

INTEGRATING YOUTH, SPORT AND RECREATION IN DISASTER RISK ASSESSMENT IN BLANTYRE CITY, MALAWI

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DRM/023/21

DISSERTATION SUBMITTED TO NDATA SCHOOL OF CLIMATE AND EARTH SCIENCES OF THE MALAWI UNIVERSITY OF SCIENCE AND TECHNOLOGY IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE IN DISASTER RISK MANAGEMENT

29 MAY,2026

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ABSTRACT

Youth in Blantyre City face increasing vulnerability to disasters such as floods and storms, which disrupt sports and recreational activities essential for physical health, social interaction, emotional well-being, and resilience building. Despite growing awareness of disaster risks, little attention has been given to how disasters affect youth recreation and recreational spaces in urban Malawi. This study assessed the impacts of disasters on sports and recreational activities among urban youth in selected townships of Blantyre City by examining how disasters affect youth participation, identifying key barriers, and exploring strategies for improving resilience. Using a mixed-methods approach, data were collected through questionnaires, interviews, observations, focus group discussions, and secondary sources. The findings revealed that floods and storms damage recreational infrastructure, disrupt access to facilities, and reduce youth participation, with recreational spaces often repurposed as evacuation centres. Crucially, the youth highlighted that maintaining sports activities was vital for managing disaster-induced psychological stress. Limited investment in climate-resilient infrastructure and weak integration of disaster risk management into urban planning further increase vulnerability. Despite these challenges, some youth adopted coping strategies such as informal recreational activities. The study concludes that sports and recreation play a vital role in promoting psychosocial recovery and youth resilience. It recommends strengthening youth participation in disaster risk reduction, investing in climate-resilient recreational infrastructure, and integrating recreation into urban resilience planning frameworks such as Malawi Vision 2063.

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to my supervisor, Dr. Mwalwimba, for his invaluable guidance, constructive feedback, and continuous support throughout the development of this research proposal. His encouragement and insightful advice have greatly enhanced the quality of this work.

My heartfelt appreciation also goes to my roommate, whose constant motivation, understanding, and assistance created a supportive environment that made this academic journey more manageable and enjoyable.

Lastly, I extend my deepest thanks to my family for their unwavering love, patience, and moral support. Their belief in me has been a constant source of inspiration and strength throughout my studies.

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ACRONYMS / ABBREVIATIONS

DoDMA : Department of Disaster Management Affairs

UNDRR : United Nations Office for Disaster Risk Reduction

UNESCO : United Nations Educational, Scientific and Cultural Organization

UNICEF : United Nations International Children's Emergency Fund

SDGs : Sustainable Development Goals

NGO : Non-Governmental Organization

FGDs : Focus Group Discussions

CCDRR : Child-Centered Disaster Risk Reduction

UN : United Nations

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CHAPTER 1: INTRODUCTION

Background

Youth sports and recreation play a vital role in community development by providing young people with opportunities for physical health, social interaction, and resilience-building. Facilities such as football pitches, parks, and youth centers promote teamwork, leadership, and stress reduction while strengthening community cohesion (Bailey, 2013; UNESCO, 2015; UNICEF, 2023).

However, disasters increasingly threaten these benefits. In Malawi, urban centers such as Blantyre City are highly exposed to hazards like cyclones, floods, storms, and droughts, which damage recreational infrastructure, restrict mobility, and disrupt organized activities (DoDMA, 2023; National Online, 2023; World Bank, 2023). These disruptions reduce opportunities for physical activity and delay the recovery of youth social networks after disasters.

Globally, several policy frameworks emphasize the protection of recreational spaces in disaster-prone areas. The Sendai Framework for Disaster Risk Reduction (2015–2030) calls for safeguarding critical infrastructure and engaging youth in resilience-building efforts (UNDRR, 2015). Similarly, the Sustainable Development Goals (SDGs 3, 11, and 13) advocate for good health and well-being, sustainable cities, and climate action (United Nations, 2015). The UNESCO International Charter of Physical Education, Physical Activity and Sport (2015) recognize access to recreation as a fundamental right, while UNICEF (2023) highlights the protective role of play in emergencies. Evidence from the Philippines, Japan, and New Zealand shows that post-disaster sports and recreation programs support psychosocial recovery and strengthen youth resilience (Akiyama et al., 2018; Murakami et al., 2015; Thorpe, 2013).

In the Sub-Saharan African context, disasters have been shown to cause widespread damage to infrastructure, including social and recreational spaces that are rarely prioritized in recovery planning (World Bank, 2021). In Malawi, disaster management responses often focus on livelihoods, housing, and transport, with little attention to youth sports and recreational facilities (DoDMA, 2023). This study therefore focuses on Blantyre City to examine how disasters disrupt youth sports and recreation and to propose strategies for enhancing resilience within these critical spaces.

Problem Statement

Blantyre City is highly exposed to climate-induced disasters such as cyclones, floods, storms, and droughts, which frequently damage infrastructure and disrupt urban life. One of the

overlooked impacts of these hazards is their effect on youth sports and recreation. Facilities such as football pitches, swimming pools, parks, and youth centers often become inaccessible due to flooding, structural damage, or transport disruptions (DoDMA, 2023; National Online, 2023).

Globally, the importance of recreation and sports in disaster contexts has been emphasized in frameworks such as the UNESCO International Charter of Physical Education, Physical Activity and Sport (2015) and UNICEF (2023), which highlight their roles in reducing stress, promoting recovery, and strengthening youth resilience. Despite these global priorities, disaster management in Malawi continues to focus largely on livelihoods, housing, and physical infrastructure, while youth-centered recreational spaces remain excluded from disaster planning and recovery strategies (World Bank, 2023).

Although disaster research in Malawi is increasing, there remains limited evidence on the link between disasters and youth sports and recreation, particularly in urban settings such as Blantyre. Most studies emphasize economic losses, housing, or agriculture (Adelekan, 2015; Artur & Hilhorst, 2014), leaving the social and psychological impacts on young people under-documented. This lack of evidence obscures the full picture of disaster impacts and limits the development of inclusive resilience strategies that address the physical, social, and mental well-being of youth.

This study therefore seeks to fill this gap by examining how disasters disrupt youth sports and recreation in Blantyre City, identifying the challenges faced by young people and stakeholders, and proposing strategies to better safeguard and restore recreational spaces in disaster-prone urban environments.

Objectives of the study

Main objective

To investigate how disasters disrupt youth sports and recreational activities in Blantyre City and propose strategies to strengthen their resilience and recovery.

Specific objectives

a) To explore how disasters affect youth engagement in sports and recreational activities in Blantyre City.
b) To identify the key barriers that limit the continuity of sports and recreation for youth during and after disasters.
c) To examine the coping mechanisms and policy strategies that support the continuity and resilience of youth sports and recreation in disaster-prone urban areas, aligned

with global frameworks such as the Sendai Framework, the Sustainable Development Goals (SDGs), and the UNESCO International Charter of Physical Education and Sport

Research questions

a) How do disasters affect youth engagement and participation in sports and recreational activities in Blantyre City?
b) What challenges do young people face in maintaining participation in sports and recreation during and after disasters?
c) What coping mechanisms and policy measures can be implemented to support the continuity and resilience of youth sports and recreation in disaster-prone areas such as Blantyre City?

Significance of the Study

This study is significant because it explores how disasters influence youth engagement in sports and recreational activities in Blantyre City. Disasters such as Cyclone Freddy have disrupted organized sports, reduced youth participation, and limited access to recreation spaces, highlighting the vulnerability of this sector to hazard impacts (DoDMA, 2023). By examining these effects, the study contributes valuable evidence on how disasters shape youth social life, recreation, and overall well-being.

The research further identifies the key barriers that limit the continuity of youth recreation during and after disasters, including access challenges, inadequate facilities, and weak institutional support. Understanding these constraints will assist policymakers, community leaders, and youth organizations in designing targeted interventions that enhance safe participation and sustain recreation activities even in times of crisis. This aligns with Malawi's National Disaster Risk Management Policy (Malawi, Government, 2015), which emphasizes the protection of critical infrastructure and the inclusion of communities in disaster preparedness and recovery.

