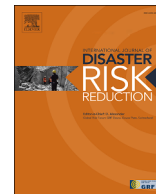


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

International Journal of Disaster Risk Reduction

journal homepage: www.elsevier.com/locate/ijdr

Differential ethnic approach in disaster risk reduction and management: The case of Colombia

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ARTICLE INFO

Keywords:

Disasters
Risk management
Colombia
Cultural diversity
Ethnicity

ABSTRACT

Colombia is a multicultural country, with ethnic minorities comprising 13% of its population. These ethnic groups have high vulnerability to disasters, not only due to their geographic location, but also because of inequities that exacerbate the vicious cycle of poverty. However, they have developed knowledge and tools to face these disasters that are responsive to their specific needs and should be incorporated into national and sub-national disaster risk reduction and management (DRRM) policies and strategies to ensure inclusion and institutionalization. This article aims to understand the current incorporation of the differential ethnic approach in the DRRM system of Colombia. A literature review of journal articles and grey literature directly relevant to the differential ethnic approach in DRRM in Colombia was conducted on December 2022 and January 2023. Out of 1067 records, only 20 were eligible: 15 (75.0%) grey literature and 5 (15.0%) journal articles. Majority of the records (19, 95.5%) were on disaster prevention or mitigation. Results showed that official national DRRM policies and plans recognize the cultural diversity of Colombia, mandating several activities that require the inclusion of ethnic minorities. Narratives of DRRM activities where ethnic minorities were involved were found. However, challenges in adopting the guidelines at the national and local levels were found, highlighting the need to increase efforts to strengthen the integration of the differential ethnic approach in the DRRM system. The low number of scoped records also highlights the lack of documentation, monitoring, evaluation, or research that can provide insights that can contribute to this topic.

1. Introduction

Colombia has the highest recurrence of extreme events in South America, with 84% of its population and 86% of its assets estimated to be exposed to two or more hazards. Due to its geographical location, the country experiences a variety of disasters, including tropical cyclones, floods, droughts, earthquakes, volcanic eruptions, and tsunamis [1,2]. The highest vulnerability to these disasters is usually observed in marginalized populations, such as ethnic minorities, victims of armed conflict, and migrant populations, among others. These populations are more prone to suffering the consequences of disasters, leading to delayed development and greater inequity that exacerbate the vicious cycle of poverty [3,4]. As they continue to overcome disasters, they develop important risk reduction tools from their own knowledge, values, and culture that are responsive to their specific needs. The institutionalization of these

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<https://doi.org/10.1016/j.ijdr.2023.103958>

Received 9 March 2023; Received in revised form 21 August 2023; Accepted 21 August 2023

Available online 22 August 2023

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efforts may help improve the inclusivity and effectiveness of national and sub-national disaster risk reduction and management (DRRM) system, policies, plans, and programs [5].

With Colombia being a multi-ethnic and multicultural country, around 13% of its 51 million population are from ethnic minorities, Colombian legislation defines minority ethnic groups as communities of people who share an origin, a history, and their own cultural characteristics. In Colombia, this concept includes 87 indigenous groups, Afro-descendant communities, raizal communities, and gypsy communities [6,7]. In 2022, the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) reported that out of the 7.7 million people in need of humanitarian aid in Colombia, 17.1% (1.9 million) belong to minority ethnic groups [8]. Recognizing the exacerbated risk in these vulnerable populations, the Pan American Health Organization (PAHO) has advocated for the engagement of minority ethnic groups in planning national and sub-national DRRM strategies to ensure that their specific needs are met and that DRRM strategies are culturally appropriate and respectful to better protect them during and after disasters [5].

The Sendai Framework for Disaster Risk Reduction 2015–2030 highlights the importance of such inclusive, accessible, and non-discriminatory whole-of-society approach to DRRM. This includes promoting living conditions that develop local capacities, community, and institutional resilience, paying special attention to the most vulnerable populations [9]. To this end, *enfoque diferencial étnico*, or the differential ethnic approach, has been proposed by the PAHO as a strategy to reduce disaster risk in multicultural communities. This approach focuses on identifying and recognizing the special ethnic and cultural characteristics of minority ethnic groups, including their thoughts, worldviews, and development visions, and incorporating these into action. This can guarantee the integration of ancestral knowledge, own media and languages, and forms of education and communication into DRRM planning, allowing these populations to develop their own capacities and tools for more appropriate and sustainable preparation, response, and recovery [10,11].

