate risk is not an exceptional event, but a structural and ongoing condition that shapes everyday life. As Lizarralde et al. (2021) argue, the danger lies not only in the climatic events themselves, but in the absence of institutional recognition and investment that leaves already marginalised neighbourhoods exposed.

Yet, in the face of this, local leadership emerges. When *lideresas* from Comuna 3 shared videos of the flooding, they also described their local monitoring group, a grassroots WhatsApp network used to track rainfall and warn neighbours. This informal effort complements the more institutional SIATA geoportal system and demonstrates what Gregoratti et al. (2024) call 'resilience from below', adaptive strategies based on mutual dependence, shared knowledge, and care. These *lideresas* show how vulnerability is not only resisted through large-scale interventions, but through small-scale, everyday practices of leadership and support that respond directly to the structural absences surrounding them.

The element of responsiveness in the ethics of care, as defined by Tronto (1993), centers on the importance of listening to others' needs rather than assuming them. Care, especially in marginalised contexts, must emerge from bottom-up processes, but it cannot be presumed that we already know what those needs are (Davis, 2022).

This lack of responsiveness became evident throughout my fieldwork. A recurring theme in conversations with *lideresas* was the frustration of not being heard and the absence of meaningful dialogue with authorities. Two *lideresas* explicitly urged public officials to listen to the community (Interview 1, 2), while another stressed that although officials may be highly educated, they often lack the basic capacity to truly listen and understand the realities of the neighbourhood (Interview 1). Their reflections reveal a deep disconnect between top-down governance and local needs, reinforcing Tronto's (1993) argument that responsiveness is essential for care to be ethical and effective.

While Puig de la Bellacasa (2017) reminds us that care is not always reciprocal, the act of listening must be recognised as foundational. Without it, resilience cannot be truly shared or supported. Incorporating responsiveness into local leadership, especially in climate-vulnerable and marginalised communities, is not only about ethics; it is essential for building resilience and justice in the face of environmental crisis.

In the context of leadership, one *lideresa* explained how many neighbours mistakenly assume that she and other *lideresa* are paid for their environmental work, when in fact, it is entirely voluntary (Interview 4). This unpaid labour is particularly significant in the

context of climate change adaptation. As Gregoratti et al. (2024) argue, the burden of resilience is often shifted onto communities, especially women, through what they term ‘resilience from above’, where institutions offload responsibility without providing compensation. Environmental care is often treated as invisible and unpaid work. Yet, as my fieldwork shows, women enact everyday leadership through consistent, voluntary actions, such as the installation of the *geomantle,* that build ‘resilience from below’. These practices are not formally recognised or valued, especially in monetary terms, despite their critical role in protecting communities. Moving toward gender equality in the context of climate resilience requires the recognition and valuation of environmental care as political labour. Acknowledging this work is crucial to avoid the continued exploitation of ‘resilience from below’ by systems that fail to support those who shoulder its burdens.

4.1.3 Urban Gardens as Sites of Relational Autonomy and Environmental Care

Finally, I present empirical data from the *huertas,* urban vegetable gardens that highlight everyday practices of care, where leadership based on community-driven resilience became especially visible. During the gathering, *Encuentro de los huerteros y las huerteras*, the *lideresas* discussed the importance of reusing rainwater, protecting soil health, and fostering food sovereignty. They emphasised the collective autonomy of producing nutritious food as a community. Composting was also a recurring theme, many spoke of ways to expand local composting by sharing knowledge, involving households and restaurants, and building capacity together.

Looking toward future energy autonomy, they discussed integrating solar panels and renewable technologies. However, my gatekeeper, Estefania, from the neighbourhood raised concerns about financial constraints and bureaucratic barriers. Despite these obstacles, the *lideresas* voiced their desire to *“open doors”* and collaborate with external factors such as universities and public authorities. I interpreted this as a shared sense of enthusiasm and commitment, even if tempered by the knowledge that their vision of autonomy and care often contrasts with institutional priorities.

The word resilience itself surfaced in the gathering, particularly in relation to how Comuna 8 has endured and adapted over time. The garden was described not only as a space for food production, but as a site of love and care, especially for the soil. One *lideresa,* whom I interviewed after the event, explained that just a month earlier a minor landslide had occurred in her neighbourhood, damaging several homes. The *lideresas* described how the use of rainwater systems and careful soil maintenance was a way to take responsibility for mitigating future environmental risks.

These empirical insights reinforce the idea that female leadership and ‘resilience from below’ are sustained through the enactment of care. Even in the face of uncertainty and infrastructural limitations, the *lideresas* found strength and engagement in their capacity to act together. Their practices reflect not just environmental concern, but a vision of autonomy rooted in collective knowledge, relational responsibility, and the power of care as a political force.

4.2 Local Knowledge and Strategies as Embodiments of Care

Place-based, embodied, and situated knowledge, also known as community-based education, has the potential to transform communities facing climate change and environmental risks by empowering them to act against injustices and imminent threats. These forms of local knowledge and strategies are acts of care, as I will argue through my interpretation of the empirical findings.

As outlined in the theoretical framework, Greenwood (2013) and Grunewald (2008) build on the concept of place-based and situated knowledge as a means to envision alternative futures through critical reflections on past injustices. Grunewald (2008) further argues that a critical pedagogy of place should shift focus away from individuals and instead emphasise relational aspects, particularly the ecological relationships between humans and non-humans.

This emphasis on place-based awareness aligns with what Davoudi and Ormerod (2025) and Davis (2022) identify as central to acts of care: responsiveness. Greenwood (2013, p. 220), in his framework of critical pedagogy of place, highlights key questions such as: *"What happened here? What is happening here now? Where is this place heading and what should happen?"* These questions are essential to understanding care as relational and mutually responsible, especially when acknowledging the needs of others, such as communities and regions. This thesis draws on these ideas to conceptualise care as knowledge.

I will present three empirical examples that align with care as knowledge, demonstrating how place-based and situated knowledge empowers *lideresas* living in marginalised neighbourhoods, often in areas of high environmental risk, to learn, engage, and strengthen their capacity for care through local knowledge practices.