Finally, the study analyzes the coping mechanisms and policy strategies that support the continuity and resilience of youth sports and recreation in disaster-prone urban areas. By aligning local findings with global policy frameworks such as the Sendai Framework for Disaster Risk Reduction (UNDRR, 2015), the Sustainable Development Goals (United Nations, 2015), particularly SDG 3 (Good Health and Well-being), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action) and the UNESCO International Charter of Physical Education and Sport (UNESCO, 2015), the study strengthens the case for integrating youth recreation into national and city-level disaster risk management and urban resilience planning in Malawi

CHAPTER 2: LITERATURE REVIEW

Introduction

This chapter reviews existing literature related to youth sports and recreation in disaster contexts. It draws on studies conducted at the global, regional, and national levels to provide a comprehensive understanding of how disasters affect the condition and accessibility of youth recreational facilities, participation in sports, and resilience-building strategies. The review synthesizes previous findings to identify what is already known, highlight existing research gaps, and establish the foundation upon which this study in Blantyre City, Malawi, is built.

Disasters significantly affect youth engagement in sports and recreational activities across various contexts. Globally, hazards such as floods, earthquakes, and typhoons disrupt youth participation by damaging facilities and limiting opportunities for recreation and social recovery. For instance, Typhoon Haiyan in the Philippines destroyed numerous sports fields and playgrounds, interrupting youth-led programs (Akiyama et al., 2018), while the 2010 Haiti earthquake demolished community sports centers, reducing spaces for youth interaction and psychosocial recovery (Brown, S.; Pierre-Louis, F, 2012). Similarly, the Christchurch earthquake in New Zealand forced the closure of community sports venues, demonstrating how disasters can instantly disrupt organized youth activities (Cloke & Conradson, 2012). In sub-Saharan Africa, disasters degrade recreational spaces or shift youth priorities toward survival; floods in Lagos, Nigeria, damaged football pitches and playgrounds (Adelekan, 2015), and tropical storms in Mozambique interrupted coastal recreation and informal play areas (Artur & Hilhorst, 2014). In Malawi, Cyclone Freddy disrupted football tournaments, closed youth centers, and reduced recreational participation in Blantyre City (DoDMA, 2023; National Online, 2023). These studies indicate that youth engagement in sports and recreation often declines during and after disasters, highlighting the need to understand how such disruptions affect urban youth well-being and social resilience.

Disasters also create multiple barriers that limit the continuity of youth recreation. Globally, floods, cyclones, and storms can block access routes, destroy sporting equipment, and create safety concerns that prevent participation. In Bangladesh and India, flooding restricted youth mobility and access to playgrounds, leading to prolonged inactivity (Alam & Rabbani, 2017; Hossain & Roy, 2018), while floods and storms in Jordan and Sweden temporarily closed outdoor recreational areas (Odeh & Rashed, 2015; Wamsler & Brink, 2014). In sub-Saharan Africa, poor infrastructure and limited funding make recreational spaces more vulnerable; inadequate drainage in Lagos worsened flood damage to sports fields (Adelekan, 2015), and storm events in Mozambique disrupted organized youth programs (Artur & Hilhorst, 2014). In Malawi, recurring floods and cyclones often close youth centers and playgrounds, while

transportation disruptions hinder access even when facilities remain intact (DoDMA, 2023). The absence of formal recovery plans for sports and recreation further exacerbates the problem, leaving youth without structured opportunities for engagement. Identifying these barriers is crucial for developing practical interventions that sustain recreation during crises.

Several studies highlight the importance of coping mechanisms and policy strategies to support youth sports and recreation in disaster contexts. Globally, post-disaster initiatives show that sports and recreation can foster healing, recovery, and resilience. In New Zealand, post-earthquake action sports programs provided safe spaces for youth to rebuild confidence and social ties (Thorpe, 2013), while in Japan, community-led reconstruction of playgrounds after the tsunami accelerated recovery and strengthened social connection (Murakami et al., 2015). UNICEF (2023) demonstrated that "Recreation Kits" in emergency settings help maintain structured play and psychosocial well-being. Regionally, integrating climate-resilient and community-driven approaches into recreation planning can enhance long-term usability (Adelekan, 2015; Artur & Hilhorst, 2014). At the policy level, the World Bank (2021) recommends mainstreaming recreation within urban resilience programs in African cities. In Malawi, the National Disaster Risk Management Policy (Malawi, Government, 2015) emphasizes protecting critical infrastructure but gives limited attention to youth recreation. Aligning national strategies with global frameworks such as the Sendai Framework for Disaster Risk Reduction (UNDRR, 2015), the Sustainable Development Goals (United Nations, 2015), and UNESCO's International Charter of Physical Education and Sport (2015) can strengthen resilience and ensure inclusive planning. This study seeks to contribute to these efforts by analyzing how coping practices and policy interventions can promote the continuity and resilience of youth recreation in Blantyre City.

Conceptual Framework to Guide the Research

The conceptual framework provides the foundation for this study by illustrating the relationship between disasters, their impacts on youth sports and recreation, and the strategies that enhance resilience in urban areas such as Blantyre City. It outlines how different types of hazards influence recreational activities and guides the analysis of the factors, challenges, and coping mechanisms that shape youth engagement during and after disasters.

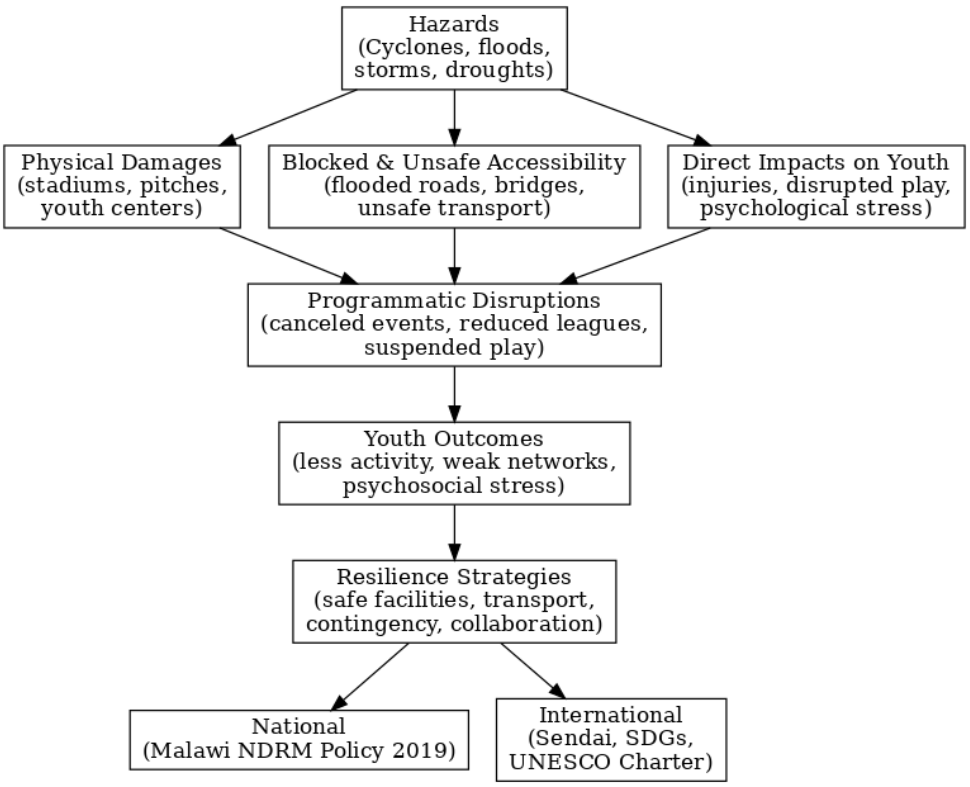


Figure 1 above shows a conceptual framework guiding the study

This study was guided by a conceptual framework that explains how disasters disrupt youth sports and recreation in urban areas like Blantyre City. Hazards such as cyclones, floods, storms, and droughts interact with urban vulnerabilities to affect recreational spaces through three main pathways: physical damage to facilities, blocked accessibility from unsafe routes, and direct impacts on youth during activities.

