

Subjects Addressing Extreme Weather Events in Burkina Faso's Primary School Curriculum

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ABSTRACT

Extreme weather events are increasingly frequent and intense as a consequence of climate change, particularly in vulnerable regions such as the Sahel. Burkina Faso is highly exposed to climatic hazards, including floods, droughts, heat waves, and strong wind events, which significantly affect communities, infrastructure, and the education system. In this context, education is widely recognized as a key instrument for enhancing climate resilience and disaster risk reduction among younger generations. This study aims to identify the subjects addressing extreme weather events within Burkina Faso's primary school curriculum and to assess the nature and depth of their pedagogical integration. A qualitative content analysis was conducted on official curriculum documents, teaching guides, and instructional materials. The analysis focused on the presence, distribution, and pedagogical orientation of climate-related content across subjects. The results show that extreme weather events are primarily integrated into Geography, Observation Sciences, Civic and Moral Education, Reading, and Environmental Education. Among these disciplines, Geography contains the highest concentration of references to climate processes, environmental hazards, and human-environment interactions. However, the findings reveal that curriculum treatment remains fragmented, uneven, and largely descriptive in nature. Floods are the most frequently addressed hazard, while droughts, heat waves, and windstorms are comparatively underrepresented. Moreover, the curriculum places limited emphasis on the development of practical competencies related to preparedness, adaptation, resilience, and disaster risk reduction. The study concludes that although climate-related hazards are present in the primary education curriculum, their integration remains insufficient to effectively prepare learners for current and future climate risks. Strengthening interdisciplinary climate education and incorporating competency-based disaster risk reduction approaches are therefore essential for improving educational relevance and building long-term climate resilience in Burkina Faso.

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1. Introduction

Extreme weather events have become one of the most visible and disruptive consequences of contemporary climate change. According to the Intergovernmental Panel on Climate Change (IPCC, 2023b)(Lieske et al., 2014), global warming has already led to an increase in the frequency, intensity, and spatial extent of climate extremes, including floods, droughts, heat waves, and severe windstorms. These events are no longer considered rare or isolated phenomena but are increasingly recognized as systemic risks that affect environmental stability, socio-economic development, and human security. Vulnerable

regions, particularly Sub-Saharan Africa, are disproportionately affected due to high exposure, rapid population growth, and limited adaptive capacity (Bank, 2021) (Niang, I., O.C. Ruppel, M.A. Abdrabo, A. Essel, C. Lennard, J. Padgham, 2014). In West Africa and the Sahel region, climate variability and extreme weather events represent a persistent development challenge. Empirical studies show that rainfall patterns have become increasingly irregular, with alternating episodes of intense precipitation and prolonged dry spells (Sultan & Gaetani, 2016). These changes contribute to recurrent flooding and drought conditions, which directly affect agriculture, water resources, infrastructure, and livelihoods (Ayanlade et al.,

2018). Floods, in particular, have become more frequent in urban and peri-urban areas, where inadequate drainage systems and rapid urban expansion amplify vulnerability. At the same time, rising temperatures and heat stress are emerging as additional threats to human health and productivity across the region (UNEP, 2022).

Burkina Faso is among the countries most exposed to these climatic hazards. Situated in the Sahelian zone, the country experiences strong seasonal variability characterized by alternating dry and rainy seasons. Flood events during the rainy season regularly lead to loss of life, destruction of infrastructure, and disruption of socio-economic activities. The devastating floods of 2009, for example, caused widespread damage across the country, including the destruction of hundreds of schools and the interruption of educational services for thousands of learners. More recently, recurrent urban flooding in Ouagadougou has highlighted the growing vulnerability of educational infrastructure in rapidly expanding cities (Iskandar et al., 2021) (H. Karambiri, Fowe Tazn, K. Traoré, M. Bologo/Troaré, 2015). In rural areas, drought episodes continue to undermine agricultural production, food security, and household resilience, thereby increasing socio-economic inequalities. Children and school communities are particularly vulnerable to these climate-related hazards. Beyond direct exposure to physical risks, extreme weather events frequently lead to school closures, learning interruptions, and long-term disruptions in educational trajectories. (UNICEF, 2021) emphasizes that such disruptions can have lasting consequences on cognitive development, educational attainment, and future socio-economic opportunities. Schools, therefore, occupy a dual position: they are both exposed infrastructures and strategic institutions for building resilience among future generations. In this context, education is increasingly recognized as a key instrument for climate change adaptation and disaster risk reduction. The Sendai Framework for Disaster Risk Reduction (2015-2030) highlights the importance of integrating disaster risk knowledge into formal education systems in order to strengthen societal resilience (Pal et al., 2023) (UNDRR, 2016). Similarly, Sustainable Development Goal 13 emphasizes the role of education in climate action, awareness, and adaptive capacity. (UNESCO, 2024) further argues that effective climate change education should move beyond awareness-raising and focus on developing competencies such as critical thinking, risk perception, problem-solving, and adaptive decision-making. However, despite this strong international policy consensus, significant gaps remain in the actual integration of climate change and extreme weather education into national curricula, particularly in low-income countries. Existing research suggests that climate-related content in many African education systems is often fragmented across disciplines, inconsistently distributed across grade levels, and largely descriptive in nature (Stevenson et al., 2017) (Salinas et al., 2022). As a result, learners are often exposed to factual information about environmental

phenomena without acquiring the practical competencies necessary for disaster preparedness and resilience building.

