

Article

The significance of prior resilience experiences in communities exposed to socio-political violence in Colombia for enhancing the community-based disaster management (CBDM) model

Paula Andrea Valencia Londoño^{1,*}, Luisa Fernanda Duque Monsalve², Sandra Patricia Trujillo¹

¹ Faculty of Social and Human Sciences, Universidad de Medellín, Medellín 050001, Colombia

² Faculty of Psychology, Universidad de San Buenaventura Medellín, Medellín 050001, Colombia

* **Corresponding author:** Paula Andrea Valencia Londoño, pvalencia@udemedellin.edu.co

CITATION

Valencia Londoño PA, Duque Monsalve LF, Trujillo SP. (2024). The significance of prior resilience experiences in communities exposed to socio-political violence in Colombia for enhancing the community-based disaster management (CBDM) model. *Journal of Infrastructure, Policy and Development*. 8(9): 5352. <https://doi.org/10.24294/jipd.v8i9.5352>

ARTICLE INFO

Received: 20 March 2024

Accepted: 5 June 2024

Available online: 11 September 2024

COPYRIGHT



Copyright © 2024 by author(s).

Journal of Infrastructure, Policy and Development is published by EnPress Publisher, LLC. This work is licensed

under the Creative Commons

Attribution (CC BY) license.

<https://creativecommons.org/licenses/by/4.0/>

Abstract: This study aims to underscore the relevance of pre-existing resilience experiences within communities affected by socio-political violence in Colombia, particularly in the context of developing effective risk management practices and enriching the CBDM model. This research employs a qualitative design, incorporating a multiple case study approach, which integrates a comprehensive literature review, in-depth interviews, and focus groups conducted in two Colombian communities, namely Salgar and La Primavera. The community of La Primavera effectively harnessed community empowerment and social support practices to confront socio-political violence, which evolved into a form of social capital that could be leveraged to address disaster risks. Conversely, in Salgar, individual and familial coping strategies took precedence. It is concluded that bolstering citizen participation in disaster risk management in both communities and governmental support for community projects aimed at reducing vulnerability is imperative. This study reveals that capabilities developed through coping with the humanitarian consequences of armed conflict, such as community empowerment and practices of solidarity and social support, can enhance community resilience in the face of disasters.

Keywords: disaster; disaster risk; community resilience; violence; empowerment; social support; solidarity; Colombia

1. Introduction

Community-Based Disaster Management (CBDM) is a model that regards communities as the primary experts on their vulnerability conditions, emphasizing their active participation in decision-making processes directed toward their well-being. The CBDM model encompasses various stages, including preparation, response, and recovery during emergencies (UNISDR, 2006). To this end, communities conduct a thorough assessment of the threats they face, their specific vulnerabilities, and their capacities, which serve as the foundation for their risk reduction programs (Azad et al., 2019).

The results of risk management processes guided by the CBDM model have been noteworthy, particularly in terms of reducing fatalities and property damage, particularly in developed nations (Haque and Uddin, 2013). The growing acceptance of this approach reflects the substantial evolution in risk management discourse in recent years, transitioning from a reactive and top-down approach to a proactive one that emphasizes community involvement. This paradigm shift is rooted in the shortcomings identified within the top-down risk management approach, which

include: limited success in assessing the needs of vulnerable populations; a transition from linear development to significant setbacks in growth and human development over the last decade, attributed to various catastrophic events; the escalation in the frequency of events, both small and medium-scale, leading to an increase in disasters and related losses (Azad et al., 2019).

Therefore, CBDM aims to prepare communities to respond to unexpected events, through their active participation in local government and voluntary support. This implies empowering the local population by transforming social, economic, and political structures that generate inequality and underdevelopment, and strengthening coping mechanisms to adapt local capacities (Azad et al., 2019; Masing, 1999; Skertchly and Skertchly, 2001). In that sense, communities become active subjects to face disasters and create their own strategies of risk management, gaining self-sufficiency. That permits reducing the impacts and risks of disasters through community participation, placing the people at the center of development (Urry, 2011). They gain control of their environment to guide the decisions and actions of governments and public administrators (Azad et al., 2019; Haque and Uddin, 2013, Ireni-Saban, 2013).

The key factor of the CBDM approach is the community empowerment processes and participation; this guarantees the sustainability of the community's initiatives for disaster reduction (Aldrich and Meyer, 2014). Community-based perspectives are based on existing local knowledge and experience, as well as resources and people's coping and adaptation strategies (Masing, 1999). This provides the community with mechanisms to sustain and enhance skills and resources despite facing adversity (Ireni-Saban, 2013). CBDM should be understood as a process that allows people and communities to build capacities to live and thrive in a changing environment and manage it effectively in uncertain and unpredictable circumstances Mayeur (2018). This forms the idea of a "resilient community," which is characterized by the ability to synergistically use all available resources to safeguard its livelihoods against threats, integrating ancestral knowledge passed down through generations with the modern early warning systems (Mayeur, 2018).

Strengthening local capacities begins with recognizing community bonds, shared values, practices, perceptions, and interests (Azad et al., 2019; Ireni, 2013). Consequently, social bonding capital is now regarded as a cornerstone of CBDM (Aldrich and Meyer, 2014; Delilah Roque et al., 2020). This type of capital encompasses emotionally close relationships among individuals, such as friends, family members, or neighbors, which facilitate the mobilization of solidarity and social support during times of need, such as disasters (Joshi and Aoki, 2014). Furthermore, it has been confirmed that social capital serves as a mediating variable between CBDM practices and disaster resilience (Salehi et al., 2022). This alignment makes sense as CBDM hinges on citizen empowerment through participation (Aldrich and Meyer, 2014).