These disruptions lead to programmatic effects such as canceled tournaments, reduced participation, and suspended youth leagues, which in turn cause negative outcomes including limited physical activity, weakened social networks, and increased psychosocial stress.

To mitigate these effects, the framework emphasized resilience strategies such as constructing disaster-resistant facilities, improving transport and access, creating temporary play areas, and strengthening collaboration among stakeholders. These measures align with the Malawi National Disaster Risk Management Policy, the Sendai Framework for Disaster Risk Reduction, SDG 11 (Sustainable Cities and Communities), and UNESCO's International Charter of Physical Education and Sport.

Overall, the framework provides a basis for analyzing how disasters affect youth recreation and identifying strategies that promote resilience and policy alignment in Blantyre City.

Theoretical Framework

This study is guided by three key theories: Resilience Theory, Ecological Systems Theory, and the Child-Centered Disaster Risk Reduction (CCDRR) Framework, which together provide a holistic understanding of how disasters affect youth sports and recreation, the challenges faced, and the strategies for building resilience.

Resilience Theory emphasizes the capacity of individuals and communities to adapt, recover, and thrive in the face of adversity (Masten, 2001; Ungar, 2011). It supports the study's objective of identifying how youth cope and remain engaged in recreation after disasters, highlighting the importance of personal strengths, social support, and collective recovery processes in maintaining well-being and participation.

Ecological Systems Theory (Bronfenbrenner, 1994) explains that youth development is influenced by multiple interconnected systems, from family and peers to community institutions and broader policies. Disasters disrupt these systems simultaneously, for instance, floods may damage community facilities while affecting family routines. This theory supports the objective of assessing how these disruptions influence youth access to recreational opportunities during and after disasters.

Child-Centered Disaster Risk Reduction (CCDRR) Framework focuses on the unique vulnerabilities and capacities of children and youth in disaster contexts (Peek, 2008; Tanner, 2010). It recognizes young people not only as victims but also as active agents in risk reduction and recovery. This framework aligns with the study's objective of developing strategies for safeguarding and restoring youth recreation, emphasizing inclusion, participation, and empowerment of young people in building community resilience.

Together, these theories provide a comprehensive foundation for understanding how disasters disrupt youth recreation, how young people adapt, and how resilience strategies can be strengthened to protect their right to safe and inclusive recreational spaces

Summary of the Literature

Disasters disrupt youth sports and recreation by damaging facilities and limiting access through destroyed roads, unsafe transport, and temporary closures (Akiyama et al., 2018; Brown & Pierre-Louis, 2012; Adelekan, 2015; Artur & Hilhorst, 2014). These disruptions reduce opportunities for physical activity, social engagement, and resilience-building, while recovery efforts often overlook recreational spaces. Most existing studies focus on Asia and Latin America, leaving limited evidence from Malawi or sub-Saharan Africa. This study addresses that gap by examining how disasters affect youth recreation in Blantyre City. The findings will guide policies and interventions for resilient and inclusive recreation, aligned with the Sendai Framework, SDG 11, and UNESCO's International Charter of Physical Education and Sport.

CHAPTER 3: MATERIALS AND METHODS

Introduction

This chapter outlines the approaches and procedures employed in conducting the study. It presents the research design, description of the study area, and the methods used for data collection and analysis. The purpose of this chapter is to demonstrate how the research objectives were systematically and reliably addressed.

The study focuses on understanding the effects of disasters on youth sports and recreational spaces in Blantyre City. To achieve this, qualitative research methods were adopted, including interviews and field observations. These methods were considered appropriate for capturing in-depth insights from recreation space operators and stakeholders, as well as for documenting the physical impacts of disasters on recreational facilities.

In addition, the study utilized both primary and secondary sources of data. Primary data were collected through structured questionnaires administered to youth participants and recreational facility operators, allowing for the collection of firsthand information on their experiences, perceptions, and the impacts of disasters on sports and recreational activities. Secondary data were also incorporated to complement the primary findings, particularly for recreational centres that were not physically visited during the fieldwork. This included reviewing existing reports, records, and documented evidence on disaster impacts affecting such facilities. The integration of both primary and secondary data enhanced the comprehensiveness and reliability of the study by enabling triangulation of information from multiple sources.

Study Area

The study was conducted in Blantyre City, Malawi's principal commercial and industrial hub located in the Southern Region. As one of the country's largest urban centres, Blantyre City is characterized by a diverse and rapidly growing population, as well as a wide range of recreational spaces, including football pitches, community parks, and youth centres that support youth sports and leisure activities.

Despite its economic significance, the city is highly vulnerable to climate-induced hazards, including floods, storms, cyclones, and droughts. Intense rainfall events frequently result in urban flooding, which damages infrastructure and limits access to recreational facilities. In contrast, prolonged dry conditions negatively affect water-dependent amenities such as swimming pools. Furthermore, rapid urbanization, coupled with the city's predominantly hilly terrain, exacerbates disaster risk by reducing drainage efficiency, increasing surface runoff, and placing additional pressure on already strained urban infrastructure systems.

Blantyre City was selected as the study area due to its dual characteristics as both a highly active urban Centre and a disaster-prone environment. This makes it a suitable context for examining the impacts of disasters on youth sports and recreational spaces, as well as for generating insights into strategies for enhancing resilience in similar urban settings.