4.2.1 Waters of Care: Embodied Learning and Ecopedagogy in Comuna 3

The first empirical example emerged in the workshop series in Comuna 3. These three workshop sessions centered on water as the key theme. While heavy rainfall made it impossible to carry out some planned outdoor excursions, such as an interactive community walk to discuss local places of ritual importance or areas prone to flooding, the sessions were adapted ad hoc. The facilitators used children's books, images and YouTube videos to engage the women, all of whom were *lideresas.* Together, we explored regional and local ecosystems, including the *páramo*, a unique high-altitude ecosystem only found in the Andes region.

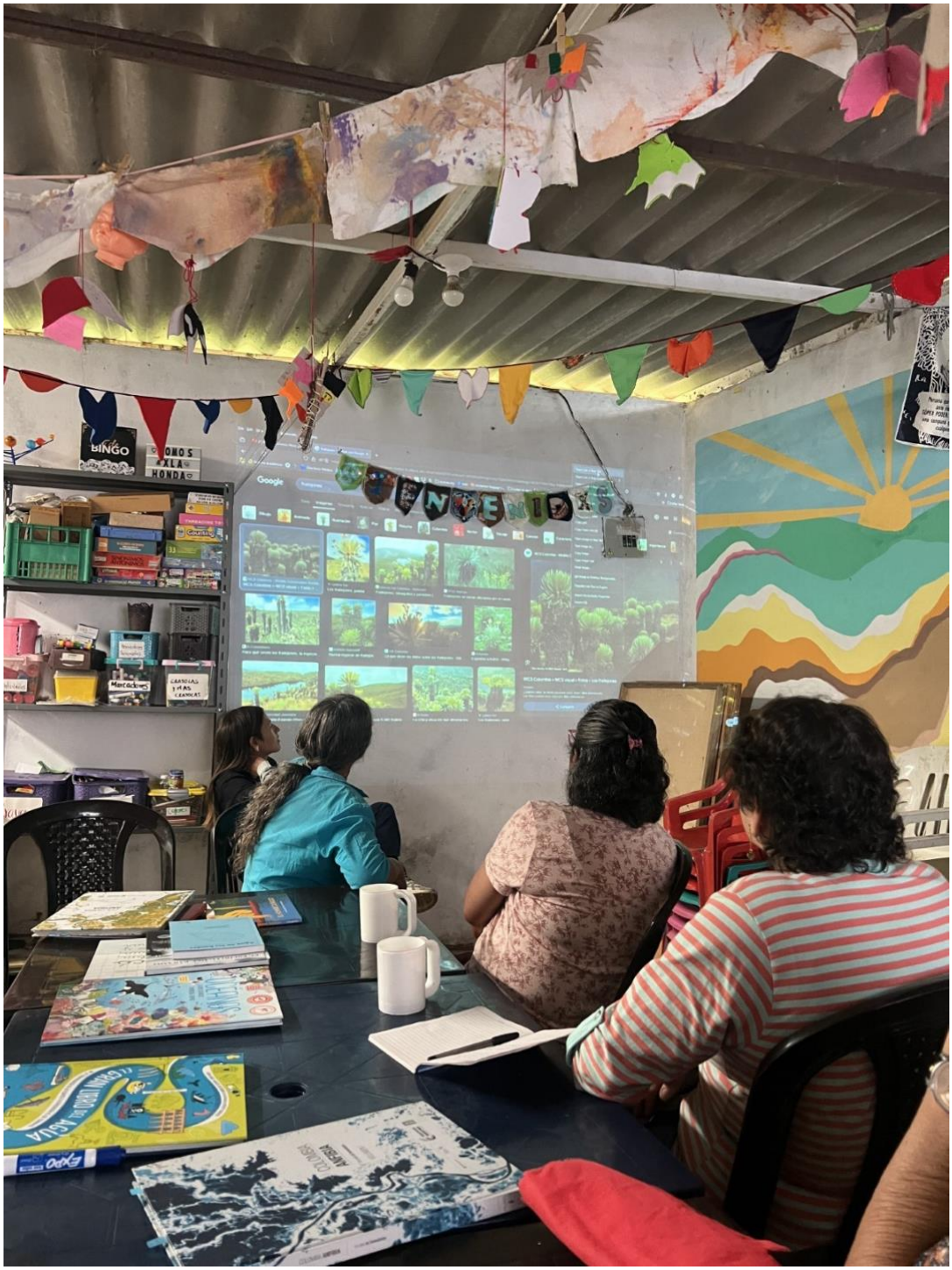


Figure 6. The *lideresas* participating in the workshop series, analysing images of the *frailejón.* Photography by Hanna Marshall. Comuna 3, Medellin.

In one of the sessions, there was a strong focus on the *frailejón*, a plant explained as *"creating and filtering water".* The *lideresas* were very engaged and curious to find out more about this vegetation in relation to the *páramo.* A young geologist and master's student contributed to the sessions by contextualising these discussions further, linking the local environment to regional concerns, such as current water shortages in Bogotá.

The group discussed how water is not *"born in one place"* and how even hillside communities make up a broader ecosystem. Knowledge became grounded in the local and regional context, and made accessible through simple terms, media content, and real-world examples. These discussions aligned well with Greenwood's (2013) reflective questions mentioned earlier, offering an opportunity to explore local environmental risks in connection to broader ecosystems. Discussions of ecosystems, as well as its impact of the local and global context of the water cycle, were presented. As the neighbourhood in Comuna 3 lacks many basic elements of critical infrastructure, with continuous heavy rainfall, these discussions were fundamental to develop knowledge of climate change, in its local and regional context. The intense rainfall even made it difficult for both myself, the facilitators and the *lideresas* to reach the location of the workshop, emphasising the urgency of these types of workshops and learnings.

Throughout the workshop series, the facilitators attributed a significant portion to reading books related to water and local landscapes and environments, such as the *páramo*. All were related to indigenous myths, stories and cultures in the Colombian territory. The books, such as *"El Hombre Dorado"* and *"El Espiritu del Páramo"* centered around ancient Colombians children's stories with indigenous mythologies, however with an underlying colonial critique and discussion. These books were read out loud, altering reading and critical discussion of the importance of water in the past, and how the colonial legacy consequently came to change the value of care and nurture for the local landscapes and the *páramo*.