In the Colombian context, risk management predominantly adheres to traditional top-down approaches, while the concept of resilience has garnered attention from academia and practical settings in various scenarios. This is particularly evident in well-documented processes of the recovery of populations affected by armed conflict, offering valuable lessons that can be applied to risk management contexts. The last 70

years of Colombia's history have been marked by strong episodes of socio-political violence that have resulted in recurrent and shocking humanitarian consequences. From the late 1940s and throughout most of the 1980s, the bipartisan struggle between liberals and conservatives, known as the "La Violencia" period, resulted in the first wave of displacements from the countryside to the city, caused by selective homicides and massacres perpetrated by armed groups. Cities such as Medellín doubled their population and began to occupy peripheral lands and inaccessible areas, starting with precarious settlements (Echeverry and Orsini, 2010). These liberal guerrillas, in the 1960s, gave rise to the formation of Marxist or Maoist leftist guerrillas, clearly influenced by the Chinese and Cuban revolutions, in turn, their pressure on drug traffickers and landowners for extortion payments, motivated in the 1970s the formation of self-defense armies, showing the "strong links between guerrilla and paramilitary activity with the increase in crime" (Giraldo, 2008, p. 101). In the 1980s and 1990s, the direct interests of these armed actors in the illegal economies led to a bloody struggle in rural areas and a complex phenomenon of violence, which resulted in a renewed increase in socio-political violence. This confrontation produced a series of humanitarian consequences for the civilian population, among the most visible: forced displacements, massacres, selective homicides, kidnappings, disappearances, sexual violence, forced recruitment, and landmine attacks, among others. According to the Comisión de la Verdad (2022): 450,664 were killed between 1985 and 2018, 45% of these homicides occurred between 1995 and 2004; 121,768 people were forcibly disappeared between 1985 and 2016; 50,770 were victims of kidnapping between 1990 and 2018; there were 16. 238 cases of recruitment of children and adolescents from 1990 to 2017; and according to OCHA Colombia (2023) 8,375,715 people have been included in the Single Registry of Victims for events of forced displacement that occurred from 1985 to 31 December 2022, according the Comisión de la Verdad (2022) was the peak year with 730,904 victims. This situation aggravated the humanitarian crisis in the territories and cities. As can be seen in the above data, after the paramilitary demobilization in the mid-2000s and the signing of the Peace Agreement with the FARC, socio-political violence persists, new post-demobilization groups fight for territorial control in strategic corridors and try to take over illegal economies, producing an upturn in the post-agreement humanitarian consequences.

Previous studies in Colombian contexts have underscored the significance of certain processes in fostering resilience among communities exposed to political violence (Carrasco and Villa, 2019). Researchers have found that collective memory exercises serve to transform pain, restore the dignity of victims, and create a platform for asserting their rights to truth, justice, and reparations (Carrasco and Villa, 2019; Latorre, 2010; Villa, 2014). Within community-based organizations, spaces for mutual support have enabled the redefinition of adverse experiences and the rebuilding of the social fabric (Villa, 2014). Collective resilience becomes achievable through communicative and affective reciprocity, manifested in shared narratives of adversity, solidarity, and empathy (Granados et al., 2017).

In broad terms, the formation of support networks in resettlement areas is crucial for victims of forced displacement in Colombia. Communities provide resources such as food, childcare support, housing construction, and even spaces for recreational activities (González, 2004). Assistance comes from neighbors, relatives, as well as

religious, educational, healthcare, and NGO institutions, fostering networks and bonds of trust and solidarity to cope with stress (Domínguez, 2018). In some instances, community-based organizations initiate development projects addressing food security, business start-up strategies, infrastructure improvement, and land restitution efforts (Domínguez, 2018). This highlights the active role of communities in resilience processes, aligning with the core tenets of the CBDM model, which emphasizes the experiences, capacities, and knowledge of communities as fundamental pillars in disaster management processes.

In Colombia, the prevailing approach to risk management adheres to a top-down model where public institutions take the lead in emergency preparedness, response, and recovery. A pertinent case in point is the community of La Primavera, situated in the Metropolitan area of Medellín City within the municipality of Barbosa. This community has grappled with the repercussions of armed conflict and natural disaster risks (Corporación Región, 2016). Another community under study is the municipality of Salgar, located among the Most Affected Areas by Armed Conflict (ZOMAC) in Colombia (República de Colombia, 2017). This municipality experienced a devastating flash flood in 2015, resulting in the loss of 104 lives. In these two cases, the present study seeks to demonstrate the significance of prior resilience experiences within communities exposed to socio-political violence in Colombia for developing risk management practices and enriching the CBDM model. This is achieved through a qualitative research design encompassing a comprehensive review of the academic literature, in-depth interviews, and focus groups, all aiming to identify the community resilience processes cultivated by victims of violence and their contributions to disaster risk management.

2. Materials and methods

Research The research was conducted with a qualitative approach and employed the multiple holistic case study method, allowing for an in-depth exploration of complex phenomena while considering the influence of context on their configuration (Yin, 2018). Specifically, this study adopted a multiple holistic case study approach, focusing on two communities that share exposure to socio-political violence and participation in disaster risk management processes. These communities, however, primarily differ in that one, “La Primavera,” represents an ex-ante case where a large-scale disaster has not yet occurred, while the other community, Salgar, is an ex-post case where a torrential flood has already taken place.

2.1. La primavera settlement

Is located between the left bank of the Medellín River and the north highway, and near to “El Hatillo” district, in the municipality of Barbosa, 42 km approximately from the metropolitan area of Medellín. Noticing that the settlement is built on a gas pipeline and next to the old railway line. The first inhabitant arrived in “La Primavera” in 1978, and according to reports by Corporación Región (2016), the settlement process can be delineated into four distinct periods. **Table 1** presents the different stages of the community settlement of “La Primavera”.

Table 1. Chronology of the settlement of “La Primavera”.

1997–2001 First period	2002–2013 Second period	2013–2018 Third period	2018–present time Fourth period
The settlement was founded. After a massacre, the settlement was closed in 2001.	Consolidation of the settlement. Creation of the association of victims of the armed conflict “Los Meandros Nuevo Amanecer”.	Announcement of the commuter train mega-project (risk of eviction of the local population). The Aburrá river changes its course, the community begins to perceive the risk of flooding. Creation of the resettlement project by the community	Disproportionate increase in population and houses that increases social conflicts Risk management actions

Source: adapted from the report of the region corporation.