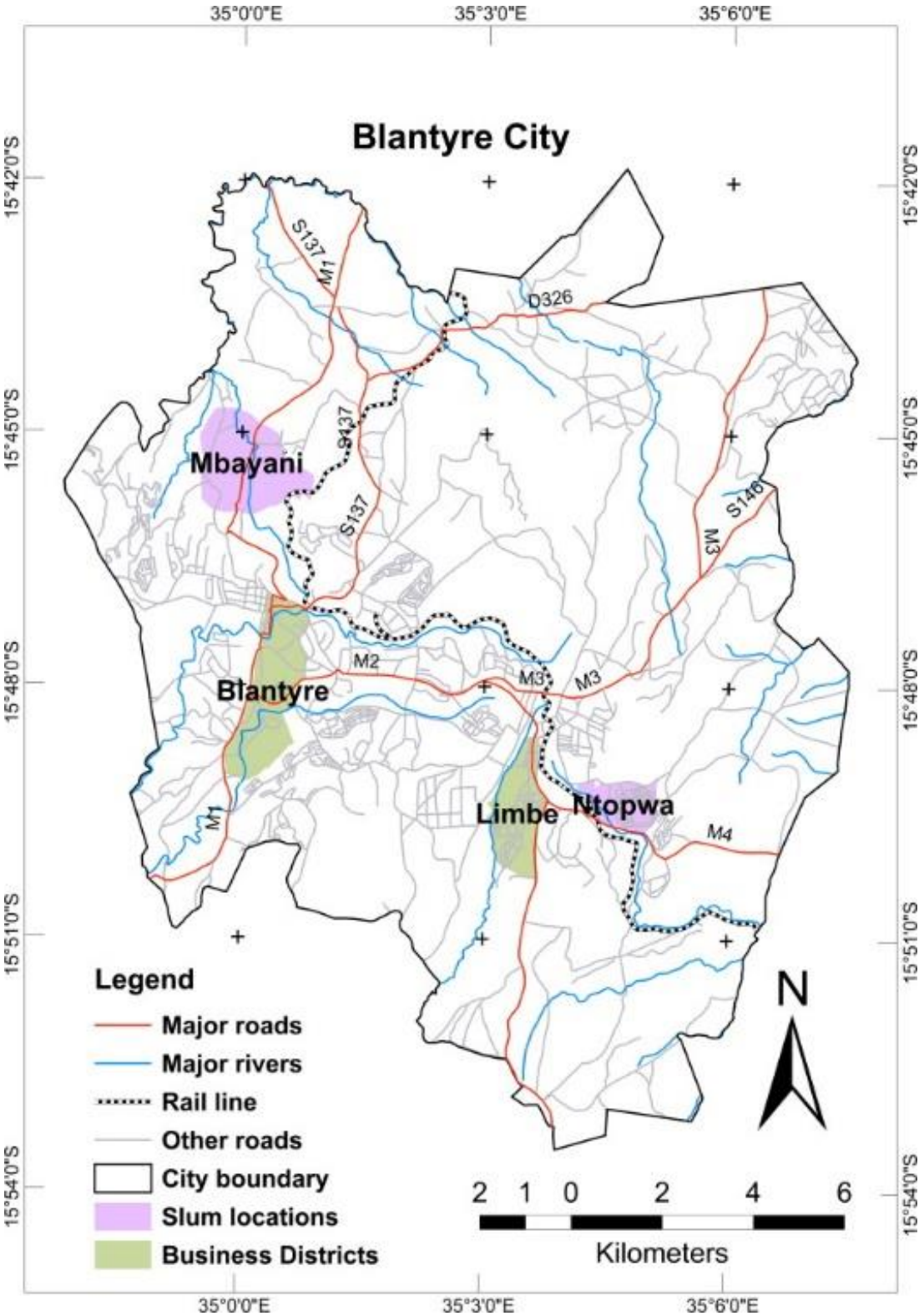


Figure 2 above shows a Blantyre city map

Methods and Research Design

This study employed a mixed-methods research design, integrating both qualitative and quantitative approaches to comprehensively examine how disasters affect youth sports and recreational activities in Blantyre City. The adoption of this design enabled an in-depth analysis of disaster impacts by capturing both measurable trends and experiential perspectives. It facilitated a holistic understanding of how disasters influence youth engagement, the barriers that limit participation, and the coping mechanisms and policy strategies that promote resilience within recreational spaces.

The study utilized both primary and secondary sources of data. Primary data were collected through field observations, structured questionnaires, and semi-structured interviews with youth participants and recreational facility operators. Questionnaires were administered to gather quantifiable information on participation patterns and experiences, while interviews provided detailed qualitative insights. Observations were conducted at selected recreational facilities to assess their physical condition, accessibility, and operational status during and after disaster events. Tools such as observation checklists and the KoboToolbox (Kobo Collect) were used to systematically record data on infrastructure damage, accessibility challenges, and other disruptions.

Secondary data were used to complement and validate the primary findings. These included local media reports, official disaster documentation from the Department of Disaster Management Affairs (DoDMA), and relevant datasets from both local and global sources. Secondary data were particularly useful in capturing information on recreational centres that were not physically visited but had documented experiences of disaster impacts. This integration of data sources enhanced the reliability of the study through triangulation.

The first phase of the study examined how disasters affect youth engagement in sports and recreational activities. Observations at football pitches, community parks, and youth centres were used to evaluate facility conditions and levels of accessibility. Interviews with facility operators provided information on the types of hazards experienced, such as floods, storms, and cyclones, the duration of disruptions, and their effects on participation levels. Quantitative data on participation were analyzed to identify patterns before, during, and after disaster events.

The second phase focused on identifying barriers that limit the continuity of youth recreation during and after disasters. Semi-structured interviews were conducted with facility operators and youth leaders to explore challenges such as reduced attendance, cancelled activities, damaged infrastructure, blocked access routes, and safety concerns. In addition, focus group discussions (FGDs) were held with youth participants to capture their lived experiences,

including changes in access to recreational spaces and motivation to participate. Field notes were recorded to support and contextualize the qualitative findings.

The final phase examined coping mechanisms and policy strategies that enhance the resilience and continuity of youth sports and recreation in disaster-prone environments. Facility operators and youth groups were asked to describe adaptive strategies such as temporary relocation, community-led rehabilitation efforts, and collaborations with non-governmental organizations. The study also reviewed key policy and international frameworks, including the Sendai Framework for Disaster Risk Reduction, the Sustainable Development Goals, and the UNESCO International Charter of Physical Education and Sport, to assess the alignment of local practices with global standards for resilience and inclusive recreation.

Data analysis involved both thematic and statistical techniques. Qualitative data from interviews and FGDs were analyzed using thematic analysis to identify recurring patterns related to disaster impacts, participation barriers, and coping strategies. Quantitative data, including participation records, were analyzed using descriptive statistics to illustrate trends in youth engagement across different disaster periods. The findings from both qualitative and quantitative components were triangulated to provide a comprehensive and robust understanding of how disasters affect youth sports and recreational activities, the challenges to continuity, and the strategies necessary to strengthen resilience within the recreational sector of Blantyre City.

Research Matrix

Table 1 below shows Research Matrix of the study

Specific Objectives	Methods	Data Collection Tools
To explore how disasters affect youth engagement in sports and recreational activities in Blantyre City.	Semi-structured interviews with youth participants, coaches, and community leaders; supplementary observations at recreational spaces; review of attendance records and local media reports.	Interview guide, notebooks for field notes, smartphone/camera for photos, attendance records, reports from the Department of Disaster Management Affairs, and local media sources.
To examine the challenges that limit youth participation in sports and	Semi-structured interviews with youth, facility operators, and community leaders; focus group	Interview guide, FGD guide, notebooks for field notes, attendance registers/logbooks, site visit notes.

recreational activities during and after disasters.	discussions (FGDs) with youth; review of attendance trends.	
To identify coping mechanisms and strategies that enhance resilience and continuity of youth sports and recreation in disaster-prone areas.	Semi-structured interviews with youth groups and facility operators; review of policy documents, international frameworks, and NGO initiatives; triangulation of qualitative and quantitative data.	Interview guide, policy documents (e.g., Department of Disaster Management Affairs, United Nations Office for Disaster Risk Reduction, UNESCO), UNICEF Sport for Development resources, and field notes.

Sampling and Sample Size

This study employed purposive sampling to select recreational areas within major townships of Blantyre City. Purposive sampling enabled the researcher to deliberately target sites where youth actively participate in sports and recreational activities, thereby ensuring that the selected participants and locations were directly relevant to the study objectives. The identified townships were selected based on the availability of recreational facilities such as football fields, playgrounds, and youth centres.

From these selected areas, a total of 44 youth participants were included in the study. The sample size was determined using Taro Yamane formula with a margin of error of 15%. This approach ensured a manageable yet sufficiently representative sample of the youth population within the study area.

Given these parameters, the calculated sample size of 44 respondents was considered adequate to capture diverse perspectives while remaining feasible within the study's time and resource constraints.

The calculation is shown below

Given:

Total youth population in Blantyre according to 2018 Malawi census (N) ≈ 400,000

Error margin (e) = 15% = 0.15

Formula: [2]

$$n=\frac{N}{1+N(e)2}$$

Step 1: Calculate the denominator

$=1+N(e)^2=1+400{,}000 \times (0.15)^2$

$0.15^2=0.0225$

$400{,}000\times0.0225=9{,}000$

Step 2: Calculate n

$$n= \frac{400{,}000}{9{,}000} \approx 44.4$$

$\approx$44 participants

Data Management

Data collected during the study comprised field notes, completed observation checklists, photographs, interview transcripts, and secondary data obtained from various documented sources related to research activities conducted in Blantyre City. Field notes were recorded manually during site visits and subsequently transcribed into digital format to facilitate organization, storage, and analysis. Photographs captured during fieldwork were systematically labeled according to location, date, and type of recreational facility to ensure proper documentation and ease of retrieval. Interview responses were transcribed verbatim into Microsoft Word documents shortly after each session to maintain accuracy and minimize data loss.

In addition to primary data, secondary data were collected from sources such as local media reports, institutional records, policy documents, and disaster reports from the Department of Disaster Management Affairs. These data were particularly important for providing contextual information and for capturing evidence on recreational facilities that were not physically visited during fieldwork but had documented experiences of disaster impacts. All secondary data were carefully reviewed, organized, and stored alongside primary data to support triangulation and enhance the validity of the study findings.

To ensure effective data organization, all materials were stored within a structured digital filing system, with separate folders designated for observations, interview transcripts, attendance records, and secondary data sources. Backup copies of all data were created and stored on external storage devices to safeguard against potential data loss. Measures were taken to ensure confidentiality and ethical compliance by removing or coding personal identifiers, such as the names of facility operators and participants. Access to raw data was restricted to the researcher and was used solely for academic purposes.