In a multicultural country like Colombia that is constantly exposed to hazards, the importance of involving minority ethnic groups in the development of DRRM strategies and plans is crucial, especially as they are the ones more vulnerable and at risk. As the country continues to improve its DRRM approach, it is important to understand the extent of how minority ethnic groups are considered in national and sub-national strategies and plans. This article aims to understand the current incorporation of the differential ethnic approach in the DRRM system of Colombia. At the moment, no such reports have been published. As such, the results of this article can aid researchers and policy makers in the further integration of the differential ethnic approach into national and sub-national DRRM strategies and plans of Colombia, with the end goal of protecting the rights and improving the lives of minority ethnic groups. Likewise, this article can serve as a reference for countries with multicultural communities that seek ways to integrate ethnic minority groups within their DRRM systems.

2. Methodology

Following the Joanna Briggs Institute (JBI) Manual for Evidence Synthesis [12], a literature review was conducted on December 2022 and January 2023. The literature search was limited to online-based databases and search engines, including PubMed, Scopus, Medline Ovid, LILACS, SciELO, Evidence Aid, and Google Scholar. This literature review included grey literature, which are literature not published in peer review journals [12]. This type of literature serves as a valuable resource to address the potential scarcity of published articles in scientific journals. Grey literature often offers information that may not be present in commercially published sources, offering a crucial platform for sharing studies featuring null or negative outcomes that might otherwise remain unpublished [13]. For grey literature, databases in the official websites of the Government of Colombia, UN OCHA, Médecins Sans Frontières (MSF), Relief Web, and International Committee on the Red Cross (ICRC) were used. The search was made using a combination of basic keywords and Medical Subject Headings (MeSH) terms, including “disasters,” “indigenous peoples or ethnicity,” and “Colombia.” The search was done in both English and Spanish and was limited to literature published from 1991, which was when the multiethnicity of the country was recognized in its constitution [14], to 2022.

The inclusion criteria for the review included full-text primary or secondary research articles and technical reports that were directly relevant to the topic of differential ethnic approach in DRRM in Colombia published in either English or Spanish. The scoped articles were recorded in an EndNote database, and duplicates and articles that did not meet the inclusion criteria were removed. The remaining articles were then screened for relevance according to the inclusion criteria by two independent researchers. Disagreements were resolved by a third researcher. Similarly, the resulting articles were then analysed and categorized into major themes by two independent researchers, with the third researcher resolving disagreements. The themes used were according to the major DRRM phases: prevention/mitigation, preparedness, and response and recovery. Some articles encompassed more than one phase and were categorized into multiple themes accordingly. All researchers who reviewed and coded the articles have extensive research experience in public health.

3. Results

3.1. Literature search

A total of 1067 records were scoped in the initial database search. From this, 543 records (50.9%) were removed: 356 (33.4%) were duplicates, 154 (14.4%) were marked ineligible, and 33 (3.1%) were not in English or Spanish (i.e., the title was in English or Spanish, but not the main text). After screening the abstracts of the remaining 524 records, 129 records (24.6%) that were not directly related to the topic were removed. Of the remaining 295 records, only 193 records (65.4%) were retrievable. From this, 173 records (89.6%) were removed due to irrelevance the topic or unavailability of full text. A total of 20 articles and grey literature were found eligible for this review [11,14–32] (Fig. 1).