The primary risk affecting the community is flooding from the Aburrá River, but it also faces threats from fires and traffic accidents. The settlement has led to the erosion of the banks of the Medellín River, exacerbated by the exploitation of the river’s resources. Additionally, the influx of new settlers offering housing to displaced individuals and migrants, such as Venezuelans, has generated coexistence difficulties and strained relations among leaders due to the prevailing community uncertainty, competition for limited resources, and the absence of state presence. Moreover, the impending construction of a commuter train has fueled apprehension due to the arrival of new illegal armed actors.

2.2. Salgar

Located in the southwestern part of the Antioquia department, Salgar was profoundly impacted by a torrential flood on 18 May 2015, resulting in the loss of 104 lives. Before this disaster, the municipality had experienced socio-political violence, first during the bipartisanship violence since the 1950s and subsequently due to the internal armed conflict involving guerrilla groups, paramilitaries, and the Colombian state security forces. Through the collaboration of public and private organizations, those who lost their homes in the 2015 avalanche were resettled in four housing projects in 2017. However, as per the assessment by the Municipal Disaster Risk Management Council (2023), a significant portion of the urban and rural population remains at high risk due to windstorms, forest fires, torrential floods, landslides, and inundations.

Explanatory case studies are instrumental in addressing questions about the “how” and “why” of a phenomenon (Yin, 2018). In this instance, the research question was, “How does community resilience to disasters or disaster risk manifest in Colombian communities that have experienced socio-political violence?” The theoretical proposition underpinning this study, informed by the CBDM framework, posits that prior experiences of coping with adversities, such as the socio-political violence encountered by both communities, enhance community resilience in the face of disasters.

The research was conducted between 2020 and 2023, during which participants’ narratives were collected regarding the coping strategies they developed in response to the socio-political violence affecting both groups. In Colombia, this violence peaked between 1996 and 2002, gradually decreasing thereafter (Calderón, 2016). Additionally, participants’ narratives were collected regarding their experiences in

disaster risk management during the study. In Salgar, the main focus was on how the community coped with the torrential flood in 2015, while in La Primavera, the focus was on managing the various risks perceived in the area since 2017. The aim was to identify if the resilience developed by these communities to face socio-political violence also helped them deal with disasters or the risk of disaster.

In qualitative case studies, narratives are used to understand the social actors' perspectives on their experiences (Merriam, 1998; Nie, 2017; Yin, 2018), acknowledging that their accounts are based on shared realities (Arias and Alvarado, 2015). These narratives are valuable for comprehending resilience processes (Corrales, 2005; Rodríguez, 2006; Vanistendael, 2002; cited in Domínguez and Herrera 2013), as they allow for the integration of adverse experiences into personal identity and the creation of narratives of hope and recovery. Such studies adopt a diachronic and holistic perspective, enabling the analysis of experiences within their socio-historical context, comparison, and maintaining a sense of continuity (Mallimaci and Giménez, 2006). It is acknowledged that these experiences, recalled verbally, “are interpreted from the present,” which aligns with the qualitative approach, more concerned with the subjective organization of individual and collective history than the enumeration of objective events (Ricoeur, 2006).

Triangulation of researchers, sources, and techniques was employed to enhance the study's validity. Triangulation among researchers was achieved through mutual review of coding and categorization processes. Triangulation of primary sources involved the inclusion of various actor types: community leaders, community members, and external actors supporting risk management processes, supplemented by a review of secondary sources. Triangulation of techniques encompassed semi-structured interviews, focus groups, participant observation, and literature review (see **Tables 2 and 3**).

Table 2. Sources and data generation techniques in La Primavera.

Technique	Number	Source	Observation
Semi-structured Interviews	9	Community Leaders	Community Action Board and Victims' Association
Semi-structured Interviews	21	Community Members	“High,” “Medium,” and “Low” areas of the settlement.
Semi-structured Interviews	9	External Actors	Governmental: Mayor, Planning Department, Risk Management Unit, Antioquia Railway, Metropolitan Area of the Aburrá Valley. Private Sector: Transmetano S.A. NGOs: Corporación Región. Educational Institutions: University of Antioquia.
Focus Groups	7	Community Leaders and Community Members	Talking maps for risk identification, timeline for resilience and vulnerability factors, family resilience, conflict identification, actor and female leadership mapping.
Participant Observation	Does not apply	Community Life	Walkthroughs, health campaigns, participation in inter-institutional forums.
Secondary Source Review	9	NGOs	Reports from Corporación Región.

Table 3. Sources and data generation techniques in salgar.

Technique	Number	Source	Observation
Semi-structured Interviews	6	Community Leaders	Environmental, cultural, victims' leaders, Community Action Boards.
Semi-structured Interviews	21	Community Members	Residing in "La Habana," "La Florida," "Las Margaritas," and "La Aldea."
Semi-structured Interviews	6	External Actors	Governmental: Municipal officials, firefighters. NGOs: Fundación Berta Martínez, Corporación Antioquia Presente.
Focus Groups	3	Community Leaders and Community Members	Talking maps for risk identification, family resilience, and actor mapping.
Participant Observation	Does not apply	Does not apply	Walkthroughs, Asocomunal activities.
Secondary Source Review	21	Press, NGOs, Universities, Government	Research reports and authorities, journalistic reports.

Following Yin's (2018) recommendation, the data were analyzed using the coding and categorization processes employed by grounded theory, aiming to uncover concepts or themes in the data that would help address the research question and subsequently verify whether the initial theoretical propositions are confirmed or not. These processes were carried out with the assistance of Nvivo software version 1.6.1. Additionally, two of the analysis techniques proposed by Yin (2018) were used to enhance the study's validity: explanation building and cross-case synthesis.

3. Results

The community resilience to disasters in the studied cases is particularly evident in the strengthening of risk communication practices in both communities, as well as in the efficient response and rapid post-disaster infrastructure reconstruction in the case of Salgar. Smaller advancements were also found in small-scale emergency response plans and preventive interventions to reduce risk in both locations. It is worth noting that these advancements have occurred in recent years, in Salgar, since the occurrence of the torrential flood in 2015 and in the La Primavera community when they began to perceive the risk of disasters in their territory, which happened in 2017. In the case of Salgar, partial achievements were also identified in economic, psychological, and social fabric recovery after the torrential flood, which can be understood as an expression of resilience from a "minimum" approach where resilience is seen as positive adaptation (Gómez and Klotiarenco, 2010).