For data analysis, qualitative data were coded and analyzed thematically in alignment with the study objectives, allowing for the identification of recurring patterns and key themes related to disaster impacts, participation barriers, and coping mechanisms. Quantitative data, including attendance records and usage statistics, were organized and tabulated to assess trends in participation over time. The integration of qualitative and quantitative data enhanced the robustness of the analysis by capturing both descriptive insights and measurable patterns, thereby providing a comprehensive basis for addressing the research questions.

Ethical Considerations

This study adhered to established ethical principles to safeguard the rights, dignity, and well-being of all participants involved in the research. Prior to data collection, all participants, including youth respondents, facility operators, and managers in Blantyre City, were fully informed about the purpose of the study, the nature of the information to be collected, and the intended use of the findings. Informed consent was obtained either verbally or in writing before participation, and involvement in the study was entirely voluntary. Participants retained the right to withdraw from the study at any point without any form of penalty or negative consequence.

Confidentiality was strictly observed throughout the research process. All interview responses were anonymized, and recreational facilities were assigned codes to prevent identification in the final report. No personal identifiers were included in any reports, publications, or presentations arising from the study. The research avoided sensitive or intrusive questioning, focusing strictly on participants' professional experiences and observations related to recreational activities and disaster impacts.

Photographic documentation of recreational facilities was undertaken only with prior permission from relevant authorities. Where images were captured, care was taken to exclude identifiable individuals unless explicit consent was obtained. All collected data were securely stored and protected from unauthorized access, and were used solely for academic purposes.

Limitations of the Study

While this study aimed to provide comprehensive insights into the impacts of disasters on youth sports and recreational activities in Blantyre City, several limitations were anticipated. Firstly, the use of purposive sampling and a relatively small sample size of 44 respondents may limit the generalizability of the findings to the wider youth population in the city. The non-probability sampling approach, while appropriate for targeting relevant participants, reduces the extent to which results can be statistically inferred to all recreational users.

Secondly, the study relied largely on self-reported data from youth participants, facility operators, and community leaders, as well as observational assessments of selected

recreational spaces. This may introduce response bias, including recall bias or underreporting of certain challenges, particularly those perceived as sensitive or less significant by respondents.

Thirdly, the geographical scope of the study was confined to urban areas of Blantyre City, which may not fully reflect the experiences of youth in peri-urban or rural settings. Variations in infrastructure, exposure to hazards, and access to recreational facilities in these areas may result in different patterns of disaster impact that were not captured in this study.

Finally, logistical constraints such as limited time, financial resources, and accessibility challenges, particularly in areas affected by disaster events, may have restricted the depth and breadth of data collection. Despite these limitations, the study remains valuable in providing context-specific evidence that can inform policy development and strengthen strategies for protecting and enhancing youth recreational spaces in disaster-prone urban environments.

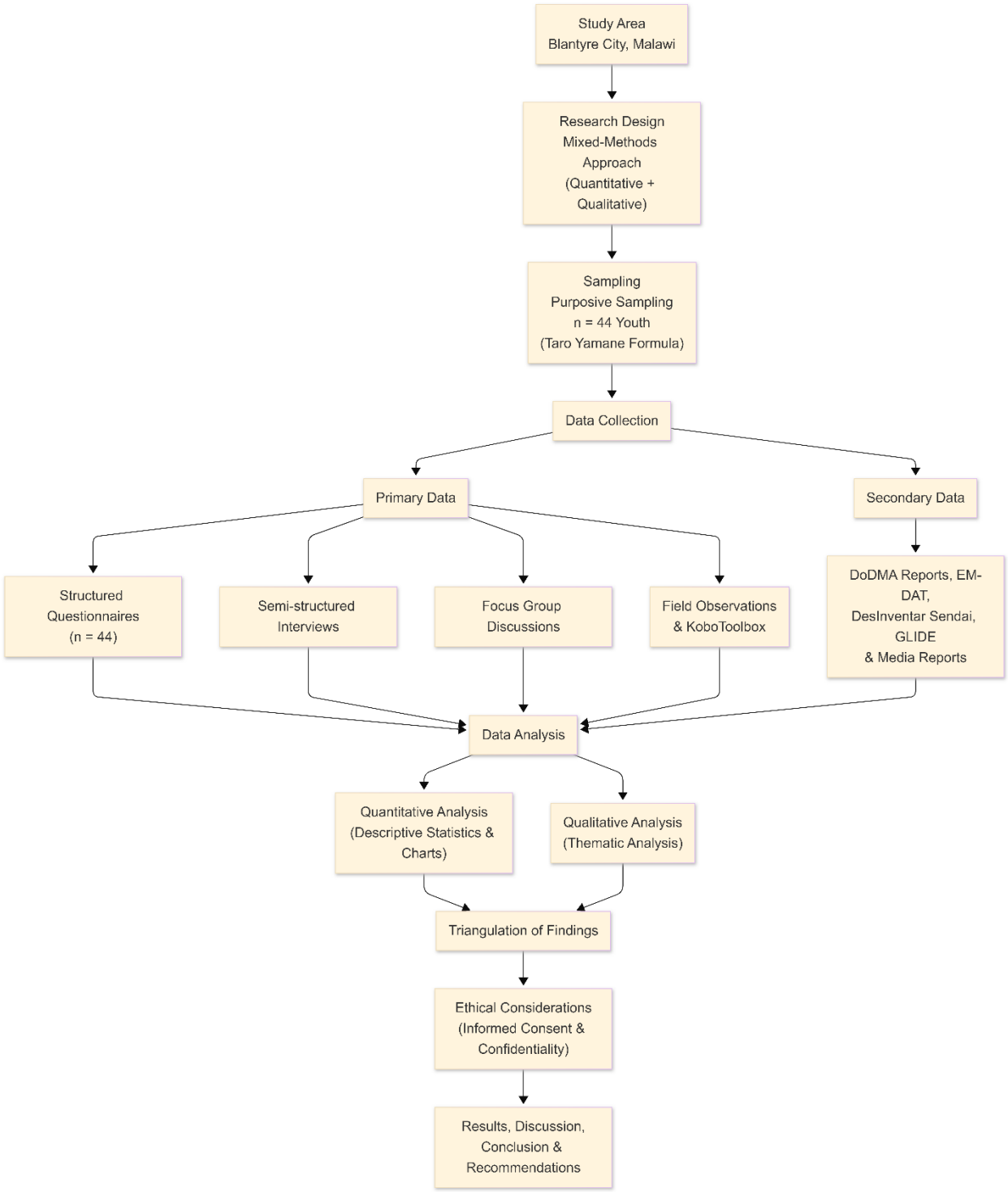


Figure 3 above shows the methodological flow chart

CHAPTER FOUR: RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents and analyses the primary and secondary data collected from 44 purposively sampled youth participants and recreational facility operators in Blantyre City. The findings are organised according to the study's specific objectives and are interpreted in relation to the conceptual framework (Figure 1), the theoretical lenses of Resilience Theory, Ecological Systems Theory, and the Child-Centred Disaster Risk Reduction (CCDRR) Framework, as well as existing literature. Quantitative data from structured questionnaires are presented using descriptive statistics and supported by visual aids, while qualitative insights from semi-structured interviews, focus group discussions (FGDs), and field observations provide depth and context.

The chapter begins with the demographic profile of respondents, followed by their knowledge of disasters, disaster experience and exposure, the direct and indirect impacts of disasters on youth sports and recreational activities, and finally the coping strategies and adaptation mechanisms employed by young people. These results directly address the three research objectives and demonstrate how disasters disrupt youth recreation while also revealing pathways for resilience. Where relevant, findings are triangulated with secondary sources from DoDMA (2023), EM-DAT, and DesInventar Sendai to strengthen validity.

4.2 Demographic Characteristics of Respondents

A clear understanding of the respondents' profile is essential because demographic factors influence both participation in sports and vulnerability to disaster impacts (Artur & Hilhorst, 2014).