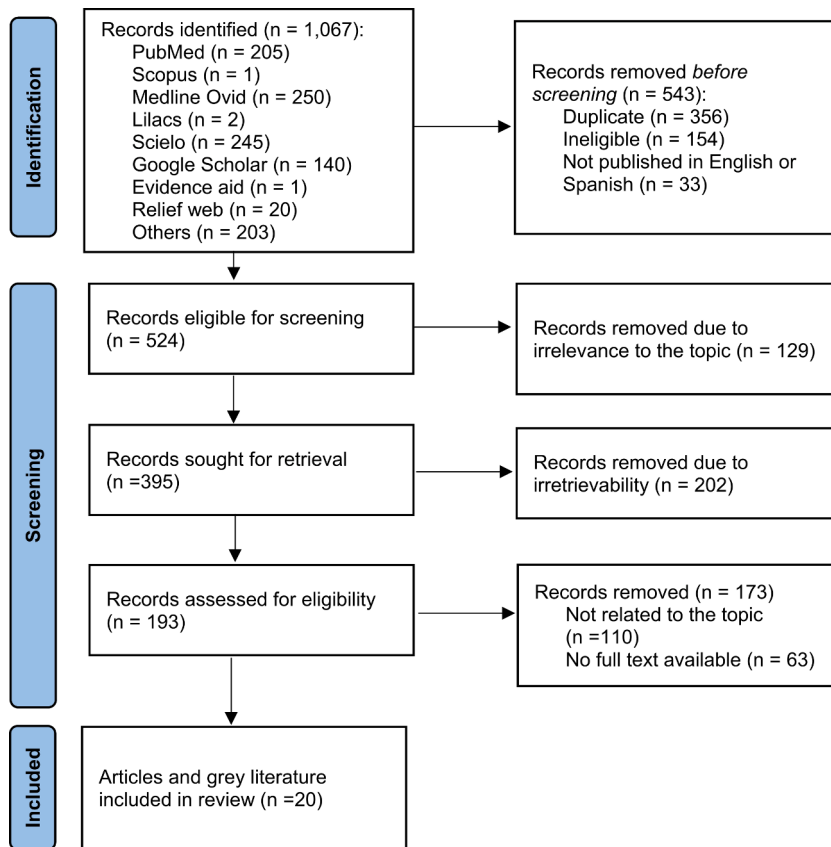


Fig. 1. PRISMA Flow Diagram of the literature search process.

Of the 20 eligible records, 15 (75.0%) were grey literature [11,14–27]: three documents (15.0%) are related to laws and policies [14–16], eight (40.0%) are official plans and strategies of the Government of Colombia [17–24], one is a guiding strategy from an international body [11], and three (15.0%) are technical reports [25–27]. All the grey literature scoped were published in Spanish. The remaining five articles (25.0%) were published by academic researchers in journals: three (15.0%) from local universities published in Spanish [28–30] and two (10.0%) international universities (Germany and Brazil) in association with local universities published in English [31,32]. There were no indications that any of the authors were associated with or were of ethnic origins, but some researches were conducted in collaboration with community leaders [30–32]. Almost all of the articles were published in the last 17 years (2005–2022), except for one that was published in 1991 [14].

In terms of content, majority of the records (18, 90.0%) were on disaster prevention/mitigation [11,14–23,25,26,28–32]. Of the 18, 13 (72.2%) focus solely on prevention/mitigation [11,14–16,19–23,25,28,30,32], while 4 (22.2%) were on both prevention/mitigation and preparedness [17,18,26,31] and one (5.0%) was on both prevention/mitigation and response [29]. The remaining two documents (10.0%) were on disaster response and recovery [24,27]. A summary of the articles is shown in Table 1.

3.2. Differential ethnic approach in DRRM in government laws and plans

As a multiethnic and multicultural country, the Government of Colombia supports and protects the rights of its minority ethnic populations. Most importantly, the Colombia Constitution of 1991 recognizes the diversity of ethnic and cultural groups in the country, promoting non-discrimination based on ethnicity or culture [14]. Moreover, in 2005, the United Nations High Commissioner for Refugees (UNHCR) released a guiding strategy on developing guidelines for the comprehensive care of displaced indigenous populations in Colombia following the differential ethnic approach [11].

In terms of their inclusion in DRRM planning, the principle of cultural diversity was included in the Política Nacional de Gestión del Riesgo de Desastres (National Disaster Risk Management Policy) of 2012 [15]. In relation to this, the Unidad Nacional para la Gestión del Riesgo de Desastres (UNGRD, National Unit for Disaster Risk Management) published the Estrategia Nacional para la Respuesta de Emergencias 2015–2030 (National Strategy for Emergency Response). This strategy highlighted the normative, technical, and methodological elements that can guide national and sub-national actors in incorporating a differential ethnic approach in DRRM actions [17,18].

Colombia's Estrategia Nacional para la Respuesta de Emergencias mentioned the need to train risk management workers in the inclusion of differential approach and cultural diversity in designing, implementing, and evaluating care strategies before, during, and after emergencies [18,25]. In addition, various recent DRRM plans also mentioned the importance of designing DRRM strategies with

Table 1
Articles included in the review.