The study highlights that the processes that promote community resilience to disaster risk can be condensed into four categories: 1) community empowerment; 2) social support and solidarity practices; 3) risk perception, and 4) risk governance through public-private networks. In this article, the first two will be discussed. The analysis did not favor a "literal replication" (Yin, 2018) because the theoretical proposition under evaluation operated differently in explaining the two cases. In the ex-ante case (La Primavera), coping with sociopolitical violence stimulated collective empowerment, social support, and solidarity practices, which favored disaster prevention and preparedness. In the case of Salgar, collective empowerment, social support practices, and solidarity also play an important role in community resilience

to disasters, but these processes were not as significant in coping with sociopolitical violence. On the contrary, the phenomenon of war in Salgar led to a withdrawal of citizens into their private lives, where family and individual coping strategies prevailed.

3.1. Community empowerment

3.1.1. Community empowerment: La Primavera case

According to a socio-demographic survey conducted by the research team and completed by 120 people from La Primavera, 74.8% reported being victims of forced displacement, and 58% are registered in the Sole Registry of Victims of the Armed Conflict; additionally, 26% reported being affected by some type of socio-natural disaster. Given the high rates of victimization, the “Association of Victims and Displaced Persons Nuevo Amanecer Los Meandros” was created by community members in 2013 to facilitate access to rights for victims: truth, justice, reparation, and non-repetition. This association has enabled victims living in La Primavera to receive compensation and psychosocial support. Community organizations, predominantly composed of victims of socio-political violence, have spearheaded various initiatives to promote environmental conservation and community participation in social programs. They have searched for assistance for people in extreme need, chronically ill individuals and people with disabilities, the elderly, and some families who have lost their homes due to floods. Additionally, they have organized efforts to enhance infrastructure, such as building paths, stairs, a community hall, and a precarious sewage system.

Over the years, the community has sought recognition and support from state entities, mobilizing in various ways to improve their living conditions. Initially, they faced resistance and obstacles as the municipal administration refused to engage with them and labeled them as “invaders.” However, through their persistent efforts and support from non-governmental entities, they gained visibility:

“The relationship (with the State) with them was null, because we came there and they looked at us like invaders, as if we were less than them, and I learned with the Region Corporation that nobody is more than anybody (...) we all have the same rights (...) we are already visible, they already know at all times that we are here.” (Community Leader, La Primavera).

Continued community organization, participation, and leadership have afforded them public visibility and the ability to voice their demands. This community empowerment has enabled them to propose risk management actions since 2017, when the population became more aware of the risks associated with changes in the river’s trajectory (bringing it closer to their homes). Regarding disaster risk management, the community has enhanced its communication and emergency response capabilities. Through their efforts, they have been included in the monitoring of the Early Warning System of Medellín and the Aburrá Valley due to the risk of floods. Additionally, some leaders act as “river watchers” to timely communicate risks. The community has participated in risk management training and established its own management committee. They have defined evacuation routes, meeting points, conducted emergency drills, and modified some practices to prevent disasters, such as avoiding

excavations and burning trash. In recent years, they also managed to remove an abandoned pipe causing erosion and flood risk and convinced the city's energy company to remove a high-voltage tower that posed a fire risk. These actions have been possible thanks to their efforts and networks with public and private organizations. A prominent project is the creation of a "resettlement project" to provide dignified housing in less disaster-prone areas. The proposal was created by the Victims' Association, with support from the NGO Corporación Región. It is a resettlement project that aims to ensure access to decent housing:

"What's your objective? (...) A housing project, what we are looking for is resettlement, in a place to start over, put down roots, because most of us are victims of forced displacement due to the armed conflict. So, here we cannot put down roots, we have no security." (Community Leader, La Primavera).

Community leaders conclude that risk management practices promoted by previous community processes of organization and participation are related to the same interests, claims for decent housing:

"Has the victims association helped you to face this issue of risk? Or do you see it as two separate processes?"

"No. It is the same process (...) we have been involved in all areas (...) we already realized that we were already visible, so we had to touch all areas." (Community Leader, La Primavera).

The resettlement project is their most ambitious collective interest, aiming to restore their rights as victims of forced displacement and rebuild their lives in a safer place. It should be noted that resettlement has been widely adopted by governments as a strategy for disaster risk reduction. However, scientific research has shown that resettlement rarely stimulates community resilience; on the contrary, this measure often has negative effects on health, social cohesion, and employment opportunities, among other aspects (Jain and Bazaz, 2020). For this reason, experts recommend conducting a thorough evaluation of the economic, social, and environmental costs and benefits before deciding to resettle a community. Nevertheless, they also acknowledge that under extreme conditions, resettlement can be a viable preventive strategy in areas with high levels of hydrogeological hazard (Menoni and Pesaro, 2008). The victims' organization of La Primavera, for its part, perceives the resettlement project as an opportunity to improve their living conditions, which makes sense given a set of circumstances. They are victims of forced displacement who settled informally in the area and therefore do not have property titles for their precarious homes. In this context, resettlement, supported by state resources, is seen as an opportunity to obtain homeownership under conditions of greater dignity and security. According to the survey conducted by this research team, the housing conditions are very poor; for example, 38.9% of families do not have sewage systems, and 61.2% of homes either lack bathrooms or have inadequately equipped ones. However, in all these years, the community has not been able to obtain the resources to make this project possible.

Therefore, in the case of La Primavera, one way people faced victimization in the context of the armed conflict was through community empowerment, allowing them to gain visibility in the public sphere, recognize themselves as rights-holders, and create projects such as resettlement that seek not only access to decent housing but

also disaster prevention. In this empowerment process, the NGO Corporación Región played a central role, characterized, as recommended by experts in the field, by its long-term and non-assistentialist accompaniment (Maskrey, 2011).