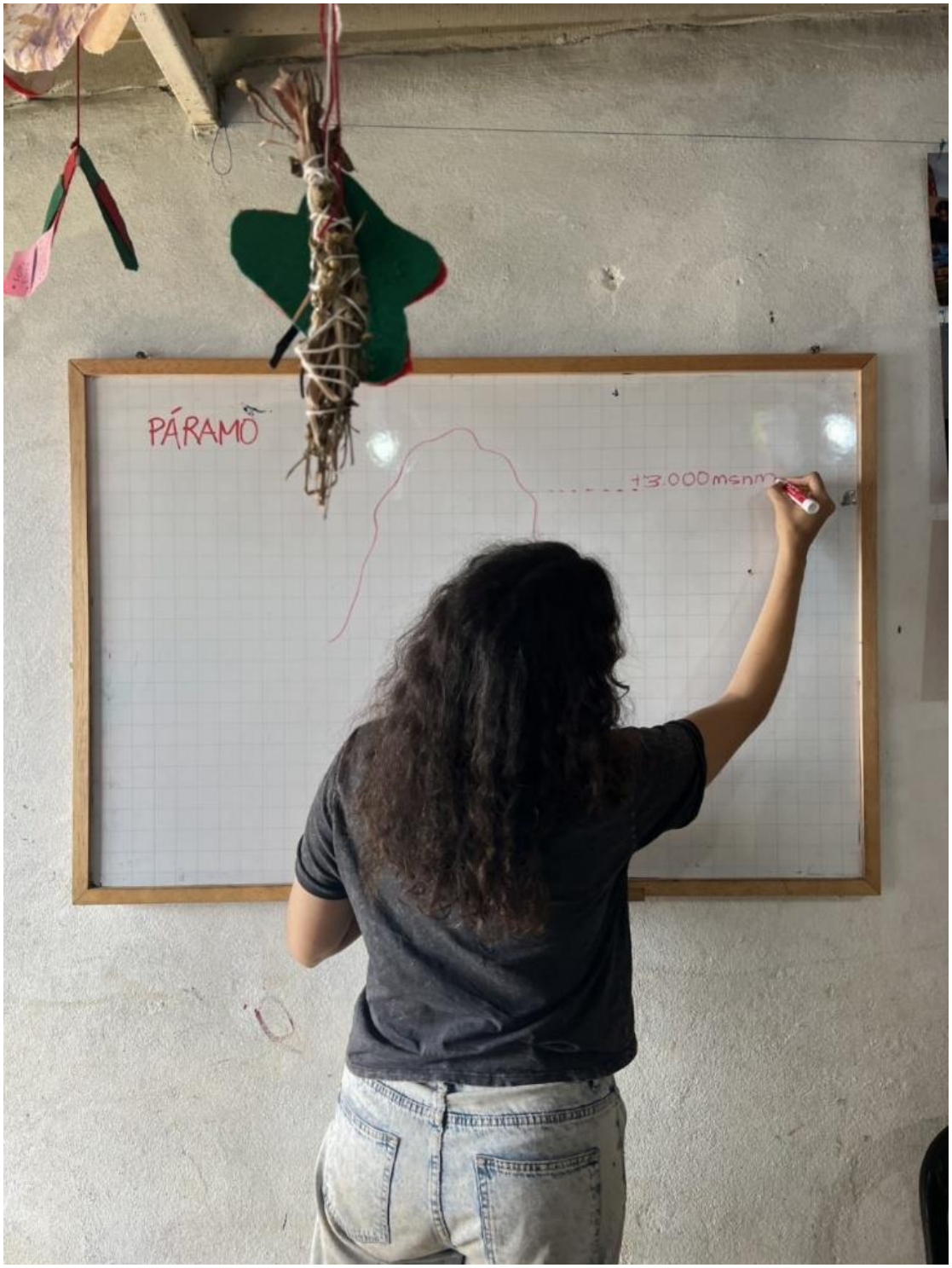


Figure 7. Workshop facilitator drawing a Páramo in the Workshop. Photography by Hanna Marshall (2025). Comuna 3, Medellin.

These examples speak directly to the reflective themes raised by Greenwood's (2013) framework. Grunewald (2008) takes this further by encouraging critical engagement with place-based knowledge by identifying traditions, relationships, or practices worth preserving.

When reading the book; *"El Espiritu del Páramo",* the local ecosystem was described as a sacred being that was being watched over and how humans had to show how to respect and live in harmony with the páramo, by for example utilising food growing practices. Furthermore, spaces of water were discussed, in relation to rituals, and how the *lideresas* would go and explore places that could be sacred for them in the community.

While reading about water and local ecosystems in the Colombian territories, the *lideresas* engaged in discussions about ritual water sites and historical perceptions of water. These highlight the role of critical pedagogy in locally rooted environmental education. They exemplify the kind of critical reflection that Gruenewald (2008) encourages, namely, to consider which aspects of tradition, social ties or local practices should be preserved and valued over time. The use of older children's books created space for the *lideresas* to reflect on the issue of water, a pressing environmental and natural resource concern. Through this activity, they were able to explore how present-day practices and relationships, such as water-related rituals, connect with historical understandings of nature and community. These reflections resonate with the aforementioned reflective questions of; What happened here, particularly in relation to natural landscapes and indigenous water mythologies? And what will happen here, in light of the projected loss of ecosystems such as the páramo under climate change?

By combining elements of creativity, diverse media and visuals, and an openness to experimenting with new methods, such as using children's books and visual materials adapted for women between the ages of 35 and 70, this form of locally embodied knowledge becomes not only a method of knowledge transfer but also a communal strategy among the *lideresas*. It enables them to navigate and respond to environmental risks in areas marked by insufficient infrastructure and persistent hazards such as flooding and landslides.

4.2.2 Grassroots Classrooms: Escuela Popular and Climate Learning in Comuna 8

The second example from the field is one that the *lideresas* told me about throughout the interviews but also in the informal conversations I had with them while I visited their vegetable gardens, or before/after different gatherings in Comuna 8.