Author	Title	Publication date	Details	DRRM phase	Reference
<i>National laws and policies</i>					
Corte Constitucional de Colombia	Constitución Política de Colombia	1991	No discrimination based on ethnicity or culture	Prevention/mitigation	14
Congreso de la República de Colombia	Ley 1523 de 2012	2012	Established the policy for disaster risk reduction and management (DRRM)	Prevention/mitigation	15
Departamento Administrativo de la Presidencia de la República	Decreto 2157 de 2017	2017	DRRM plan for public and private companies	Prevention/mitigation	16
<i>National plans and strategies</i>					
Unidad Nacional para la Gestión del Riesgo de Desastres (UNGRD)	Plan Nacional de gestión del riesgo de desastres 2015–2030	2022	National DRRM Plan 2015–2030	Prevention/mitigation; Preparedness	17
UNGRD	Estrategia Nacional para la Respuesta de Emergencias	2015	National Emergency Response Strategy	Prevention/mitigation; Preparedness	18
Ministerio de Salud y Protección Social (MinSalud); Organización Panamericana de La Salud (OPS)	Plan Sectorial de Gestión del Riesgo de Desastres	2016	DRRM sectoral plan	Prevention/mitigation	19
MinSalud; OPS	Guía Hospitalaria para la Gestión del Riesgo de Desastres	2017	DRRM guide for hospitals	Prevention/mitigation	20
UNGRD	Plan de pueblos indígenas y grupos étnicos	2017	Implementation plan for the “todos somos pacífico”; improving community diagnosis by involving community leaders	Prevention/mitigation	21
UNGRD	Guía comunitaria para la Gestión del riesgo de Desastres	2013	Risk assessment training plan for community leaders	Prevention/mitigation	22
Departamento Nacional de Planeación	Lineamientos para la implementación del enfoque de derechos y la atención diferencial a grupos étnicos en la gestión de las entidades territoriales Sostenible	2016	Guidelines for implementing the rights-based approach and differential attention to ethnic groups in sustainable territorial management in Colombia	Prevention/mitigation	23
Ministerio de Interior y de Justicia Republica de Colombia	Objetivo del Sistema Nacional de Prevención y gestión del riesgo de desastres, mitigar el riesgo por fenómenos naturales	2007	A system established by the Ministry of Interior and Justice in Colombia aimed to response and recovery from natural phenomena	Response and recovery	24
<i>International guiding strategy</i>					
United Nations High Commissioner for Refugees	Enfoque Diferencial Étnico del ACNUR Colombia. Estrategia de Transversalización y Protección de la Diversidad. Población Indígena y Afro colombiana	2005	UNHCR's Ethnic Differential Approach in Colombia, a strategy for Transversalization and Protection of Diversity for Indigenous and Afro-Colombian population	Prevention/mitigation	11
<i>Technical reports</i>					
Cardenas A	Enfoque diferencial y discapacidad	2015	Technical report about differential approach and disability	Prevention/mitigation	25
García Gutiérrez A	Fortalecimiento de la capacitación e investigación en gestión del riesgo en Colombia	2014	Building a team to assess volcanos risk with indigenous communities	Prevention/mitigation; Preparedness	26
UNGRD	Informe de estion 2013	2013	Report on the management of UNGRD in 2013, focusing on mitigation of the high risk of drought among the Wayuu indigenous community in Alta Guajira	Response and recovery	27
<i>Published articles</i>					
Vásquez Santamaría JE, Gómez Vélez MI, Martínez Hincapié HD	Approximation to the first report on extension for the inter-american commission on human rights (Interamerican Comission on Human Rights- IACHR): Managing the risk of natural disasters in Colombia as a general overview for the exercise of human rights in processes of population resetting	2017	Discussed the first report on extension for the Inter-American Commission on Human Rights (IACHR) in the context of managing the risk of natural disasters in Colombia and its impact on human rights in processes of population resettlement	Prevention/mitigation	28

(continued on next page)

Table 1 (continued)

Author	Title	Publication date	Details	DRRM phase	Reference
Vásquez Santamaría JE	The increased risk of COVID 19 in Colombia as a result the state of information for the prevention of technical foreseeable disasters	2020	Discussed the increased risk of COVID-19 in Colombia resulting from the state of information for the prevention of technical foreseeable disasters	Prevention/mitigation; Response	29
Flórez LAR	Community risk management. Spatial and environmental justice.	2020	Community management experience for territorial planning in rural areas	Prevention/mitigation	30
Claghorn J	Reinhabit the Mountain: strategies and processes for sustainable communities in the mountainous periphery of Medellín	2014	Risk mitigation through community engagement in rural areas	Prevention/mitigation; Preparedness	31
Calderón Ramírez DR, Frey K	Networks and Disasters Risk Governance in Bogota, Colombia	2022	Cooperation agreements and participation of different social actors in disaster risk management and resilience building in rural communities	Prevention/mitigation	32

specific population groups, recognizing that DRRM is a social process that involves the responsibility of various actors, including the public, private, and community sectors at the national and sub-national levels. This was highlighted in the Plan Sectorial de Gestión del Riesgo de Desastres (Disaster Risk Management Sector Plan), Plan de Gestión del Riesgo de Desastres de las Entidades Públicas y Privadas (Disaster Risk Management Plan for Public and Private Sectors), and Guía Hospitalaria para la Gestión del Riesgo de Desastres (Disaster Risk Management Guide for Hospitals) [16,19,20].