In Burkina Faso, although environmental themes are included in subjects such as Geography, Observation Sciences, Civic and Moral Education, and Environmental Education, there is limited empirical evidence on how extreme weather events are systematically represented across the primary school curriculum. It remains unclear which subjects explicitly address these hazards, how frequently they appear, and to what extent they contribute to the development of disaster risk reduction competencies among pupils. This lack of clarity represents an important research gap, particularly in a context where climate risks are increasing and directly affecting educational continuity. Understanding how extreme weather events are integrated into school curricula is essential for evaluating the effectiveness of education systems in preparing learners for climate-related challenges. Curriculum analysis provides a valuable methodological approach for identifying not only the presence of climate-related content but also its disciplinary distribution, pedagogical orientation, and depth of treatment.

Therefore, this study aims to examine the subjects addressing extreme weather events in Burkina Faso's primary school curriculum. Specifically, it seeks to (1) identify the disciplines in which extreme weather events are included and (2) to assess the nature and depth of their integration.

2. Materials and Methods

2.1 Research Design

This study adopted a qualitative documentary research design based on systematic curriculum content analysis. The approach is appropriate for examining how educational content is structured and how specific themes particularly extreme weather events are represented across official primary school curriculum documents in Burkina Faso.

A qualitative design was selected because the objective of the study is not to measure numerical relationships, but to interpret the presence, distribution, and depth of climate related content within educational materials. This approach allows for a detailed examination of both explicit and implicit references to extreme weather events across different subjects and grade levels.

The analysis focused on identifying patterns of inclusion, thematic emphasis, and pedagogical orientation related to climate change and disaster risk content within the curriculum. This conceptual framework (figure 1) summarizes the flow of climate-related content across subjects and highlights the gap between knowledge transmission and disaster risk reduction competencies.

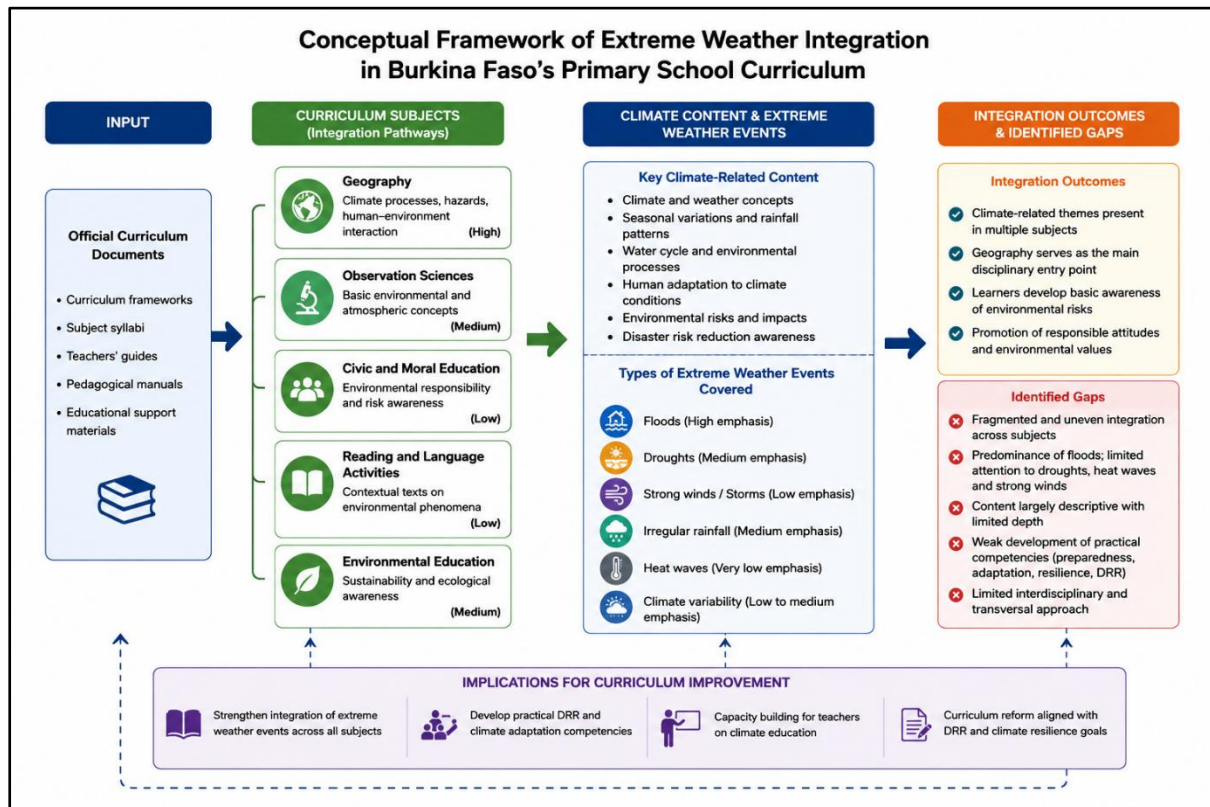


Figure 1. Conceptual framework of extreme weather integration in primary curriculum

2.2 Data Sources

The study was based on an extensive review of official curriculum documents governing primary education in Burkina Faso. These documents constitute the authoritative reference for the design, implementation, and evaluation of teaching and learning processes within the national education system. The dataset included a range of pedagogical and institutional materials, specifically:

- National curriculum frameworks for primary education;
- Subject syllabi across different disciplines;
- Teachers' guides and instructional handbooks;
- Pedagogical manuals used in classroom instruction;
- Official educational support and reference materials.