They told me about a local educational initiative called *Escuela Popular*, which I came to understand as a concrete expression of locally based and situated knowledge. It closely aligns with what Greenwood (2013), Gruenewald (2008) and McInerney et al. (2011) describe as environmental and ecological education rooted in the specific conditions and realities of a community, in this case, Comuna 8. This iniative, the *Escuela Popular,* was brought forward in 2023 by the Movimiento de las Laderas. It reponds to the climate crisis currently affecting residents in these marginalised neighbourhoods, by aiming to build a deeper understanding about what constitutes climate change in relation to justice, helping communities move toward mitigation and adaptation strategies that have a tangible impact (Velásquez Castañeda, n.d.).

When I interviewed two *lideresas* (Interview 1), I noticed a book from this school and the women proudly showed me the diplomas they have received for their community and climate action work. One of them recalled the day when leaders from 46 neighbourhoods

in Comuna 8 gathered and went together to the local government. She remarked that it's "*not about organising, its rather about mitigating"*. In alignment with real-world concrete issues, these *lideresas* have developed a strong place-based critical thinking through their engagement in climate and local justice actions. In another interview, a *lideresa* shared how the *"8 por la 8"* (eight locally-based mitigation measures), developed through the *Escuela Popular*, which helps to guide their everyday actions. The initiative of the *Escuela Popular* hit *"like a total explosion"* (Interview 4), as something very good for the community. She explained that these strategies have delivered results, referring to them as *"popular consultations".*

The *Escuela Popular* in Comuna 8 exemplifies a critical pedagogy of place in practice. The stories of *lideresas* show how informal, community-led educational spaces have enabled them to develop strategies grounded in their everyday realities. Through shared knowledge, diploma courses, and frameworks like "*8 por la 8,"* these initiatives foster both critical awareness and collective action. This knowledge embodies the ethics of care, particularly the principle of mutual responsiveness (Davis, 2022; Davoudi & Ormerod, 2025). When the *lideresas* shared how they gathered and approached the local government together, I interpreted it as an expression of how their needs are inherently place-based, rooted in locally developed mitigation strategies that, according to one *lideresa* from Comuna 8, marked a turning point in their community efforts.

4.2.3 Care Across Generations: Semilleros as Sites of Environmental Education

The third and final empirical data I would like to add to the discussion and analysis is one that directly connects to what Davis (2022) argue is nurture as a future investment. It illustrates how locally, embodied and situated knowledge, rooted in ethics and practices of care, can contribute to transformation in these marginalised nieghbourhoods. While Adam and Groves (2011), notes that the practice of care is related to the present moment, nurture is about supporting others potential, imagining and working to an alternative future.

I began to notice a recurring pattern throughout the stories of the *lideresas:* their engagement in so-called *semilleros* (literally *"seedbeds"*), from when they first arrived in the community over 20 years ago, to the present, and into their future plans. I argue that *semilleros* are spaces that plant seeds of education for future generations. They are sites of development and learning.

Over the course of the fieldwork, I came to understand *semilleros* as spaces where children and young people are trained and develop skills and knowledge related to their local environment. One *lideresa* (Interview 10), who arrived more than two decades ago, became involved as a community leader with a strong focus on children. As a sports and recreational coordinator, she applied for funding from the local government to organise *semilleros* focused on outdoor activities. These included not only recreation but also environmental education, encouraging care for nature and a deeper understanding of local ecosystems.

She emphasised that environmental themes were always part of the activities, and she pointed proudly to a young woman beside me, Estefania, who had grown up in the neighborhood and had brought me to the interview. She is now close to graduating as an environmental engineer from the local university. The *lideresa* expressed her pride in seeing how her former *semilleros* participants, had grown into environmentally engaged young adults.

In another neighborhood in Comuna 8, I learned that a group of *lideresas* were currently preparing new *semilleros* for the upcoming year. This time, they were integrating the topic of climate change through film, in collaboration with local filmmakers. The initiative aimed to bring together slightly older children and young teenagers. Although I did not participate directly in the planning or implementation, it was clear how deeply involved the *lideresas* were.

Finally, at the local gathering *Encuentro de los huerteros y las huerteras*, I heard stories from mostly *lideresas* about their work with children in *semilleros* based in their organic *huertas*. These *semilleros* foster embodied, locally rooted environmental education. Children learn about organic planting, caring for local seeds, and composting, as well as the value of recycling and sustainable habits.

One of the two men present (among 10 participants) stated that children would be the ones to transform these green urban spaces, the *huertas,* into something beautiful in the future. The group collectively emphasised how teaching children healthy environmental habits from a young age was key, and how *huertas* offered the good starting point for this kind of education.

The concept of *semilleros* in these marginalised neighbourhood exemplifies a critical local pedagogy, with strong ties to environmental practices and climate change awareness. This connects both to the argument presented by Davis (2022) that nurture makes up the part of care where the focus lies on the future generations, to allow them to grow, flourish and transform their knowledge. Additionally, as McInerney et al. (2011), who emphasise that placed-based education, or community-based education, is linked to the ethics of care in thinking and nurturing for the future generations. It showed a strong ethics of care for the environment, and helped to put them in a context of local issues, where environmental and social concerns, such as climate change, can be addressed. In principle, it puts these younger generations, in a process of understanding and shaping communities.

In different contexts and fields; movies, sports and urban gardening, these *lideresas* showed eagerness to nurture and care for the future, younger generation of these places, by creating more environmental awareness, critical perspectives and useful habits and practices, all in the work and imagination of an alternative future.

This section has shown how *lideresas* engage with local knowledge and strategies through workshops, community-based educational initiatives and knowing, practiced through nurturing future generations. These empirical findings I interpret as grounded in various embodied expressions of care and reflect a critical pedagogy of place, where relational dimensions are central.