Age Distribution of Respondents

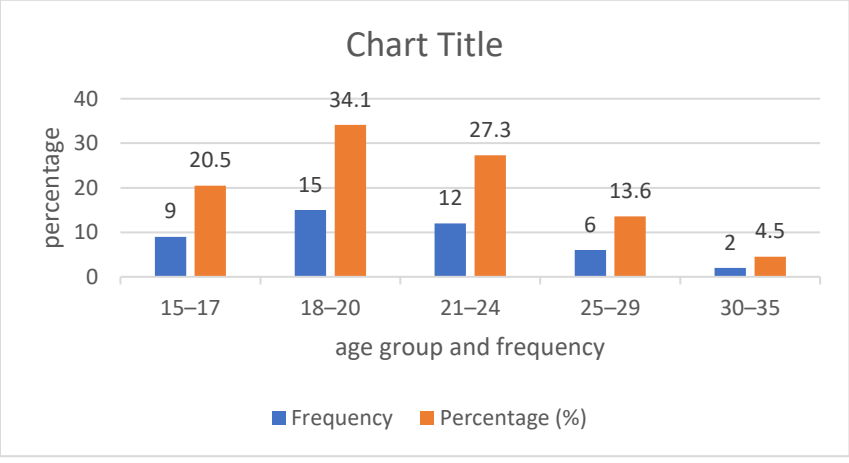


Figure 4. showing age group/ percentage

Figure 4.1 illustrates the age distribution of the 44 respondents. The majority (34.1 %) were aged 18–20 years, followed by those aged 21–24 years (27.3 %). Respondents aged 15–17 and 25–29 accounted for 20.5 % and 13.6 %, respectively, while the 30–35 age group formed the smallest proportion (4.5%).

This distribution effectively captured the core youth bracket (15–24 years), the developmental stage during which participation in sports and recreational activities is typically highest. In line with Ecological Systems Theory (Bronfenbrenner, 1994), these age groups are particularly sensitive to disruptions in their immediate social and physical environments (microsystem), such as recreational facilities. Consequently, the sample provides a highly relevant representation of urban youth most likely to experience and be affected by disaster-induced interruptions to sports and recreation. These findings therefore lay a strong foundation for addressing Specific Objective (a): exploring how disasters affect youth engagement in sports and recreational activities in Blantyre City.

Sex Distribution of Respondents

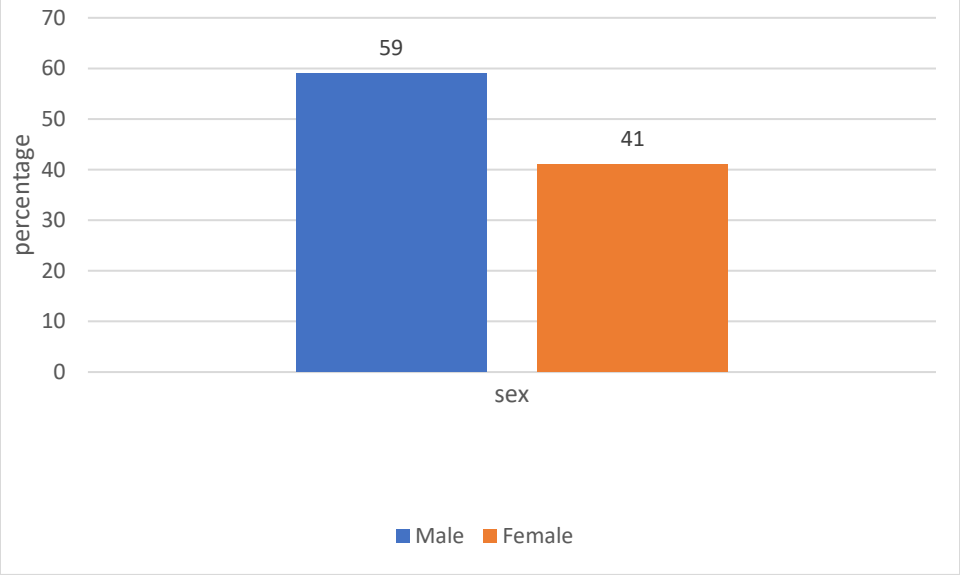


Figure 5. Sex distribution of respondents

Figure 4.2 presents the sex distribution of respondents, showing that males constituted 59 % of the sample while females accounted for 41 %.

This gender imbalance reflects well-documented sociocultural patterns of sports participation in Malawi and across Sub-Saharan Africa, where male youth tend to dominate organised physical and competitive activities due to prevailing norms and differences in access to facilities and opportunities (Artur & Hilhorst, 2014; UNICEF, 2023). In disaster contexts, these disparities are often amplified: heightened safety concerns, mobility restrictions, and

caregiving responsibilities can disproportionately limit female participation in recreational activities. From the lens of Ecological Systems Theory (Bronfenbrenner, 1994), gender operates as part of the macrosystem that interacts with disaster impacts to shape youth experiences within their immediate recreational environments (microsystem). The findings therefore underscore the importance of gender-sensitive strategies when addressing Specific Objective (a): exploring how disasters affect youth engagement and participation in sports and recreational activities in Blantyre City.

Place of Residence of Respondents

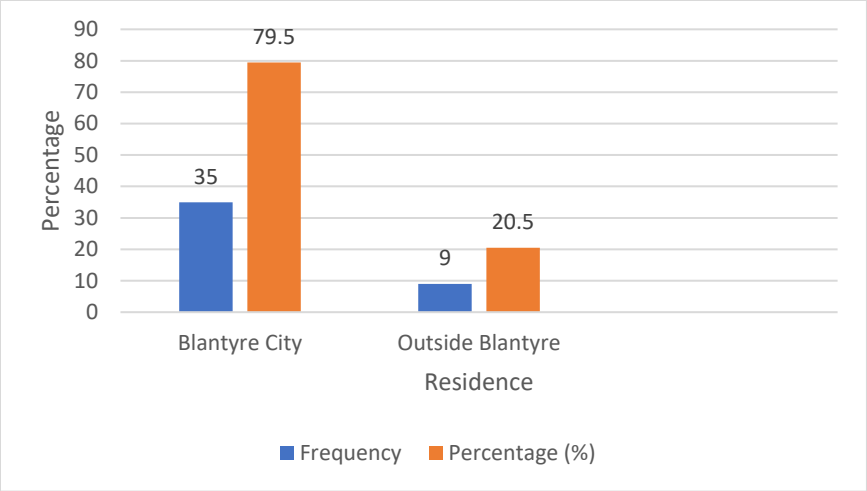


Figure 6. Place of residence of respondents

Figure 4.3 shows the distribution of respondents by place of residence. The majority (79.5 %) resided within Blantyre City, while 20.5 % came from surrounding areas.

This distribution is highly appropriate for the study, as it ensures that the findings are predominantly grounded in the urban context of Blantyre City, the exact setting of the research. Respondents living within the city are more likely to experience the full range of urban disaster impacts, including flooding, infrastructure damage, and poor drainage, all of which directly affect the accessibility and condition of recreational facilities. From the perspective of Ecological Systems Theory (Bronfenbrenner, 1994), residence within the city represents a critical exosystem that shapes young people's daily interaction with recreational spaces (microsystem). The strong urban representation therefore enhances the relevance and reliability of the findings in addressing Specific Objective (a): exploring how disasters affect youth engagement and participation in sports and recreational activities in Blantyre City.

Education level

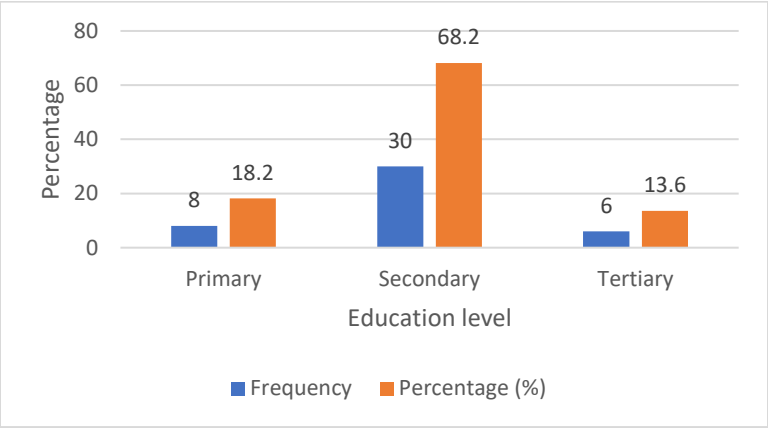


Figure 7.Education level of respondents

The majority of respondents (68.2 %) had attained secondary education, followed by those with primary education (18.2 %). Only 13.6 % had reached tertiary level.