Beyond this, the Government of Colombia also established the Plan Todos Somos Pacifico or the Plan de Pueblos Indígenas y Grupos Étnicos (Plan for Indigenous Peoples and Ethnic Groups) in 2017, a plan that focuses on reducing inequalities in the Pacific Region, which has a high poverty rate among Afro-Colombian and indigenous populations. This plan included the establishment of community councils which serve as meeting places for deliberative dialogue among the community and for the development of proposals to influence inclusive public policy. These community councils are also crucial in improving community diagnosis for DRRM, which can be difficult due to the ongoing armed conflict in the region [21].

3.3. Integration of the differential ethnic approach in DRRM activities

The Government of Colombia has implemented various activities to ensure the involvement of ethnic minority communities in DRRM planning [26]. For example, the UNGRD has been working with national and international organizations to create training scenarios and promote the participation of civil society in DRRM planning, including the implementation of DRRM activities in ethnic communities [28,29]. The UNGRD has also developed a training plan for risk management, which includes the training of community leaders in risk assessment concepts, such as threat, vulnerability, and identification of risk scenarios [22]. Members of indigenous communities have also been part of the team assessing risk in volcanoes due to their unique geographical location and knowledge of the territory [26].

On the other hand, the Government of Colombia has implemented a variety of actions to address the needs of ethnic minorities during and after disasters [23]. For example, in response to the Nevado del Huila volcano eruption in 2007, UNGRD provided humanitarian aid especially for the affected indigenous communities and allocated a budget for the recovery of impacted sectors, such as livestock and communication routes [24]. Similarly, to mitigate the high risk of drought for the Wayuu indigenous community in Alta Guajira, the UNGRD also provided emergency humanitarian aid to meet their immediate needs, as well as infrastructure to reduce long term risks [27].

Lastly, various academic institutions in Colombia have collaborated with community leaders, social organizations, and government agencies to guide DRRM actions in communities. These efforts aimed to increase the community's knowledge of risk management and, in turn, to improve the understanding of participating organizations on the community. These efforts have led to the development of community-level risk management plans that empowered communities and integrated them into all the stages of DRRM [30–32].

3.4. Gaps and limitations

While several activities and efforts have been made towards the inclusion of ethnic minorities in DRRM, many reports have also pointed out difficulties in implementation and adoption of established policies and guidelines [11,21,23]. While guidelines that recommend the adoption of the ethnic approach exist, they often lack practical guidance on effective implementation, making it difficult for local agencies to adopt these guidelines into local DRRM efforts [21]. The UNHCR, for example, pointed out the failure of implementing guidelines on the differential ethnic approach at both the national and local levels, hindering the active integration of indigenous communities [11].

4. Discussion

The Sendai Framework calls for the inclusive, accessible, and non-discriminatory participation and collaboration of the entire society in the DRRM cycle, recognizing the importance of empowering those who are most vulnerable to disasters as they are the ones who suffer the most consequences [9]. The differential ethnic approach advocates for the active consideration and integration of an-

cestral knowledge, community resources, and language, among others, of ethnic communities in planning for all phases of DRRM to develop capacities and tools that are more appropriate and sustainable [10,11]. Recognizing the vulnerability of these populations and the knowledge and experience they can contribute is the first step to a more inclusive and responsive DRRM system that addresses their specific needs [33].

The Government of Colombia recognizes the rights of ethnic minorities to self-determination, including self-governance and cultural expression within each group's own definition of development [10,14]. With this, minority ethnic groups should be given the opportunity to participate in the development of policies, plans, and programs that concern them, including DRRM. This literature review shows that Colombia has done several efforts in addressing the needs of ethnic minorities during and after disasters. Cultural diversity is recognized in the country's DRRM system, policies, and plans, mandating training for risk management workers and supporting the involvement of ethnic minority groups in public policy development through the establishment of community councils [15–21,25]. The UNGRD has also endeavored to involve community members in DRRM activities, such as trainings and risk assessments [22,26,28,29]. Special attention has been given to communities who were affected by disasters [24,27]. The academe has also been active in the recent years in advocating for the inclusion of community members in DRRM planning [30–32]. With all these, however, also comes difficulties in implementation both at the national and local levels [11,16,21,23].