4.3 Justice and Recognition

Understanding justice amid marginalisation and the climate crisis requires examining how care is politicised. As The Care Collective (2020) and Tronto (2013) and argue, care must be pushed out from the private into the public, forming the basis of what they term a caring democracy. This vision of care is not only relational and interdependent, but fundamentally political, offering an alternative to individualistic, profit-driven models of governance. In Latin America, this thinking is deepened by feminist scholars who show that care is inseparable from place. The concept of *cuerpo-territorio* (Zaragocin & Caretta, 2021) frames the body and land as ontologically connected, such that violence against territory is also violence against women's bodies. Yet through everyday acts of *re-existencia* (Glockner et al., 2024), women engage in care not as passivity but as a radical strategy of rebuilding and defending life.

Building on these perspectives, Bond and Barth (2020) and Davoudi and Ormerod (2025) call for a 'care-full' approach to climate adaptation, one that challenges dominant masculinist planning frameworks and centers emotional, social, and embodied dimensions of justice. When care continues to be sidelined as feminine or emotional, we risk losing the very foundation of what justice should mean in the context of environmental crisis. As Bond and Barth (2020) warn, structural injustices persist when adaptation strategies protect the privileged while displacing the marginalised; *"the rich get seawalls, the poor get moved."* (p.1).

In cities like Medellín, which can be understood as both wounded and caring (Till, 2012), urban space becomes more than a site of capitalist exchange, it is an inhabited and lived space. For care to be sustained across generations, people must be recognised and must recognise themselves in the social and physical environments they inhabit (Till, 2012). Recognition, then, is not only symbolic but spatial, emotional, and relational. The reflections and practices of *lideresas* in Medellín challenge dominant framings of climate justice by foregrounding relational, embodied care as a political and territorial act. These experiences, I argue, hold powerful lessons for advancing towards more caring and just futures in Latin America.

The following section draws on the experiences of *lideresas* in Medellín to show how these ideas are lived, embodied, and negotiated, particularly within contexts of displacement, environmental risk, and structural neglect. Through their everyday practices, care emerges as a method of re-existence, resistance, and recognition.

4.3.1 When It Rains Inside: Emotion, Risk, and the Politics of Place

The concept of caring democracy frames care as a political act grounded in collective responsibility rather than individualism. As The Care Collective (2020) argue, dominant understandings of autonomy, particularly in the Global North, have been shaped by white, masculine ideals that marginalise and privatise care. In contrast, this study explores how *lideresas* in climate-affected, marginalised neighbourhoods in Latin America enact care as a public, relational, and political practice. Understanding care in this way reconnects with its older meanings, concern, sorrow, trouble, and highlights the emotional and structural dimensions that underpin everyday leadership.

In one interview, a *lideresa* (Interview 3) was asked what it meant to her to be a women leader. Rather than emphasising authority or control, she responded:

> *"For me, it means not letting things fall apart, I mean, solidarising with others. Sowing, for me, means growing. It means pain. Because when you feel the pain of what's happening in the community, when you say, 'I have to do something about it.' For example, the houses on the other side, over the ravine — when it rains heavily, I get worried, and it's not my house, but I worry because it's my community, where there are people, human beings. For me, it means work, it means love — love for others ("amor al prójimo)", love for family, love, pain for those who don't have, for the less fortunate. Because there are many people, let's say, who are in their houses, calm, not running many risks, while many others have to suffer. I'm not talking about myself, but I am talking about other families. It's very hard for them, many times when it rains, it rains more inside than outside. Or many times, it's raining so hard that the current that comes peacefully floods the house. So they are in this constant anxiety, and for me, it also means that - worry. It's a mix of emotions, of sensations, that can lead you to that meaning which has no explanation. It happens according to the event, to what is happening."*

Her answer reframes leadership as deeply rooted in emotional and communal responsibility. Rather than a position of power, leadership emerges through relational care and solidarity with others, particularly those living in vulnerability. Her words echo the Care Collective's (2020) claim that care is not merely a private or domestic act but a practice that mobilises emotion into political action. She foregrounds worry, pain, and love as forms of ethical and political attention to others, revealing how care becomes the foundation for local action in the face of environmental risk.

Significantly, she contrasts families "*in their houses, calm, not running many risks"* with others "*who have to suffer,*" touching directly on the inequalities that structure risk and protection in Medellín. Her reflection draws attention to spatial injustice, how exposure to environmental threats is unevenly distributed, and situates care as a response to these structural disparities. This reinforces the argument that care is inherently political: it names inequality, motivates collective response, and redefines leadership as an ethics of solidarity and responsibility.

In this way, her testimony illustrates how *lideresas* in Medellín's marginalised neighbourhoods enact a form of caring democracy, where recognition and justice are

practiced through everyday acts of concern and protection. These reflections invite a broader rethinking of climate justice, one that recognises care as central to resistance, resilience, and the right to remain in place.

The concept of the 'wounded city' (Till, 2012) offers a way to understand urban spaces beyond dominant Western frameworks. It draws attention to how cities are shaped by histories of violence, neglect, and displacement, making visible the harm inflicted by the state and other socio-political forces. Rather than viewing cities solely as sites of property and exchange, this perspective recognises cities as spaces where pain, memory, and care coexist. As Till (2012, p. 257) suggests, understanding 'wounded cities' also means focusing on "*why places, people, environments, and non-human natures continue to be injured*.". This concept is vital for recognising political care in the context of environmental injustice and imagining more just urban futures.

4.3.2 Growing From the Wounds: Displacement and *Re-existencia*

In Comuna 3, and 8, all the *lideresas*, with one exception, I interviewed had experienced displacement, either from rural conflict or/and due to environmental threats like erosion and landslides. One women leader from Comuna 8 told me how she was displaced due to Colombia's armed conflict, only to be displaced again in Medellín due to a rockfall. Another woman described arriving in the city over 25 years ago, calling it *"frightening"* at first, but later identifying herself as someone who had adopted "*a mindset of seeking solutions*" (Interview 2). These stories reflect a broader pattern of structural violence and marginalisation across Colombia, a country marked by decades of internal displacement.