This educational profile indicates that most participants possess basic to moderate levels of formal schooling. Such levels may shape their awareness of disaster risks and their ability to engage consistently in organised sports and recreational activities. The relatively low proportion of respondents with tertiary education further suggests limited access to advanced knowledge, structured opportunities, and formal systems that typically support both organised sports participation and disaster preparedness. From the perspective of Ecological Systems Theory (Bronfenbrenner, 1994), education operates within the mesosystem and exosystem, influencing how young people interact with recreational spaces and respond to environmental disruptions. These findings therefore reinforce the relevance of the sample for addressing Specific Objective (a): exploring how disasters affect youth engagement and participation in sports and recreational activities in Blantyre City.

Overall Implication of Demographic Characteristics

Overall, the demographic profile of the 44 respondents reveals a sample that is highly relevant to the study's urban focus. The majority of participants fall within the core youth age bracket (15–24 years), are predominantly male, reside within Blantyre City, and have attained secondary or lower levels of education. These characteristics increase their exposure to urban disaster risks such as flooding and infrastructure damage while reflecting typical patterns of sports and recreational participation in Malawi.

From the perspective of Ecological Systems Theory (Bronfenbrenner, 1994), age, gender, residence, and education collectively shape the microsystem (individual engagement in recreation) and mesosystem (interaction with community facilities and family support) in

which youth develop. The moderate-to-low levels of disaster knowledge noted among respondents further highlight structural vulnerabilities that influence both participation and coping capacity. Collectively, these demographic features provide a solid foundation for understanding how disasters affect youth engagement in sports and recreational activities (Specific Objective a), as well as the barriers and coping mechanisms explored in subsequent sections of this chapter

4.3 Knowledge about disasters

The findings on knowledge about disasters indicate that the majority of respondents have a moderate level of awareness, accounting for 68.2% of the sample. This is followed by those with low knowledge (31.8%), with no respondents reporting a high level of knowledge about disasters.

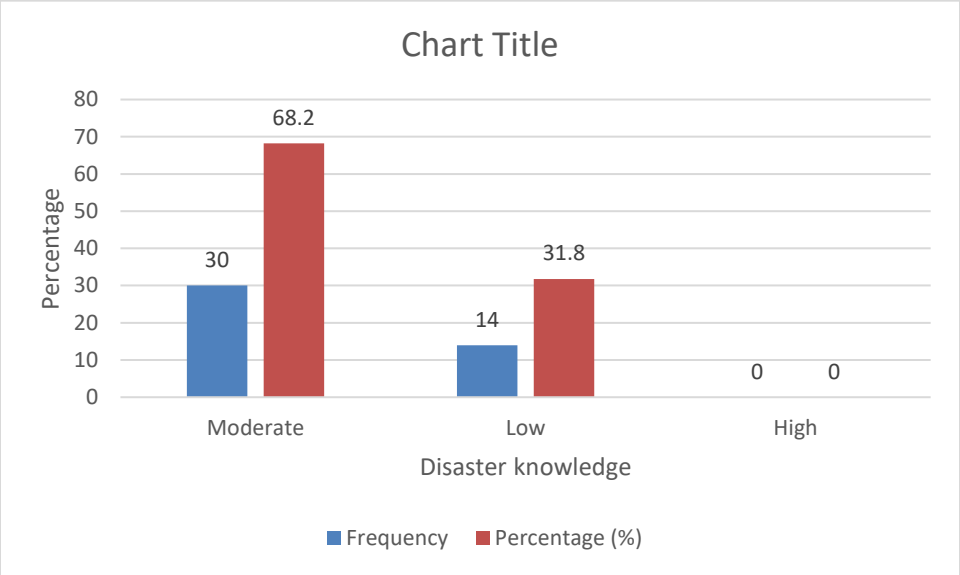


Figure 8. Level of knowledge about disasters among respondents

This distribution suggests that while many youths have some basic understanding of disaster risks, a significant proportion still lacks sufficient knowledge. The absence of respondents with a high level of knowledge highlights gaps in disaster education and awareness within the study area. This may limit the ability of youth to effectively prepare for, respond to, and cope with disaster events. Strengthening disaster awareness programs and improving access to information is therefore essential for enhancing resilience and promoting informed participation in both recreational and daily activities.

4.4Disaster Experience and Exposure

This section presents the findings on the types and frequency of disasters experienced by respondents, as well as their effects on sports and recreational facilities in Blantyre City.

Types of Disasters Experienced and their frequency

Understanding the types and frequency of disasters experienced by youth in Blantyre City is essential for addressing Specific Objective (a) of this study: to explore how disasters affect youth engagement and participation in sports and recreational activities. This section presents findings on disaster exposure from the 44 youth respondents and triangulates them with secondary data from DesInventar Sendai, EM-DAT, and GLIDE. The analysis is guided by the study's conceptual framework, which illustrates how hydrometeorological and biological hazards interact with urban vulnerabilities (such as poor drainage and high population density) to produce physical damage to facilities, blocked accessibility, and programmatic disruptions to recreation.

The findings show that hydrometeorological disasters are the most frequently experienced hazards, followed by biological hazards. Geological and technological disasters were not reported by any respondents. Among hydrometeorological events, storms (including stormy rains, wind storms, and cyclones) clearly dominate as the most common and recurrent hazard, with participants reporting approximately 15 occurrences between 2015 and 2026. Respondents described storms as regular events that bring heavy rainfall, strong winds, and widespread damage to infrastructure, including sports pitches, goalposts, fences, and youth centres.

Floods ranked as the second most experienced disaster, with four major occurrences noted over the same period. Participants explained that floods typically follow intense rains, resulting in waterlogged playing grounds, eroded surfaces, damaged access roads, and restricted mobility to recreational spaces. In contrast, landslides were rarely experienced (only one major event associated with Cyclone Freddy in 2023), yet respondents emphasized their severe consequences when they occur, including safety risks and prolonged disruption of outdoor activities such as hiking around areas like Soche Hill.

In terms of biological hazards, respondents identified cholera outbreaks (occurring twice, in 2017–2018 and 2022–2023) and the COVID-19 pandemic (a single but major event in 2020) as the primary disasters experienced. Although less frequent than storms and floods, these events had profound impacts through movement restrictions, closure of recreational facilities, and reduced opportunities for social interaction, key elements of youth sports and recreation.

These primary accounts are strongly supported by secondary data from national and global disaster databases. The table below summarises the key hazards, their frequency, and alignment between primary respondent experiences and secondary records:

Disaster Type	Frequency (Secondary Data)	Occurred (Years / Key Dates 2015–2026)	Available in GLIDE	Available in EM-DAT	Available in DesInventar Sendai	Participants' Experience (Primary Data)
Storms (stormy rains, wind storms, cyclones)	25	2015–2016 (multiple), 2023 (Freddy), 2024 (Chido), 2025 (Jude), 2026	No	Yes	Yes	Most frequently experienced; causes strong winds, heavy rainfall, damage to facilities
Floods	5	2019 (Idai), 2023 (Freddy), 2026	Yes	Yes	Yes	Second most experienced; leads to waterlogged fields, erosion,
Landslides	2 (major)	2023 (Freddy)	No	Yes	Implied	Less frequent but significant; associated with heavy rains, causes safety risks and temporary suspension of activities
Cholera	2	2017–2018, 2022–2023	Yes	Yes	No	Experienced as outbreaks; leads to reduced gatherings
COVID-19	1	2020	Yes	Yes	No	Major impact; caused closure of facilities, movement restrictions,

Table 2.Types and frequency of disasters experienced by respondents

From the perspective of Ecological Systems Theory (Bronfenbrenner, 1994), these disasters disrupt multiple interconnected systems surrounding youth: the microsystem (immediate recreational spaces such as football pitches and youth centres), the mesosystem (interactions between home, school, and community facilities), and the exosystem (urban infrastructure like roads and drainage). Hydrometeorological events directly damage or render inaccessible the physical environments where youth engage in sports, while biological hazards disrupt social routines and group activities.