Only a few of the literature scoped mentioned the involvement of community members [30–32]. Most of the grey literature scoped were national DRRM policies and plans that did not mention whether or not minority ethnic groups were involved or consulted in the development process. These policies and plans are typically prepared by national or sub-national organizations where ethnic communities are severely underrepresented [5]. It is essential that the DRRM process is understood as a social process that involves the co-responsibility of various actors, including public, private, and community organizations. This approach recognizes the need for all sectors to be involved in the DRRM process and to consider the perspectives of all stakeholders in order to effectively assess and mitigate risk. By treating DRRM as a social process, it is possible to build more resilient communities [34]. In order to ensure the full participation of all community members, particularly ethnic minorities, it is essential to engage in the dialogue of knowledges. This involves leveraging the knowledge of ancestors, media and languages, and modes of education and communication; and conducting training and capacity building programs specific to ethnic groups. By embracing this approach, it is possible to more effectively identify and address risks and build the capacity of ethnic communities to manage disasters [35]. This should apply not only in the development of national and sub-national DRRM policies, plans, and programs, but also in the conduct of academic research.

This literature review found only five journal articles and three technical reports that talked about the inclusion of ethnic groups in Colombia's DRRM policies, plans, and programs [25–32], highlighting the severe lack of monitoring, evaluation, or research on this topic. Moreover, there was also a lack of literature on disaster preparedness, response, and recovery. Conducting more research on this topic to identify best practices and areas for improvement can be helpful in better understanding the impact of the differential ethnic approach to DRRM. More insights into this topic can inform the improvement and development of future strategies and enhance the effectiveness of DRRM in diverse communities [36]. Documenting and disseminating these experiences and efforts can also be helpful for other multicultural countries similar to Colombia.

Ethnic minority groups are important components of society as they contribute significantly to its long-term development, but they are also more vulnerable because of their exposure to increased dangers, exclusion, and poverty. These characteristics hinder their ability to anticipate, mitigate risk, respond to, and recover from poor or disastrous occurrences [10]. However, time and again, they have shown resilience and knowledge in overcoming these difficulties. Traditional indigenous knowledge, values, and culture are, in themselves, important risk reduction tools that are more responsive to their specific needs. With the support from policymakers and researchers, the institutionalization of these efforts and knowledge can contribute greatly to the improvement of the national and sub-national DRRM system, policies, plans, and programs that are inclusive and effective [5].

While the study included a broad range of sources, including published articles and grey literature, the search was only limited to what was available online. Articles published in languages other than English and Spanish were excluded due to lack of resources for translation. Lastly, the study does not evaluate the quality of researches included. These can affect the reliability of the conclusions drawn. However, we believe the results of this study can still be used as initial input towards more comprehensive research on the topic. We recommend further case studies into the lived experiences of specific indigenous groups before, during, and after disasters, and how these can be integrated into national and sub-national policies.

5. Conclusion

This literature review talked about the use of differential ethnic approach in the DRRM system of Colombia. It emphasized that DRRM should be understood as a social process that requires the participation of all stakeholders and the integration of diverse perspectives through dialogue of knowledge. The results highlighted the constitutional basis of the recognition of the rights of minority ethnic groups in Colombia and the existence of official national policies and plans that mandate the inclusion and involvement of ethnic communities in DRRM activities. Several reports and articles were also scoped that presented examples of such, although these mentioned difficulties in terms of implementation at the national and local levels. The results of this literature review also showed the lack of reports and articles on this topic, highlighting the needs for more documentation, monitoring, evaluation, and research to feed more into the improvement of the responsiveness of the country's DRRM system to the needs of its ethnic communities.

Statement

Research as part of the project MED-342-2023 of the University of La Sabana.

Participation

All authors participated in the design, writing, and final approval of the manuscript.

Declaration of competing interest

We declare that we have no financial or non-financial conflicts of interest related to this research. We have not received any funding or other financial support for this study from any organization or company. Furthermore, we have no personal or professional relationships with any individuals or organizations that could influence our research or its reporting.

We have conducted this research with the utmost objectivity and integrity, adhering to the highest ethical standards in our field. Our primary goal is to contribute to the scientific community's knowledge base and to provide insights into important issues related to our research topic.

We affirm that all information presented in this article is truthful and accurate, and we take full responsibility for its content. We recognize the importance of transparency in research and are committed to maintaining the highest standards of ethical conduct throughout the research process.

Data availability

Data will be made available on request.

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