These documents were selected because they provide comprehensive information on learning objectives, content distribution, and pedagogical approaches across subjects and grade levels. Together, they allow for a systematic analysis of how extreme weather events and related environmental concepts are integrated into the curriculum structure.

2.3 Data Collection

All curriculum documents were systematically examined using a structured content review process aimed at identifying and extracting references related to climate and environmental risks. The analysis followed a predefined set of keywords and thematic categories to ensure consistency and comprehensiveness across all documents. The data collection focused on identifying explicit and implicit references to the following themes:

- Climate and climate-related concepts;
- Weather and atmospheric conditions;
- Extreme weather events;
- Floods and flood-related impacts;
- Droughts and water scarcity;
- Heat waves and temperature extremes;
- Strong winds and storm events;
- Irregular rainfall and climate variability;
- Environmental risks and vulnerability factors;
- Disaster risk reduction (DRR) concepts and preparedness strategies.

Each identified reference was recorded and classified according to its thematic relevance, subject context, and educational level of integration.

2.4 Data Analysis

A thematic content analysis was employed to systematically classify and interpret the extracted references from the curriculum documents. This approach allowed for the identification of recurring themes, patterns of representation, and levels of pedagogical integration of extreme weather-related content. The analysis was conducted through a structured coding framework, where each identified reference was categorized according to the following analytical dimensions:

- School subject, in order to determine disciplinary distribution of climate-related content;
- Educational cycle, to assess variation across grade levels (lower and upper primary);
- Type of climatic phenomenon, including floods, droughts, heat waves, wind events, and rainfall variability;
- Educational objective, distinguishing between knowledge acquisition, awareness-raising, and value/behavior formation;

- Level of integration, assessing the depth of treatment (descriptive, explanatory, or applied).

Following the classification process, both the frequency of occurrences and the depth of curricular integration were analyzed to identify dominant patterns and gaps in the representation of extreme weather events across the curriculum. This analytical approach enabled a comprehensive understanding of how climate-related content is distributed and embedded within the primary education system in Burkina Faso.

3. Results

3.1 Subjects Addressing Extreme Weather Events

The analysis of Burkina Faso’s primary school curriculum reveals that extreme weather events are integrated across several instructional subjects, although with varying degrees of emphasis and depth. The principal subjects through which climate-related hazards are addressed include **Geography, Observation Sciences, Civic and Moral Education, Reading, and Environmental Education**. These disciplines collectively provide learners with introductory exposure to environmental processes and climate-related risks.

Among them, **Geography emerges as the dominant subject**, containing the highest concentration of references to climate processes, environmental hazards, and human–environment interactions. It serves as the main disciplinary entry point for understanding spatial patterns of climate phenomena, including floods, droughts, and rainfall variability.

In comparison, the other subjects contribute in a more complementary manner. Observation Sciences introduce basic environmental and atmospheric concepts, while Civic and Moral Education emphasizes environmental responsibility and risk awareness. Reading materials often incorporate contextual texts related to environmental events, and Environmental Education promotes general awareness of sustainability and ecological protection.

Overall, while multiple subjects contribute to climate-related learning, the distribution of content indicates a **clear disciplinary dominance of Geography**, with other subjects playing supporting but limited roles in the curriculum’s treatment of extreme weather events. Subjects addressing extreme weather events in the primary curriculum (table 1).

Table 1. Subjects addressing extreme weather events in the primary curriculum

Subject	Role in climate education	Level of integration
Geography	Climate processes, hazards, human-environment interaction	High
Observation Sciences	Basic environmental and atmospheric concepts	Medium
Civic and Moral Education	Environmental responsibility and risk awareness	Low
Reading	Contextual texts on environmental phenomena	Low
Environmental Education	Sustainability and ecological awareness	Medium

3.1.1 Distribution of Climate-Related Content Across Educational Cycles

The integration of climate-related topics varies considerably across educational levels. In Grades 1 and 2 (figure 2) environmental themes, climate change, floods, rainfall, disasters, and wind are mainly

addressed through Sensory Exercises and Civic and Moral Education. Sensory Exercises account for approximately 33-35% of references to environmental and climatic topics, followed by Civic and Moral Education (28-29%), Language (16-17%), Reading (10%), Recitation (6%), and Singing (5%).

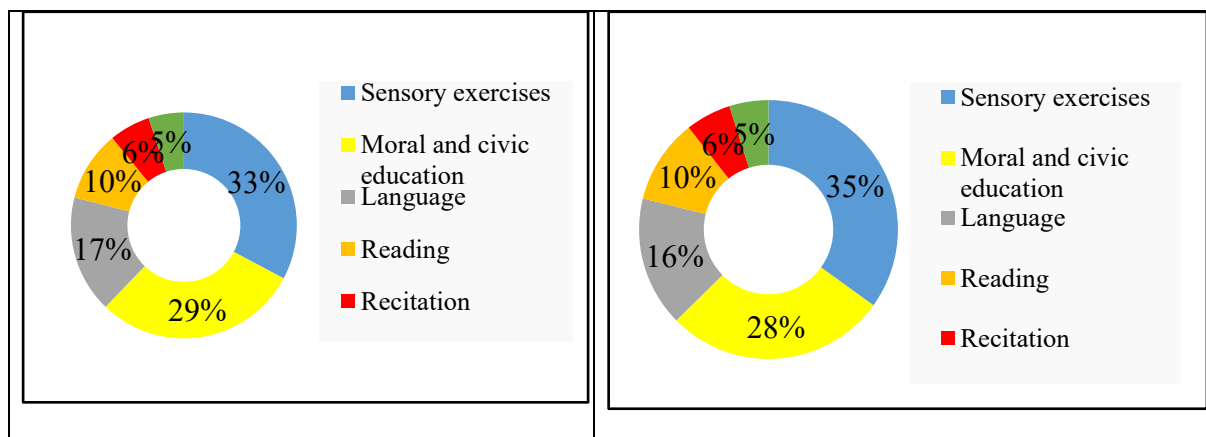


Figure 2. Distribution of subjects integrating climate-related topics in Grades 1 and 2.