3.1.2. Community empowerment in Salgar case

In the case of Salgar, the survey was administered to people living in the four settlements where they were relocated in 2017, after the torrential rainfall of 2015. Of the 120 people who responded to the sociodemographic survey 96% were affected by the flood, 66.7% experienced forced displacement, and 25% are registered in the Single Registry of Victims of the armed conflict. According to the report by Ríos et al. (2020), in 2020 there were 10,423 conflict victims in all Salgar municipality, meaning that 60% of the population was registered in the Unique Victims' Registry (RUV). Salgar was the "epicenter of paramilitarism in southwestern Antioquia" and one of the causes of armed conflict in the territory was the demonization of social claims, leading to the persecution of unionists and all types of social leaders and community organizations demanding their rights. As a consequence of the armed conflict, a "society of silence" characterized by fear, mistrust, and abstentionism was established. The threat to those who denounced what was happening, as well as the elites' implicit agreement to project an image of "nothing is happening here", led to fear, shame, and stigmatization of victims and their families. The report concludes that fear is the primary emotional state of victims and survivors, which has led to a distrustful attitude as a form of "preventive care" that restricts citizen participation, as well as social capital for peacebuilding. In this regard, one collaborator states:

"We know that here there are mass graves, there are coffee areas where people and farmers are picking coffee and dodging skulls, but they don't say anything, they cover them up and continue with the coffee, why? out of fear (...) we have talked about what if we include in the work plan the search for missing persons here in the municipality, and truly, we are a little afraid that they will disappear us." (Community Leader, Salgar).

In Salgar, there is a Victims' committee that has carried out some actions of historical memory and has been trained in topics such as victims' rights. However, generally speaking, sociopolitical violence in Salgar has discouraged social and political participation of citizens (Ríos et al., 2020); it has led to psychosocial trauma (Martín-Baró, 2003) characterized by the deterioration of social fabric and the loss of trust in institutions. The following account describes the experience of the coordinator of one of the organizations that supported Salgar's reconstruction:

"Regarding community organization, it is very weak, largely due to security issues, so no one wanted to be a leader (...) fear, a lot of fear of participating, there were no community organizations or grassroots organizations, we asked, 'but are there women's organizations here?' no, 'youth organizations?' no, 'organizations of...?' nothing, nothing, nothing (...) they told me 'No, here it's not possible (...) being a leader here means putting your head on the line' (...) more than apathy, it was fear of the labeling of what a community leader meant for armed groups (...) the conflict was no longer exacerbated, but there was still that latent fear." (Coordinator, Corporación Antioquia Presente).

Despite their fears, community leaders in Salgar have made significant

contributions to disaster risk management in three key areas: participating in the creation of environmental public policies (such as the Watershed Management and Management Plan, POMCA), engaging in climate change adaptation and environmental education projects (Páez and Díaz, 2020), and acting as intermediaries between institutional agents responsible for risk management programs and the community:

“What is the first link that we have when there is a major emergency in a village? The President of the Community Action Board (JAC by its initials in Spanish), because he knows the territory, we rely on what they say: “look, my village is composed of seven water sources, five of them are at high risk, the access roads are like this“, the families, they know all their people.” (Firefighter, Salgar)

Community contributions to risk management have been primarily made by the leaders of the “Environmental Table” and the presidents of the Community Action Boards (JAC):

“What is the contribution of the JAC presidents to risk management processes? The contribution is always with the proposal that one makes, for example, I call the leaders here and say: look, this is going to be done by the Governor’s Office or by the Mayor’s Office. Can you help me by letting me know when they have a meeting or through the group you have? They are very kind and they manage the management (...) they are always very willing (...) you can propose, and they are very active, but not active in proposing.” (Geologist, Salgar).

The passage underscores the crucial role of local leaders’ knowledge in risk management and their function as intermediaries between the community and state institutions. However, as indicated in the preceding testimony, community leaders find themselves “managing the management,” with weak community-based participation in disaster risk management scenarios. In essence, while there are visible leadership structures within the community action boards in the rural areas of the municipality, participation in peace-building processes and disaster risk management remains limited. Indeed, one of the objectives of psychosocial intervention during Salgar’s reconstruction from 2015 to 2017 was to strengthen community organizations in the areas affected by the torrential downpour, encompassing both rural and urban areas. However, today, there is a perception that community leadership and organization lack sufficient strength to lead these challenges.

“These spaces are politically used by the administrations (...) they are always subject to what the mayor says (...) Most citizen participation spaces are not binding, and not being binding means that the State simply listens but turns a deaf ear to what the community proposes (...) We as boards have been very clear and very determinant in the sense that we are autonomous and independent in our actions.” (Environmental Leader, Salgar).

In addition, there are still armed groups present in the municipality that control drug trafficking corridors in the area. In fact, some peasants refuse to have radios that allow direct interaction with firefighters to facilitate risk communication because they fear that the use of these devices may be viewed with suspicion by armed groups:

“People are reluctant to those radios due to public order issues (...) so if they see that someone has a radio with direct connection to the station, they won’t think that the river is rising but that it’s a problem.” (Geologist, Salgar).

In summary, citizen participation was not widely used by the community of Salgar as a strategy for resilience in the face of the armed conflict. Additionally, in risk management actions, social leaders often act as intermediaries between the community and institutional entities; although they engage in externally initiated processes, grassroots proposals for risk management are rare.

3.2. Practices of solidarity and social support

3.2.1. Practices of solidarity and social support: La primavera case

While most residents of La Primavera live in precarious economic conditions, it is common for them to share food and other resources with neighbors who are in worse situations, such as the sick, disabled, or elderly individuals abandoned by their families. There are also frequent accounts of assistance provided to victims of forced displacement who came to live in the area, where they were supported with clothing, food, furniture, and more. A displaced victim recalls:

“We arrived at that house, at that small place, at 7:00 p.m., and by 11:00 p.m., there were two mattresses, there was food, and I don’t know where it all came from. About ten people, everyone wanted to help (...) Thank God! This lady showed up at my house with a bed, with everything... And I will never forget that.”
(Timeline Workshop, community member).