Yet, despite this history, the *lideresas* described how they mobilised through local grassroots movements and neighbourhood councils like the *junta comunal*. They organized themselves to demand infrastructure, potable water, sewage systems, and initiated environmental education programs for children, such as *semilleros*, often using their rural knowledge of farming and land stewardship. These practices reflect the notion of *re-existencia* (Glockner et al., 2024): the rebuilding of life through care, solidarity, and everyday acts of resistance.

Their narratives show that Medellín can be understood as a 'wounded city' (Till, 2012), marked by displacement and inequality, but also as a space where care is cultivated and politicised. When *lideresas* organise in the face of repeated displacement, they challenge masculinist, technocratic planning paradigms and demonstrate that justice cannot be achieved without recognising care as a transformative political force. These stories prompt a rethinking of cities not merely as property or territory, but as relational and emotional geographies. In this way, they offer critical lessons for climate justice in Latin America: even in 'wounded cities', care can emerge as a strategy for survival, resistance, and transformation.

The notion of *re-existencia*, as developed by Glockner et al. (2024), complements the epistemology of *cuerpo-territorio*. It refers to the process of rebuilding, re-claiming, and re-existing through acts of care, resistance, and healing. This concept helps us understand how *lideresas* respond to structural and interpersonal violence not with by backing down, but by creating life-affirming alternatives. It is fundamentally tied to recognition, as it

centers the voices and actions of women who transform pain into practices of autonomy, territorial defense, and community growth.

During the gathering, *Encuentro de los huerteros y las huerteras*, as well as during a visit to a *huerta,* many of the *lideresas* described the gardens as spaces of emotional support and healing. One *lideresa* shared, "*The garden is my therapy,*" a sentiment echoed by others who emphasised the importance of these ecological spaces for collective well-being. Another *lideresa* stated, "*...the pain in one of us is the pain in all of us,*" highlighting the shared emotional burden and solidarity among women in the community. I was told that many of the *lideresas* present were displaced and heads of their households, and that the urban garden helped them "*continue day to day,"* offering not just food or income, but emotional strength and purpose.

These urban gardens are more than productive green spaces; they are spaces of care, chosen by *lideresas* in the aftermath of violence and displacement. In one visit, I was told that parts of the land used today for vegetable cultivation were once sites where victims of urban violence were buried. This historical trauma remains present, yet the transformation of these sites into places of organic growth, composting, and community building reflects how care and healing can emerge from histories of pain. These *lideresas* showed me that rebuilding is not a singular act, but a continuous process of caring for land, community, and self.

In another interview (Interview 7), a *lideresa* from a different neighbourhood described how, after arriving in Medellín due to economic displacement, she helped transform a local field into a space for community recreation. The land, once known as a *"dumping ground for the dead"* during the city's violent past, was given new meaning through collective use. However, she later discovered that the land had been sold for development by someone within the community. She expressed her devastation: *"Who would like the fact that something that belonged to the community ended up being privatised?"* In reflecting on this loss, she spoke of dignity and resistance, highlighting how recognition also involves protecting collective memory and territorial belonging.

This example underscores how care can be a strategy to reclaim territory and restore meaning. Although not directly linked to ecological care, the intention to redefine space as a site of collective healing aligns with *re-existencia*. In this case, the effort was interrupted by profit-driven development, yet it still reveals how care functions as an alternative to domination, even if it does not always succeed.

These examples, of therapeutic gardens and community-driven territorial care, illustrate how *re-existencia* becomes a form of public, political care. Rooted in histories of displacement, these practices show how care emerges from the everyday, when the *lideresas* show that care is inseparable from place, and refuse market-driven models in favour of collective survival and healing, they enact what Bond and Barth (2020) and Davoudi and Ormerod (2025) call a 'care-full' approach, centered on emotional and social justice. These cases demonstrate that in climate-affected and violent urban contexts, care is not only resistance, but it also becomes a way to reimagine the future.

4.3.3 The Body is the First Territory: *Cuerpo-Territorio* and Embodied Climate Care

The concept of *cuerpo-territorio*, closely linked to *re-existencia*, is both an epistemology and a method rooted in Latin American feminist thought. It recognises the ontological entanglement between the body and the land, suggesting that violence against territory is also violence against women's bodies (Zaragocin & Caretta, 2021). This framework is particularly relevant to this chapter's argument that care must be understood as political, especially in contexts of displacement, climate vulnerability, and community struggle. Through the lens of *cuerpo-territorio*, we see how female leadership and territorial care reflect a deep interconnection between embodied knowledge, political action, and place.

During the workshop series, attended exclusively by *lideresas* from Comuna 3, the facilitators spoke about climate change through the lens of local ecosystems in the Andean region. One facilitator used a metaphor to link the human and non-human world, presenting the human body as a mirror of the ecosystem. Abiotic elements like air, water, and temperature were compared to non-essential internal body functions, while biotic elements, plants and animals, were described as vital organs. This metaphor helped participants reflect on the interconnectedness between their own bodies and the natural environment, highlighting how care for oneself extends to ecological care.

This workshop took place in the same community centre where I had previously met one of the organisers. She had told me that the *lideresas* had identified small environmental risks in their hillslope neighbourhoods, such as landslides, and were actively developing mitigation strategies. "*The body is the first territory,*" she said. *"From there, it extends to the house, and then to the neighbourhood.*" Her statement reflects both fear and responsibility. She explained that the women get involved because they fear environmental threats and feel the need to protect the community, not only for themselves but for their children and grandchildren. This comment, repeated during our conversation, is a direct expression of *cuerpo-territorio* as an embodied, place-based epistemology (Glockner et al., 2024; Zaragocin & Caretta, 2021).

In another part of the workshop series, *cuerpo-territorio* was explored more explicitly as a methodological tool. Drawing from feminist and decolonial geography, Zaragocin and Caretta (2021) propose this concept as both a way of knowing and a participatory method. In the workshop, the *lideresas* were invited to draw their bodies and reflect on a series of questions designed to connect bodily awareness with land and water. These included: *"Where is my inner stream or river*?", "*Which part of my body protects me?",* and *"Where are the scars on my body?"*. The facilitator concluded with the question, *"Where is one always present?"* While the *lideresas* initially answered *"in the neighbourhood"* or *"in the territory,"* they agreed when the facilitator suggested: *"in your body."*

This third example illustrates the methodological application of *cuerpo-territorio*, as a reflective exercise that symbolically bridges body and territory. Although I could not fully follow up due to illness, the activity reinforces the concept's relevance for understanding climate adaptation and care practices in feminist community leadership.