In Grades 3 (figure 3) and 4 (figure 4) Geography and Observation Sciences become the dominant subjects for climate and environmental education. Together, they account for nearly half of all references related to

climate change, floods, rainfall, and natural disasters. Civic and Moral Education remains important, while Reading, Written Expression, Language, Recitation, and Singing provide complementary contributions.

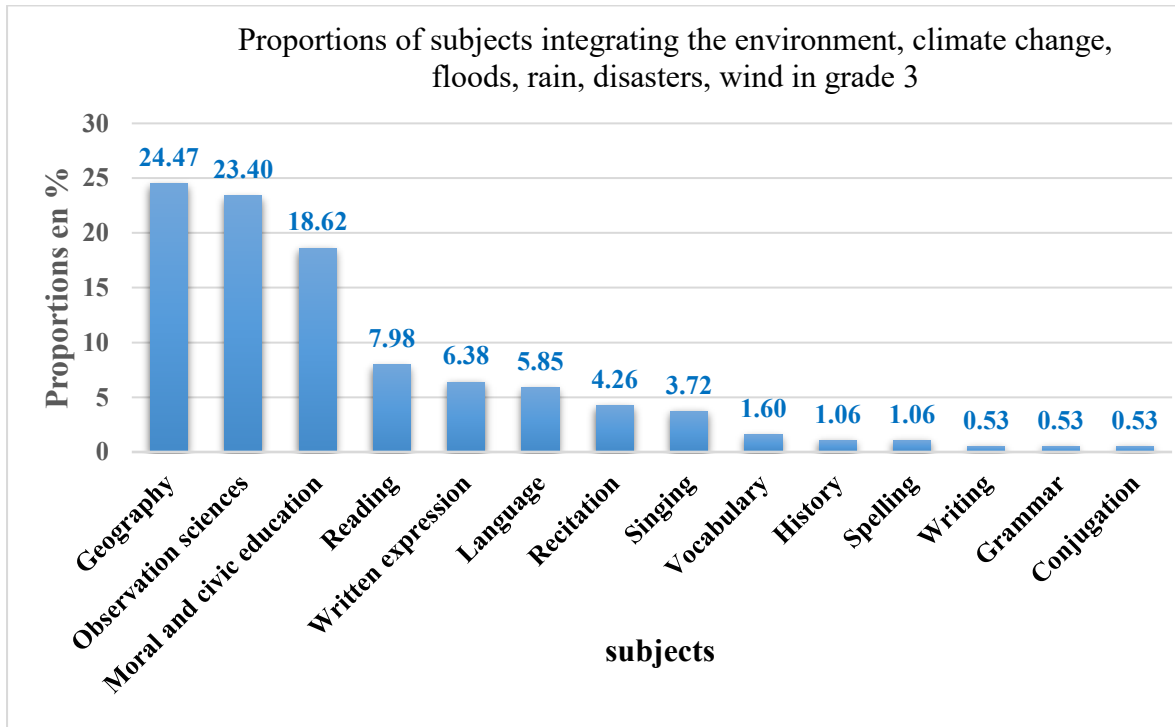


Figure 3. Distribution of subjects integrating climate-related topics in Grade 3

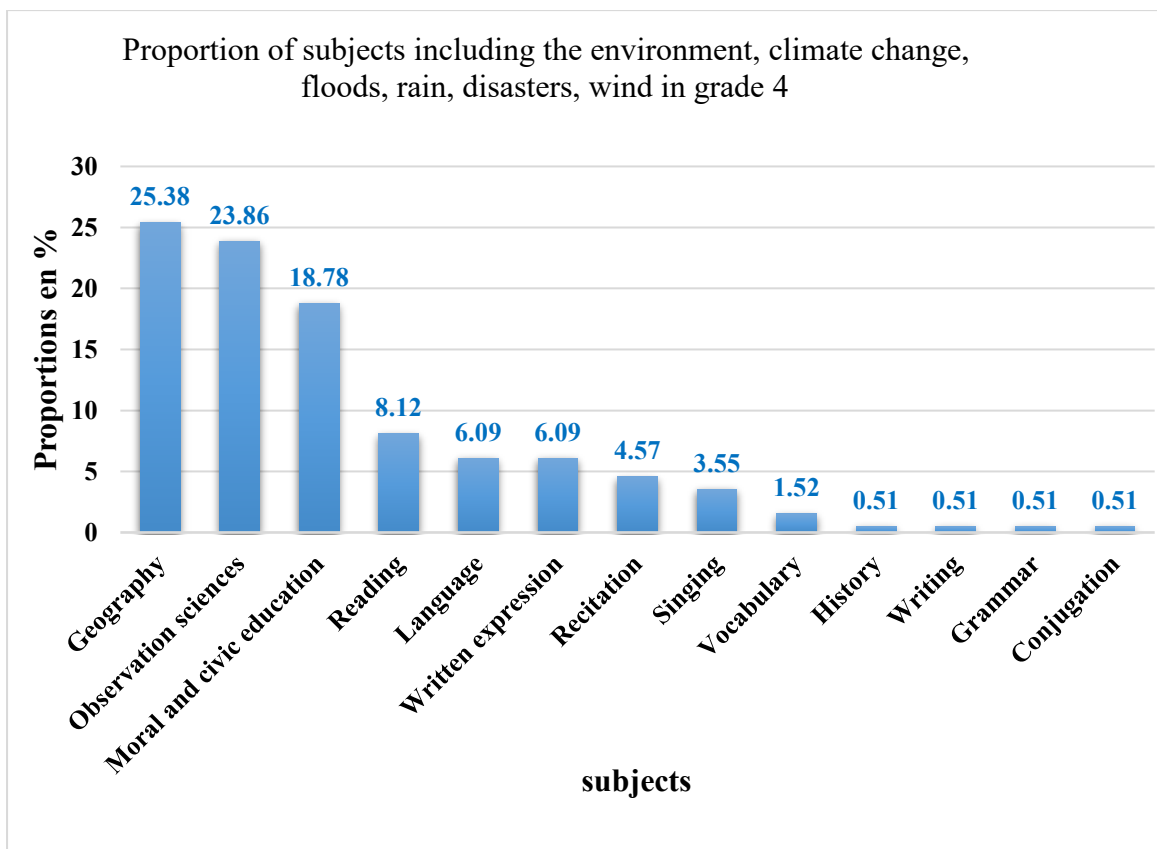


Figure 4. Distribution of subjects integrating climate-related topics in Grade 4

For Grades 5 (figure 5) and 6 (figure 6) Geography and Observation Sciences continue to dominate curriculum content related to climate and environmental issues. These subjects are complemented by Civic and Moral

Education, Reading, and Language activities, which contribute to raising awareness of environmental challenges and natural hazards.