Other research with victims of forced displacement in Colombia has shown similar solidarity practices: the community provides newcomers with resources such as food, materials for building houses, and support for childcare (Domínguez, 2018; González, 2004). Building on the CBDM model, we add that the solidarity and binding social capital, previously used to cope with the ravages of armed conflict in the La Primavera community, allowed this population to positively cope with new crises such as disasters. This can be evidenced in testimonials like the following:

[The river] began to damage a tree there (...) and there was a rainy season, and my house collapsed. It’s been three years since everything collapsed, toilets, imagine not having a kitchen, a bathroom, all of that, it hit me very hard. [And what did you do to recover?] The neighbors are very good, it’s better to have friends than money. They gave me the materials, and they [the neighbors] provided the labor (...) (Community member, La Primavera).

This suggests that families in La Primavera forge enduring bonds with their neighbors, feeling a sense of unity due to the shared experience of facing similar hardships.

3.2.2. Practices of solidarity and social support: Salgar case

In the case of Salgar, mutual support, and solidarity practices among neighbors are not often referenced by the community when explaining how they coped with sociopolitical violence. Instead, study participants and secondary sources describe the withdrawal of individuals into their private lives as one of the main measures to protect themselves. A resident of Salgar who experienced forced displacement and the murder of her brother by paramilitaries recounts:

“We, as a family, went through the pain alone because many families, many people in the town were going through similar situations, so everyone lived their pain in their own way (...) we had to stay very isolated, very enclosed because

there were meetings here, meetings there, and in all the meetings, they would kill someone (...) we had to watch how they killed them there, wherever it was (...) and what they did was dismember them with chainsaws, cut off their heads, their hands, and then threw them into the river.” (Salgar resident).

However, in Salgar, the practices of solidarity among neighbors, do contributed to the community’s resilience in the response and reconstruction stages after disaster. Many participated in rescue efforts, shared food, worked to restore basic services, and provided shelter to other families who lost their homes. As an example of these practices, we present the following account:

“During the flood, there was a man who said, ‘If you don’t have, come and take; if you have extra, give.’ He had a cart, and anyone who needed something could go and take (...) So, whoever needed it received, and whoever had extra gave.” (Environmental Table Leader, Salgar).

These acts of solidarity intensified during the emergency response, but there is evidence of their existed before the torrential flood as a means of providing social support to people with greater economic vulnerability. A representative from an NGO describes it as follows:

“It’s a community where there aren’t many sources of employment or income, so there have always been many links among them, a lot of support, networks among them, but it was noticeable that it happened within the immediate environment, like with those from the same block.” (Coordinator of Antioquia Presente).

Therefore, solidarity practices and social support links were present in the community before the disaster, especially among close neighbors. However, such expressions that do appear in the face of disaster or economic vulnerability became less frequent in the face of the consequences of the armed conflict. According to the narratives of the participants in this study, this difference could be attributed to the prevalence of feelings of fear and distrust, which apparently led to a withdrawal into private life as a coping strategy in the face of socio-political violence.

4. Discussion

The results of other research coincide with the importance of community empowerment (Amar et al., 2019; Hosseini et al., 2017; López and Limón, 2017; Meier et al., 2021; Nuñez, 2020) and practices of solidarity and social support (Aldrich and Meyer, 2014; Islam and Walkerden, 2014; Sandoval et al., 2023) for community resilience. In this study, it was found that these processes were strengthened as they had been previously used by the La Primavera community to cope with sociopolitical violence. For this case, the study’s results confirm what is proposed by the community-based disaster management (CBDM) approach: pre-existing local capacities and institutions form the foundation of CBDM (Azad et al., 2019).

Although community empowerment and practices of solidarity and social support have also been relevant to Salgar’s community resilience against the 2015 torrential flood, they did not have the same significance in coping with sociopolitical violence. On the contrary, coping with the war involved a withdrawal of Salgar residents into their private lives, where individual and family coping strategies prevailed (e.g., family unity, perseverance, positive attitude, spirituality, among others). Regarding

this difference between the two cases, it is worth noting that coping mechanisms that facilitate resilient responses of individuals at one time may not have the same effect at another time (Kalawski and, 2003; López and Limón, 2017).

Several factors can help explain why the theoretical proposition that coping with armed conflict strengthened the La Primavera community's binding social capital, which was later used for disaster risk management, was confirmed in this case but not in Salgar. The first factor is that the Association of Victims of La Primavera is mostly composed of displaced individuals who fled much more violent areas. In comparison, La Primavera is seen as a safe territory where they feel they can exercise their right to civic participation. In contrast, in Salgar, memories of the conflict have been silenced, and there has been no reconciliation process to rebuild the social fabric. Some social leaders are still stigmatized. It should be noted that narratives of fear and political repression tend to generate passivity and indifference (Martín-Baró, 2003). The second differentiating factor is the support provided by the NGO Corporación Región to the people of La Primavera, which has facilitated their empowerment. Conversely, institutional presence in Salgar, while playing a crucial role in the response and reconstruction after the avalanche, has leaned towards assistance and rescue efforts, in a top-down disaster management model.

The findings of this study align with other research on resilience to sociopolitical violence in Colombia, which also emphasizes the importance of community empowerment and practices of solidarity and social support (Carrasco, 2019; Carrasco and Villa, 2019; Granados et al., 2017; González, 2004). However, the role of historical memory holds a different place in the two cases. In studies on sociopolitical violence, it is related to the construction of truth, symbolic reparation, and dignification of victims (Carrasco and Villa, 2019; Latorre, 2010; Villa, 2014). In this research, the memory of the disaster underpins risk perception and thus drives actions for its management.