In summary, this section has presented *cuerpo-territorio* as both an epistemological and methodological framework (Glockner et al., 2024; Zaragocin & Caretta, 2021). In the first two examples, the body-land connection was made explicit through metaphor and personal testimony, while the third showed how this concept can be integrated into participatory practices of learning of ecosystems in local workshops. All three examples highlight how *lideresas* interpret and respond to environmental threats not just with technical solutions, but through embodied knowledge and community care.

These findings support this chapter's argument that care is political. In contexts of marginalisation and climate vulnerability, *cuerpo-territorio* helps us understand how care for the body and land are inseparable. It challenges the individualistic framing of adaptation and instead foregrounds collective, embodied, and place-based strategies for survival. These female leadership practices point to an alternative model of climate justice, one rooted in relational autonomy, community resilience, and the defense of life and territory.

5 Conclusion

This final chapter brings together the key insights, or findings from the study, as well as reflecting on the fieldwork, from my own positionality and finally highlighting the academic and societal contribution, while considering policy and practical recommendations.

5.1 Synthesis of Main Insights

The first research question, *how do women leaders,, lideresas*, *in marginalised neighbourhoods in Medellín navigate and respond to the environmental and social challenges in their everyday lives?,* was addressed through various empirical insights. The study showed how *lideresas* assume leadership roles that are not formally assigned, but emerge from everyday, practical problem-solving. They often act as informal engineers, social workers, and planners in their communities. This form of leadership was linked to the ethics of care and 'micro-geographies' (Glockner et al., 2024; Puig de la Bellacasa, 2017; Tronto, 1993), illustrating how care practices are both embodied and political.

Furthermore, I interpreted this leadership as rooted in mutual support and collective responsibility, which I connected theoretically to relational autonomy (Giraud, 2021; Lawson, 2007; Mackenzie & Stoljar, 2000; Nedelsky, 1989). These authors reconceptualise autonomy not as independence, but as a capacity for action shaped within interdependent networks. Acts of *la juntancia* and everyday responsiveness (Tronto, 1993) exemplified how care can be empowering, fostering what Gregoratti et al. (2024) describe as 'resilience from below'.

The SIATA geoportal workshop further illustrated this point, as *lideresas* actively engaged in emergency response strategies. This empirical example was theoretically linked to both relational autonomy and community-based resilience (Gregoratti et al., 2024; Mackenzie & Stoljar, 2000). Finally, the collaborative creation of the *geomantle*, a nature-based solution, represented an act of both care and relational autonomy. Through collective knowledge production and shared responsibility for stabilising a vulnerable hillslope, the *lideresas* demonstrated a form of grassroots leadership grounded in practical responses to climate vulnerability (Davis, 2022; Giraud, 2021; Gregoratti et al., 2024; Lawson, 2007).

The second research question, *what forms of local knowledge and/or strategies have they adopted to address these challenges?,* relates to the insights gained in the workshop series in Comuna 3, where the *lideresas* engaged in environmental education through interactive workshops that focused on water and local ecosystems. These workshops prompted critical reflections on nature, and on colonial as well as spiritual relationships with water. The body-ecosystem, *cuerpo-territorio*, helped the participants understand the interdependence of human and ecological systems. These findings were linked to the literature on critical pedagogy of place, reflected by Greenwood (2013) and Gruenewald (2008), as learning that is rooted in reflecting on *what happened here, what is happening now, and what should happen*. Secondly, this question is reflected in the *Escuela Popular*

in Comuna 8, an initiative to deepen the understanding of climate change in relation to climate justice, and to base the education on the local context of the communities, thus reflecting the lived experiences in these marginalised neighbourhoods. Finally, the *semilleros* were discovered as educational spaces that these *lideresas* were involved in, where future generations, young children and teenagers in these neighbourhoods, develop skills of environmental knowledge and awareness. This relates to the theory of Davis (2022), where nurturing is argued to be an important aspect of care, with a focus on flourishing the knowledge of future generations. It is also highlighted by McInerney et al. (2011), who investigated place-based education and the ethics of care in nurturing future generations and fostering care for the environment in a local context.

To conclude, the third research question, *what lessons can be drawn from their experiences to inform broader frameworks of climate justice in Latin America*. can be addressed by drawing on the idea of care as political action. I saw the actions of these *lideresas* as enactments of care, not private or passive, but public and political, resonating with Tronto's (1993) and The Care Collective's (2020) concept of a caring democracy. Their leadership was expressed through empathy for others, which challenged the notion of individualistic autonomy and emphasized the importance of relational recognition rooted in place (Till, 2012). For justice to occur in climate-affected communities, this requires acknowledging past and present violence and fostering spaces of healing, especially relevant in Medellín, a city marked by displacement and conflict, which many of these *lideresas* have experienced firsthand.

I also interpreted their practices, such as urban organic gardening, as expressions of *re-existencia*, grounded in an ontological connection between body (*cuerpo*) and land (*territorio*) (Zaragocin & Caretta, 2021). Harm to the *territorio* is thus harm to the body, and care becomes a way of practicing both self-care and resistance (Glockner et al., 2024; Zaragocin & Caretta, 2021). The emotional responses some women shared, worry, fear, and solidarity, reflected the structural inequalities and spatial injustices that shape environmental risk. As Bond and Barth (2020) argue, neglecting care reproduces injustice. Care, in this context, offers the potential to transform sites of violence by reclaiming territory. Consistent with Davoudi and Ormerod (2025), I see the practices of these *lideresas* as embodying a 'care-full' mode of climate adaptation, one in which collective knowledge and relative autonomy offer valuable insights for rethinking climate justice in Latin America.