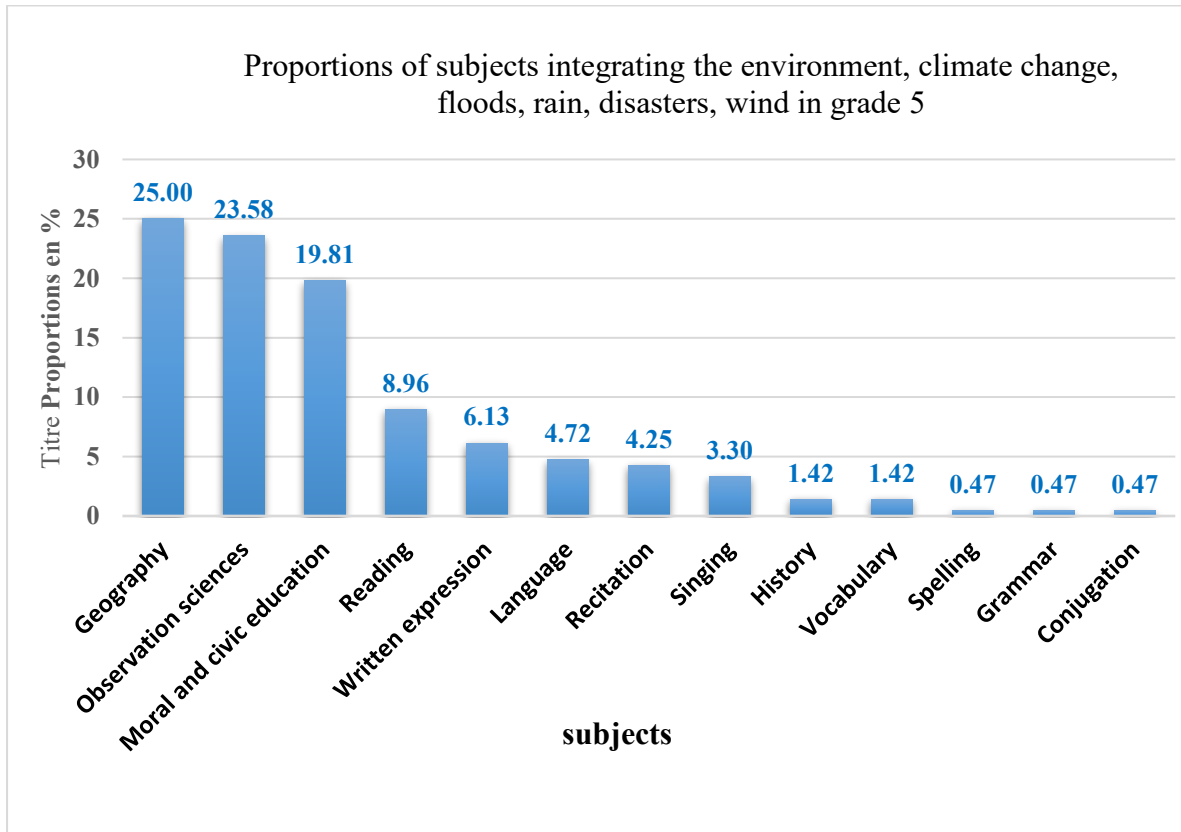


Figure 5. Distribution of subjects integrating climate-related topics in Grade 5

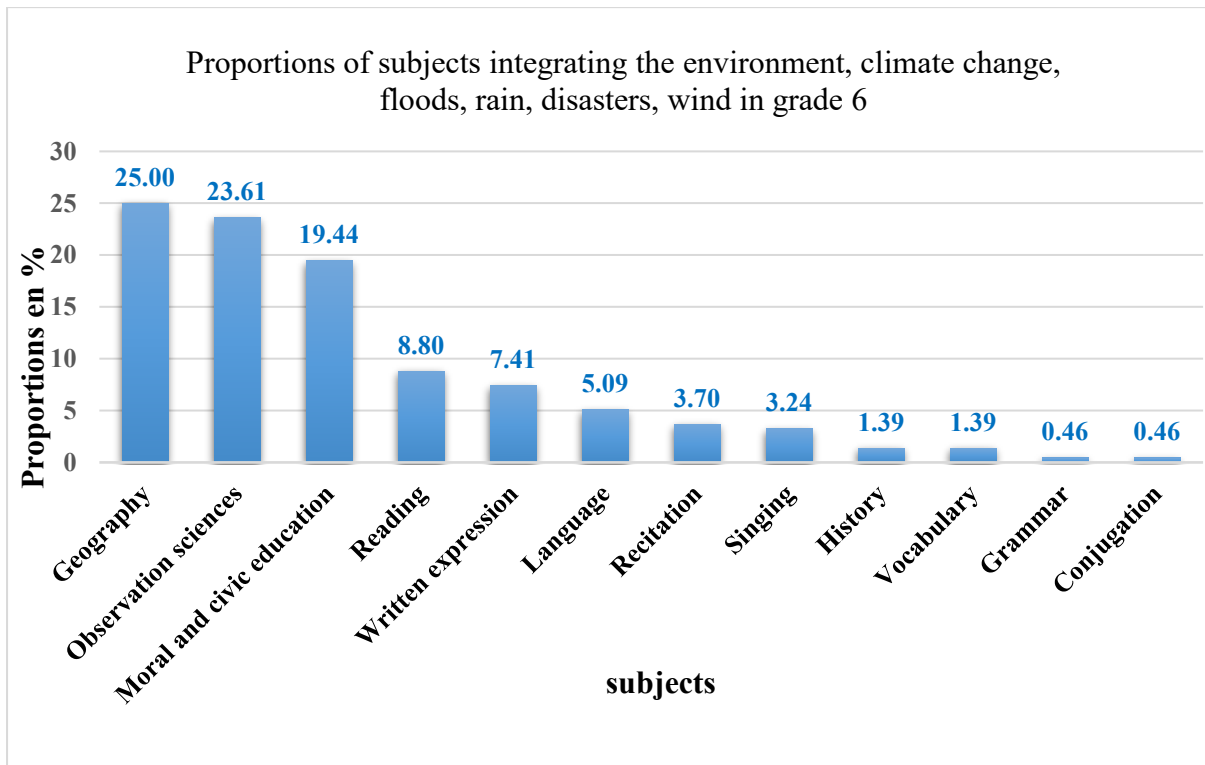


Figure 6. Distribution of subjects integrating climate-related topics in Grade 6

3.2 Geography

Geography constitutes the main disciplinary entry point through which pupils are introduced to weather

and climate concepts within Burkina Faso’s primary school curriculum (table 2)

. It plays a central role in linking environmental processes with human activities and spatial organization.

The subject covers several key themes related to climate and extreme weather events, including:

- Climate zones and spatial climatic differentiation;
- Seasonal variations and rainfall distribution;
- Rainfall patterns and hydrological dynamics;

- Flood-prone environments and risk exposure areas;

Human adaptation to environmental and climatic conditions.

In addition, Geography addresses the impacts of floods and droughts on communities, livelihoods, and local development, highlighting the interaction between environmental hazards and socio-economic vulnerability.

Table 2. Climate and extreme weather content in Geography (adapted from curriculum analysis)

Theme	Content covered	Pedagogical focus
Climate zones	Spatial climatic differentiation	Descriptive knowledge
Seasonal variations	Rainfall and temperature changes	Environmental understanding
Rainfall patterns	Distribution and variability	Analytical awareness
Flood-prone areas	Identification of risk zones	Risk awareness
Human adaptation	Response to environmental conditions	Human–environment interaction
Impacts of floods and droughts	Effects on livelihoods and society	Socio-environmental understanding

3.3 Observation Sciences