It should be clarified that neither Salgar nor La Primavera are cases where the CBDM approach has been followed. Although residents of both communities participate in training, drills, and other activities, they do not have social control over projects (Arnstein, 1969). Instead, a top-down risk management approach prevails, where the initiative lies with actors external to the community, and community leaders predominantly play a role as intermediaries or in "management of management." This situation is similar to other cases (Curato and Calamba, 2020) where participation is a form of "knowledge transfer," and communities have predetermined functions from above; they can participate in consultations but do not influence the distribution of power or resources for risk management. According to Curato and Cambra (2020), this form of participation can be transformative to some extent and can help build disaster-resilient communities, but it is limited to achieving a return to "normality" rather than questioning the underlying structures of vulnerability.

In the case of Salgar, the contribution of public and private institutions has followed a "rescue" logic. In La Primavera, the community has proposed initiatives such as resettlement, with the support of an NGO, but these have not materialized due to funding difficulties or institutional management challenges, in a political context that does not prioritize allocating resources for preventive actions. Without such preventive interventions, it is not possible to achieve the objectives proposed by the

CBDM, which include reducing vulnerability and transforming the social, economic, and political structures that generate inequality (Azad, 2019; Masing, 1999; Skertchly and Skertchly, 2001). The challenge is not merely to promote community participation in government-planned risk reduction activities but to strengthen their capacity to unlock the political and economic resources necessary for managing risks at all levels. This requires strong community organization but also government support for community-proposed risk reduction programs (Maskrey, 2011).

5. Conclusion

In general terms, it can be affirmed that, as affirmed by previous research, community empowerment and practices of solidarity and social support are important for community resilience. In the case, of populations affected by previous phenomena of socio-political violence, these practices can emanate from the response mechanisms generated by this violence, and therefore, pre-existing local and institutional capacities can become the basis for CBDM. However, it is important to keep in mind that not all resilient practices in the face of armed conflict lead to community empowerment; in some cases, copying in the face of these situations may lead to a retreat into the family and individual sphere, with important contributions in terms of individual and family resilience but with serious limitations for the deployment of CBDM.

This diverse response to socio-political violence and its possibility of transferring or not to the CBDM process can be explained by factors such as: 1. The magnitude of exposure to violence, which, according to the literature on resilience, is one of the main factors triggering the response, 2. The persistence of exposure to violence, which in the Colombian case has implied a withdrawal to the private sphere, the disappearance of individual leadership due to fear of stigmatization, the persistence of narratives of fear and political repression, 3. The type of support received from public entities and NGOs, can remain in the assistance perspective or be capacity-building.

A fundamental element to consider in assessing the contribution of community empowerment and solidarity practices originating in the response to socio-political violence to CBDM is the role of historical memory, which in the particular case of disaster events underpins risk perception and thus drives actions for its management.

However, in none of the cases studied was a CBMD approach intentionally implemented; risk management was directed from a traditional, top-down approach, where the role of the community has been, in most of the process, consultative. This perspective ignores the preventive component of CBMD, seeks a return to “normality” without questioning the underlying structures that allow vulnerability derived from inequality scenarios to persist, and forgets the importance of strengthening community organization to manage the political and economic resources needed to address risks at all levels. Without this empowerment process, a true CBMD that transforms the understanding of risk management will never be possible.

Author contributions: Conceptualization, LFD and PAV; methodology LFD, PAV and SPT; software, LFD; validation, LFD, PAV and SPT; formal analysis, LFD; investigation, LFD, PAV and SPT; resources, PAV; data curation, LFD; writing—original draft preparation, LFD; writing—review and editing,

LFDM, PAVL and SPT; visualization, LFDM; supervision, PAVL; project administration, PAVL; funding acquisition, PAVL. All authors have read and agreed to the published version of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

References

- Aldrich, D. P., & Meyer, M. A. (2014). Social Capital and Community Resilience. *American Behavioral Scientist*, 59(2), 254–269. <https://doi.org/10.1177/0002764214550299>
- Amar, J., Rojas, S., Martínez, M., Utria, L., & Colmenares, L. (2019). Resilience in victims of the winter wave in the southern Atlantic (Spanish). Barranquilla, Colombia: Editorial Universidad del Norte.
- Arnstein, S. R. (1969). A Ladder of Citizen Participation. *Journal of the American Institute of Planners*, 35(4), 216–224. <https://doi.org/10.1080/01944366908977225>
- Azad, M. A. K., Uddin, M. S., Zaman, S., et al. (2019). Community-based Disaster Management and Its Salient Features: A Policy Approach to People-centred Risk Reduction in Bangladesh. *Asia-Pacific Journal of Rural Development*, 29(2), 135–160. <https://doi.org/10.1177/1018529119898036>
- Baca, E., & Cabanas, M. (2003). Victims of violence. Psychopathological studies (Spanish). Madrid: Triacastela.
- Carrasco, N. (2019). Community resilience in victims of political violence linked to social and community organizations in Colombia [PhD thesis] (Spanish). Universidad de San Buenaventura.
- Constanza, G. V. (2004). Transformation and resilience in families displaced by violence to Bogotá (Spanish). *Revista de Estudios Sociales*, 18, 123–130. <https://doi.org/10.7440/res18.2004.11>
- Curato, N., & Calamba, S. J. (2018). Surviving Disasters by Suppressing Political Storms: Participation as Knowledge Transfer in Community-Based Disaster Governance. *Critical Sociology*, 46(2), 241–256. <https://doi.org/10.1177/0896920518796167>
- Díaz, D., Blanco, A., Sutil, L., & Schweiger, I. (2007). Arguments for a psychosocial approach to trauma: well-being, a pattern of health and disorder (Spanish). In: Yubero S., Larrañaga y E., Blanco A. (editors). *Convivir con la violencia*. Ediciones de la Universidad Castilla-La Mancha.
- Domínguez De la Ossa, E. M. (2018). Family resources to face adversity of forced displacement in colombia. *Psicología Desde El Caribe*, 35(2), 1–21. <https://doi.org/10.14482/psdc.35.2.8599>
- El Espectador. (2021). Juan Gabriel Rueda, environmental and social leader from Salgar, Antioquia, was murdered (Spanish). Available online: <https://www.elespectador.com/ambiente/asesinan-a-juan-gabriel-rueda-lider-ambientalista-y-social-de-salgar-antioquia/> (accessed on 20 February 2024).
- Gómez, E., & Kotliarenko, M. A. (2010). Family resilience: an approach to research and intervention with multiproblem families (Spanish). *Revista de Psicología*, 19(2), 103. <https://doi.org/10.5354/0719-0581.2010.17112>
- Gómez, J. D. V. (2014). Remembering in order to rebuild. The role of historical memory in repairing the social fabric (Spanish). Editorial Bonaventuriana.
- Granados-Ospina, S.J., L. F., Alvarado-Salgado, S. V., Carmona-Parra, J. (2017). The path of resilience: from the individual subject to the political subject. *Magis (Spanish)*. *Revista Internacional de Investigación En Educación*, 10(20), 49. <https://doi.org/10.11144/javeriana.m10-20.crsi>
- Haque, C. E., & Uddin, M. S. (2013). Disaster management discourse in Bangladesh: A shift from post-event response to the preparedness and mitigation approach through institutional partnerships. In: Tiefenbacher, J. (editor). *Approaches to disaster management: Examining the implications of hazards, emergencies and disasters*. IntechOpen. pp. 33–44.
- Hosseini, S. H., Amanat, N., Ghanbari, V., et al. (2017). Community-Based Management Challenges in Disaster Risk Reduction: A Content Analysis in Iran. *Health in Emergencies and Disasters Quarterly*, 2(2), 63–70. <https://doi.org/10.18869/nrip.hdq.2.2.63>
- Ireni-Saban, L. (2012). Challenging Disaster Administration. *Administration & Society*, 45(6), 651–673. <https://doi.org/10.1177/0095399712438375>
- Islam, R., & Walkerden, G. (2014). How bonding and bridging networks contribute to disaster resilience and recovery on the Bangladeshi coast. *International Journal of Disaster Risk Reduction*, 10, 281–291. <https://doi.org/10.1016/j.ijdr.2014.09.016>
- Jeon, H. Y. (2021). *Sustainable Development of Water and Environment*. Springer International Publishing. <https://doi.org/10.1007/978-3-030-75278-1>