5.2 Final Reflections: Thinking and Feeling with the Field

Building on the discussion in the methodology chapter, I would like to offer some final reflections from the field. My presence and immersion in the field profoundly affected both this research and myself as a researcher. As Militz et al. (2019) argue, research is never neutral; the entire process, from data collection to writing, analysis, and even reading, shapes the researcher and as well as the research. This became increasingly evident to me upon returning from Medellín and beginning to reflect more deeply on theory and empirical analysis.

Throughout the fieldwork, I felt a strong connection with care, a theme I have previously acknowledged in the methods chapter. I want to return to this idea by highlighting how the care shown by my gatekeepers made this research possible. Amid my personal

struggles with language barriers and power dynamics, their support and genuine care, for me and for the project , deeply influenced my thinking. It was through these experiences that I began to reflect more consciously on the concept of relational autonomy, which eventually became central to the theoretical framework guiding this thesis.

My research aimed to explore how women leaders, *lideresas,* in marginalised neighbourhoods respond to climate change. As I left the field, it became clear that this relational framework did not simply support my analysis but resonated deeply with the realities I encountered on the ground.

Drawing again on Militz et al. (2019), my positionality, as a young, white, European researcher, not fluent in Spanish and with limited prior field experience, shaped how I engaged with the field and how the field engaged with me. I experienced moments of anxiety, uncertainty, and self-doubt. Yet, these moments became part of the learning process and allowed me to reflect more critically on my methods and the context in which I applied them.

One such moment, captured in the vignette below, illustrates a methodological limitation I encountered, particularly around language and epistemological mismatches. This encounter reveals how my chosen method of individual interviews did not fully align with the participants' way of knowing and sharing knowledge.

> I was nearing the end of my fieldwork in Medellín when I was invited to the *Encuentro de los huerteros y las huerteras,* a local gathering in Comuna 8. I arrived with one of my key gatekeepers, Estefanía, and we sat down to listen. She helped me take notes as the huerteros and huerteras shared their reflections, and for a moment, I felt calm. Then, suddenly, a wave of tension and anxiety rose in my body. Three of the *lideresas* I had interviewed and gotten to know a few weeks earlier began speaking about their collective knowledge. One of them turned to Estefanía and asked why I hadn't interviewed them together. The *lideresa* explained to us, "*…because all that we know, we know collectively."* At first, I felt confused, trying to grasp what they meant. But almost immediately, I felt a deep discomfort. I realised that although I had planned individual interviews to better manage language barriers and create space for personal narratives, I may have unintentionally constrained their voices. Their knowledge wasn't individual, it was shared. They would have preferred to speak as a group, in a setting where they felt more at ease and more fully seen. I had tried to care, but I now understood that care must be relational.

This moment in the field revealed a mismatch between my research design, my linguistic limitations, and the participants' epistemological frameworks. It serves as a powerful reminder that care, and knowledge production must be context-sensitive and relational. Future research could benefit from co-designed focus groups or collective storytelling methods, which might better align with the collective ways of knowing and being expressed by these *lideresas*.

5.3 Implications and Contributions; Reflections for Policy and Practice

This study contributes to both academic and societal knowledge, while offering concrete reflections for policy and practice.

Academically, the thesis advances the use o*f* care and relational autonomy as theoretical lenses to analyse climate vulnerability in marginalised urban contexts. These concepts not only guided the analytical framework but also informed the methodology itself. This was made evident in the care shown by gatekeepers and the locally grounded concept of *cuerpo-territorio*, discussed during the workshops on water and ecosystems.

Additionally, the study underscores how feminist epistemological and ontological approaches can enable more reflexive, grounded, and ethical research practices. By linking care and relational autonomy to expressions of empowerment, knowledge-sharing, and political action, the study contributes to ongoing scholarly conversations about how these concepts function as political tools in contexts of climate vulnerability, social marginalisation, and informality.

Societally, the research provides an in-depth case study from Medellín, a city marked by its transformation from violence to innovation yet still bearing historical and social wounds. Through empirically informed insights into how women leaders*, lideresas*, engage in local climate adaptation and collective strategies, the thesis deepens understandings of 'resilience from below'. These *lideresas* mobilise care-based, community-rooted knowledge to confront both environmental and social challenges, revealing a dimension of leadership and resilience that is often overlooked in mainstream planning and policy.

From these findings, several practical implications and recommendations emerge. This research advocates for a shift toward more caring forms of governance, where relational and community-based knowledge are not just acknowledged but prioritised. A gender-sensitive approach to urban and environmental policy should enable collective spaces for relational autonomy, while challenging dominant paradigms of top-down, masculinist, and individualistic planning. Such a shift is vital to respond more justly and effectively to the climate crisis.

Furthermore, the study highlights the need to amplify the voices of underrepresented actors, particularly *lideresas* in informal neighbourhoods, who often operate without formal recognition or resources. Supporting their efforts through policy and funding is crucial.

Policy recommendations include:

- Increase resources and funding for locally embedded organisations working with place-based, critical pedagogies on climate change.
- Sustain and expand programs that support collective capacity-building for women, especially in vulnerable urban contexts.

- Recognise and advocate for ‘resilience from below’, using care-based frameworks in planning and adaptation strategies.
- Provide institutional and financial support to *lideresas* to formalise their roles and facilitate environmental education for younger generations.

As noted in the introduction, this research was supported by Sida. This institutional backing made it possible to carry out fieldwork grounded in values of care, further underscoring the importance of international funding frameworks that centre justice-oriented research.

Ultimately, this thesis has not only contributed to academic literature but has also recognised and learned from those most affected, and at the same time, most active, in responding to environmental and social challenges. From these insights, it becomes possible to envision and begin building a more caring and climate-just city.

6 Reference List

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Appendix

Appendix A. Overview of Cited Interview Data

Interview Number	**Date of Interview**
Interview 1 [1]	8 February 2025
Interview 2	22 February 2025
Interview 3	26 February 2025
Interview 4	26 February 2025
Interview 5	26 February 2025
Interview 6[2]	-
Interview 7	15 March 2025
Interview 8	18 March 2025
Interview 9	21 March 2025
Interview 10	21 March 2025

[1] In Interview 1, two *lideresas* participated

[2] Interview 6 was conducted but not cited directly in the thesis and has therefore been omitted from this overview