Observation Sciences provide pupils with foundational scientific knowledge related to environmental and atmospheric processes (table 3). Within the Burkina Faso primary school curriculum, this subject plays an introductory role in developing learners’ understanding of basic climate and environmental systems.

The content covered includes:

- Weather conditions and atmospheric observations;

- The water cycle and hydrological processes;
- Key environmental processes and ecosystem functioning;
- Introduction to natural hazards and environmental risks.

Through these themes, the subject introduces learners to fundamental concepts related to climate variability and environmental conservation, although in a simplified and descriptive form.

Table 3. Climate-related content in Observation Sciences (adapted from curriculum analysis)

Theme	Content covered	Learning objective
Weather conditions	Temperature, rainfall, wind	Basic observation skills
Water cycle	Evaporation, condensation, precipitation	Understanding hydrological processes
Environmental processes	Ecosystems, natural environment	Environmental awareness
Natural hazards	Introduction to floods and risks	Risk sensitization
Climate variability	Basic climate changes	Introductory understanding

3.4 Civic and Moral Education

Civic and Moral Education contributes to the development of environmental awareness and responsible citizenship among pupils within Burkina Faso’s primary school curriculum (table 4). Although not primarily a science-based subject, it plays an important complementary role in shaping attitudes and behavioral responses to environmental and climate-related risks.

The subject introduces learners to key themes related to environmental responsibility and disaster awareness, including:

- Environmental protection and sustainable behavior;
- Community solidarity and social cohesion during disaster situations;
- Responsible environmental practices in daily life;
- Basic awareness of environmental risks and hazards.