- Joshi, A., & Aoki, M. (2014). The role of social capital and public policy in disaster recovery: A case study of Tamil Nadu State, India. *International Journal of Disaster Risk Reduction*, 7, 100–108. <https://doi.org/10.1016/j.ijdr.2013.09.004>
- Kalawski, J. P., & Haz, A. M. (2003). Y ... where is the resilience? A conceptual reflection (Spanish). *Revista interamericana de psicología*, 37(2), 365–372.
- Latorre Iglesias, E. L. (2010). Memory and resilience study of the memory of the victims of the armed conflict in the department of Magdalena: presentification, visibilization, catharsis and resilience (Spanish). *Prolegómenos*, 13(25), 95–109. <https://doi.org/10.18359/prole.2448>
- López, F., & Limón, F. (2017). Components of the community resilience process: cultural knowledge, social capacities and organizational strategies (Spanish). *Revista Latinoamericana de Ciencia Psicológica*, 9(3), 1–13.
- Martín-Baró, I. (2003). Power, ideology and violence (Spanish). Madrid: Trotta.
- Masing, L. (1999). Integrated community disaster planning: The Philippine Experience. In: Ingleton, J. (editor). *Natural disaster management*. Leicester: Tudor Rose. pp. 201–203.
- Maskrey, A. (2011). Revisiting community-based disaster risk management. *Environmental Hazards*, 10(1), 42–52. <https://doi.org/10.3763/ehaz.2011.0005>
- Mayeur, C. (2018). Building Resilience for Well-Being: Guidelines for Spanish Development Cooperation (Spanish). Available online: <https://bibliotecadigital.aecid.es/bibliodig/es/consulta/registro.do?id=10874> (accessed on 3 May 2023).
- Nuñez, J. (2020). Community structure and self-organization: elements of social resilience for disaster scenarios (Spanish). *Revista Cultura y Representaciones Sociales*, 15(29), 331–364.
- Páez, H., & Díaz. (2020). Adaptation to climate change in informal settlements: analysis and strengthening of local initiatives in Latin America and the Caribbean (Spanish). Documento estudio de caso Salgar (Antioquia-Colombia).
- República de Colombia. (2017). Decree No. 1650 of 2017 Establishing the National Agricultural Innovation System SNIA. República de Colombia.
- Rios, G., Jaramillo, J., Taborda, J., et al. (2020). Southwestern Antioquia: a silenced conflict (Spanish). Available online: <https://periodicoelsuroeste.com/suroeste-antioqueno-un-conflicto-silenciado/> (accessed on 3 May 2023).
- Roque, A. D., Pijawka, D., & Wutich, A. (2020). The Role of Social Capital in Resiliency: Disaster Recovery in Puerto Rico. *Risk, Hazards & Crisis in Public Policy*, 11(2), 204–235. <https://doi.org/10.1002/rhc3.12187>
- Salehi, A., Keikha, A., Yaghoubi, N. M. (2022). The Effect of Community-based Crisis Management on the Resilience to Disasters with the Role of Social Capital. *International Journal of Human Capital in urban management*.
- Sandoval-Díaz, J., Muñoz, M. N., & Martínez, D. C. (2023). Systematic review on community adaptive capacity and resilience to socio-natural disasters in Latin America and the Caribbean (Spanish). *Revista de Estudios Latinoamericanos Sobre Reducción Del Riesgo de Desastres REDER*, 7(2), 187. <https://doi.org/10.55467/reder.v7i2.132>
- Skertchly, A., & Skertchly, K. (2001). Catastrophe management: Coping with totally unexpected extreme disasters. *Australian Journal of Emergency Management*, 16(1), 23–33.
- Summary for Policymakers. (2014). *Climate Change 2013—The Physical Science Basis*, 1–30. <https://doi.org/10.1017/cbo9781107415324.004>
- Tomkiewicz, S. (2004). The emergence of the concept (Spanish). In: Cyrulnik, B. (editor). *El realismo de la Esperanza*. Barcelona: Gedisa.
- Yin, R. (2018). *Case study research and applications: design and methods*, 6th ed. SAGE Publications, Inc.