Overall, Civic and Moral Education focuses more on attitudes, values, and behavioral guidance rather than

technical knowledge of climate processes or hazard dynamics.

Table 4. Climate-related content in Civic and Moral Education (adapted from curriculum analysis)

Theme	Content covered	Educational focus
Environmental protection	Protection of nature and resources	Civic responsibility
Disaster solidarity	Community response during disasters	Social cohesion
Responsible behavior	Daily environmental practices	Behavioral education
Risk awareness	Awareness of hazards	Preventive awareness

3.5 Reading and Language Activities

Reading and Language Activities contribute indirectly to climate and environmental education through the integration of contextualized texts and narratives within literacy instruction (table 5). Although not a core environmental science subject, reading materials serve as a medium for introducing pupils to real-world environmental issues and climate-related phenomena. The texts used in classroom instruction frequently address environmental situations such as:

- Heavy rainfall events;
- Flood occurrences;
- Drought conditions;
- Human responses and coping strategies in the face of environmental hazards.

Through these narratives, learners are exposed to climate-related issues in a contextual and story-based format, which supports awareness-building and comprehension development.

However, this integration remains largely implicit and non-technical, focusing more on comprehension and moral lessons than on scientific understanding or disaster risk reduction competencies.

Table 5. Climate-related content in Reading and Language Activities (adapted from curriculum analysis)

Theme	Type of content	Educational role
Heavy rainfall	Narrative texts	Awareness building
Floods	Stories and reading passages	Situational understanding
Droughts	Contextual reading materials	Environmental awareness
Human responses	Moral and behavioral narratives	Coping awareness

3.6 Environmental Education

Environmental Education modules focus on developing learners’ understanding of environmental sustainability and promoting responsible attitudes toward natural resource use and conservation (table 6). Within the Burkina Faso primary school curriculum, this subject plays a transversal role in strengthening environmental awareness and fostering sustainable behaviors.

The content addressed includes:

- Natural resource management and sustainable use of environmental resources;
- Environmental conservation and protection of ecosystems;
- Introduction to climate-related challenges and their environmental implications;
- Promotion of sustainable practices in daily life.

Overall, Environmental Education emphasizes the development of environmentally responsible attitudes and values, aiming to encourage long-term behavioral change rather than the acquisition of technical knowledge on climate processes.

Table 6. Climate-related content in Environmental Education (adapted from curriculum analysis)

Theme	Content covered	Educational orientation
Natural resource management	Sustainable use of resources	Sustainability education
Environmental conservation	Protection of ecosystems	Ecological awareness
Climate-related challenges	Environmental impacts of climate	Awareness of risks
Sustainable practices	Daily eco-friendly behavior	Behavioral change

3.7 Types of Extreme Weather Events Covered

The analysis of Burkina Faso’s primary school curriculum reveals that extreme weather events are unevenly represented across subjects and educational levels, with a clear dominance of certain hazards over others (table 7).

Flooding emerges as the most frequently addressed extreme weather event across the curriculum. It is consistently referenced in Geography, Reading, and Environmental Education, reflecting its high occurrence and impact in the national context.

Other hazards identified include:

- Droughts, which are mentioned but with less pedagogical depth;
- Strong winds, generally introduced as episodic environmental phenomena;
- Irregular rainfall patterns, often linked to seasonal variability;
- General climate variability, described in a simplified and descriptive manner.

In contrast, heat waves receive very limited attention in the curriculum, despite their increasing frequency and relevance in the Sahel region. This imbalance highlights a gap between curriculum content and emerging climate risks affecting Burkina Faso.

Overall, the curriculum demonstrates a hazard hierarchy dominated by floods, while other climate-related risks remain underrepresented or weakly developed in instructional materials.

Table 7. Frequency and curricular representation of extreme weather events (adapted from curriculum analysis)

Hazard type	Curriculum representation	Depth of treatment	Pedagogical emphasis
Floods	High	Moderate	Strong
Droughts	Medium	Low to moderate	Moderate
Strong winds	Low	Low	Weak
Irregular rainfall	Medium	Low	Weak to moderate
Climate variability	Low to medium	Low	Weak
Heat waves	Very low	Very low	Minimal

4. Discussion

The findings of this study indicate that Burkina Faso has made initial progress in integrating climate-related issues into its primary education curriculum. The presence of extreme weather events across multiple subjects reflects a growing institutional awareness of climate change and its implications for education systems. This aligns with global trends emphasizing the role of education in climate adaptation and disaster risk reduction (UNESCO, 2021, UNDRR, 2019).

Geography emerges as the dominant subject for climate education in the curriculum. This result is consistent with previous studies which highlight geography as a key disciplinary entry point for environmental education due to its capacity to link spatial analysis, human–environment interactions, and hazard distribution (Sofiyan et al., 2019) (Kanwar & Daniel, 2020), (V.A.R.Barao et al., 2022). Similar findings have been reported in other African education systems, where geography often serves as the primary vehicle for climate-related content due to its conceptual proximity to environmental processes (Chang & Pascua, 2016).

However, the integration of extreme weather events remains fragmented and pedagogically limited. Most curriculum content emphasizes awareness and descriptive knowledge rather than the development of practical competencies for disaster preparedness, adaptation, and resilience. This observation is consistent with (SOW, 2023) (Meekaew & Saenkum, 2025) (Shepard et al., 2018), who argue that climate change education in many developing countries remains information-oriented rather than action-oriented. (Twinomugisha Rwobusiisi et al., 2021) and (Rahman et al., 2014) further emphasize that such approaches fail to translate knowledge into behavioral and adaptive capacities among learners.

The predominance of floods in the curriculum reflects the lived realities of Burkina Faso, where flooding is one of the most frequent and damaging climate hazards. This alignment between curriculum content and experienced risk exposure is important, as relevance enhances learning effectiveness (IPCC, 2023a) (UNESCO, 2024). However, the relatively limited attention given to droughts, heat waves, and windstorms is problematic, particularly given projections indicating that these hazards are expected to intensify in the Sahel region under future climate scenarios (Baiardi & Morana, 2021) (UNEP, 2022). This mismatch between emerging risks and curricular emphasis suggests a lag in educational responsiveness to climate change dynamics.

International research consistently demonstrates that disaster risk education significantly improves learners' risk perception, preparedness behaviors, and adaptive capacities. For instance (Lieske et al., 2014) and (Ibourk et al., 2025) show that school-based disaster education can enhance community resilience when it includes experiential and competency-based learning approaches. Similarly (Stevenson et al., 2017) argue that effective climate education must integrate

cognitive, emotional, and behavioral dimensions to foster meaningful action.

The findings further highlight the need for stronger interdisciplinary integration of climate-related content across subjects. Currently, climate education is largely concentrated in Geography and partially supported by Observation Sciences and Civic Education, while other disciplines such as language and reading play only a peripheral role. This fragmentation limits conceptual coherence and reduces opportunities for reinforcing climate literacy across the curriculum. (Baiardi & Morana, 2021) and (Banks & Taylor, 2025) emphasize that transformative education for sustainability requires cross-curricular integration rather than subject isolation.

Moreover, the current curriculum structure appears to lack a competency-based orientation. While learners are exposed to basic concepts such as floods, rainfall, and droughts, there is limited emphasis on applied skills such as risk mapping, emergency response, environmental decision-making, or adaptive behavior. This limitation has also been observed in other low-income contexts, where curriculum reforms often prioritize content coverage over skill development (Teixeira & Crawford, 2022), (Cook, 2019).

From a policy perspective, strengthening climate education in Burkina Faso requires a shift from descriptive environmental knowledge toward action-oriented learning. Integrating disaster risk reduction competencies into primary education would align national curricula with international frameworks such as the Sendai Framework (Luís et al., 2018) and Sustainable Development Goal 13. Such integration could include practical classroom activities, scenario-based learning, and community engagement strategies to enhance learners' preparedness and resilience (Eilam, 2025), (UNESCO, 2022).

Overall, the study confirms that although climate-related topics are present in Burkina Faso's primary curriculum, their current treatment remains insufficient to adequately prepare learners for the increasing risks posed by extreme weather events. A more systematic, interdisciplinary, and competency-based approach is required to bridge the gap between knowledge acquisition and practical resilience-building.

5. Conclusion

This study investigated the integration of extreme weather events within Burkina Faso's primary school curriculum by identifying the subjects in which climate-related content is embedded and assessing the nature of its pedagogical treatment. The findings reveal that Geography, Observation Sciences, Civic and Moral Education, Reading, and Environmental Education constitute the main disciplinary entry points for addressing extreme weather events in the curriculum. Among these subjects, Geography plays a dominant role, concentrating the highest proportion of references to climate processes, environmental hazards, and human-environment interactions. The analysis further shows that floods represent the most

frequently addressed extreme weather event, reflecting their high recurrence and socio-economic impact in the national context. In contrast, droughts, heat waves, and strong wind events receive comparatively limited attention, despite their growing relevance in the Sahel region under ongoing climate change. This imbalance suggests a partial alignment between curriculum content and the evolving risk landscape. Overall, while extreme weather events are present across several subjects, their treatment remains predominantly descriptive and fragmented. The curriculum emphasizes basic awareness and conceptual understanding, but provides limited opportunities for the development of practical competencies related to preparedness, adaptation, resilience building, and disaster risk reduction. This gap limits the transformative potential of education in fostering climate-resilient behaviors among learners. In light of these findings, strengthening climate education in Burkina Faso requires a shift toward a more integrated and competency-based curriculum approach. Such reforms should promote interdisciplinary learning across subjects and emphasize applied skills that enable pupils to understand, anticipate, and respond effectively to climate-related hazards. Aligning curriculum content with international frameworks such as the Sendai Framework for Disaster Risk Reduction and Sustainable Development Goal 13 would further enhance coherence between national education systems and global climate resilience objectives. Ultimately, improving the depth and structure of climate-related education at the primary level would contribute significantly to building long-term societal resilience in Burkina Faso and support sustainable development in the face of increasing climate risks.

Compliance with Ethical Standards

Disclosure of Conflict of Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this study.

Statement of Ethical Approval

The study was conducted in accordance with internationally recognized ethical principles for research involving human participants. Approval to conduct the study was obtained from the relevant educational authorities in Ouagadougou, Burkina Faso “The Ministry of National Education, Literacy and Promotion of National Languages (MENAPLN), Burkina Faso, under authorization number 2023-002506/MENAPLN/SG/DG_AEF/DEPrim dated 13 November 2023”. All procedures were designed to ensure the anonymity, confidentiality, and protection of participants throughout the research process.

Data Availability Statement

The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request. Data are not publicly available due to privacy and confidentiality considerations related to the participants.

Author Contributions

Halidou KAFANDO: Conceptualization, methodology, data collection, data analysis, interpretation of results, writing original draft preparation and manuscript revision.

Abdoulaye SAWADOGO: Data analysis, interpretation of results, writing original draft preparation and manuscript revision

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