Resilience Theory (Masten, 2001; Ungar, 2011) highlights that repeated exposure to such hazards tests the adaptive capacity of youth and their communities. The frequent occurrence of storms and floods, combined with the disruptive effects of COVID-19, underscores the need for enhanced individual and collective resilience in maintaining recreational participation.

The Child-Centered Disaster Risk Reduction (CCDRR) framework further emphasises that youth are not merely passive victims but possess capacities for adaptation. However, the findings reveal that without targeted support, their ability to engage in resilience-building activities like sports and recreation is significantly undermined. These insights align closely with the study's conceptual framework, which posits that hazards interact with urban vulnerabilities to produce physical damage, accessibility barriers, and programmatic disruptions, ultimately affecting youth engagement in sports and recreation (Specific Objective a) and setting the stage for examining barriers (Objective b) and coping strategies (Objective c) in subsequent sections.

This exposure profile confirms that Blantyre's youth operate in a high-risk environment dominated by climate-induced and biological hazards. Addressing these patterns is critical for developing inclusive disaster risk management strategies that protect and restore recreational spaces as vital components of youth well-being and resilience.

4.5 Impacts of the disasters to sporting and recreation activities

Disasters have a clear and significant impact on youth sports and recreational activities in Blantyre City, directly addressing Specific Objective (a): to explore how disasters affect youth engagement and participation in sports and recreational activities. Quantitative data from the 44 youth respondents show that the majority (68%) indicated that sports grounds and recreational facilities are affected during disaster events, while 32% reported no impact. This high level of reported disruption highlights how hazards limit access to safe recreational spaces, thereby reducing opportunities for physical activity, social interaction, and psychosocial support among young people.

The impacts can be categorised into physical, alternative use, barrier to outdoor recreation, and cascading (indirect) effects. These findings align closely with the study's conceptual

framework, which posits that hydrometeorological and biological hazards interact with urban vulnerabilities to cause physical damage to facilities, blocked accessibility, and programmatic disruptions to recreation.

Physical Impacts of Disasters on Sporting and Recreational Activities

Hydrometeorological disasters, particularly floods and storms, exert direct physical effects on sports and recreational infrastructure. Participants reported that heavy rains and strong winds frequently cause waterlogging of playing fields, surface erosion, and structural damage to goalposts, fences, and seating areas. For instance, during Cyclone Freddy in 2023, Mpira Stadium in Chiwembe became heavily waterlogged, rendering the pitch unusable and leading to the cancellation of women's league matches. Similarly, the Manja School playing ground was severely affected when mud and debris from Soche Hill flowed into Manja Township, covering parts of the field and surrounding open spaces.

These physical damages often render facilities unsafe or completely unusable for extended periods. The time required for repairs further delays the resumption of organised sports, reducing youth access to safe recreational areas and limiting opportunities for physical activity and social engagement.

Alternative Use of Sporting Facilities in Crisis Scenarios

Beyond direct physical damage, many recreational facilities are repurposed during the response phase of the disaster risk management cycle. Respondents noted that spaces traditionally used for youth sports and leisure are frequently converted into temporary evacuation centres or relief distribution points. During Cyclone Freddy, for example, the Bangwe Youth Centre served as an evacuation site for affected communities, while several playing grounds, including Kamuzu Stadium and the Desert Community Ground in Bangwe, were used for coordinating humanitarian assistance.

Although this dual role of recreational spaces is vital for saving lives and supporting affected populations, it disrupts regular sporting activities. Facilities become occupied, crowded, and sometimes further damaged, making them unavailable for youth recreation for prolonged periods. Even after the emergency phase, time is needed to clear and restore these spaces. This situation underscores the tension between immediate humanitarian needs and the long-term importance of recreational infrastructure for youth development.

Barriers to Outdoor Recreation

Disasters also create significant barriers to outdoor recreational activities, particularly in hilly areas. Landslides and associated flooding render natural recreational spaces dangerous and inaccessible. Participants highlighted that areas such as Soche Hill and Chilobwe become hazardous after heavy rainfall, with trails destroyed, blocked by debris, or at risk of further

slope failure. During Cyclone Freddy in March 2023, severe mudslides severely restricted hiking and other outdoor leisure and fitness activities in these locations.

Consequently, landslides not only limit access to natural recreational spaces but also introduce serious safety risks, significantly reducing opportunities for outdoor activities that many youth rely on for physical and mental well-being.

Cascading (Indirect) Impacts of Disasters on Recreation

Disasters generate indirect or cascading effects that extend beyond visible damage to facilities. Even when sports grounds or centres remain physically intact, youth face challenges reaching them. Flooding often blocks or damages roads, while storms cause power outages that disrupt indoor activities such as gym sessions, video gaming, and community video shows.

These indirect impacts interrupt the normal support systems (transport and electricity) that youth depend on for consistent participation. As a result, recreational activities decline even in the absence of direct facility damage, compounding the overall disruption to youth engagement.

From the lens of Ecological Systems Theory (Bronfenbrenner, 1994), these impacts illustrate how disasters simultaneously disrupt the microsystem (immediate recreational spaces and activities) and exosystem (urban infrastructure such as roads, drainage, and electricity). Resilience Theory (Masten, 2001; Ungar, 2011) reveals the strain placed on youth adaptive capacity, as repeated disruptions to sports and recreation undermine their ability to maintain physical health, social networks, and emotional stability during crises.

The Child-Centered Disaster Risk Reduction (CCDRR) framework further emphasises that while youth possess agency, systemic barriers, such as the repurposing of facilities and inadequate prioritisation of recreational spaces in recovery efforts limit their capacity to engage in resilience-building activities. These findings strongly support the study's conceptual framework by demonstrating the multiple pathways (physical damage, accessibility barriers, and programmatic effects) through which disasters in Blantyre City reduce youth participation in sports and recreation.

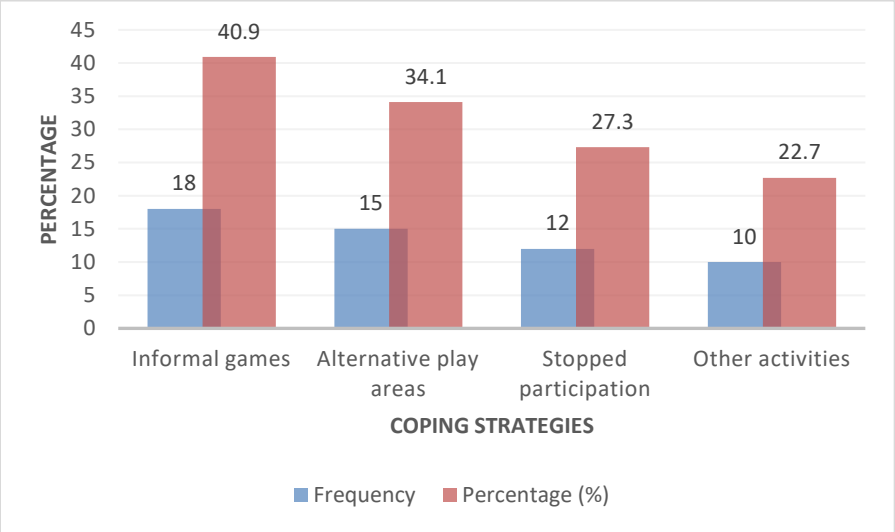
4.6 Youth Coping Strategies and Adaptation

This section examines how youth respond to the impacts of disasters and the strategies they use to continue participating in sports and recreational activities despite disruptions. The findings show that youth adopt a range of coping mechanisms, reflecting both their ability to adapt and the challenges they face during and after disaster events.

The results indicate that many youths try to continue participating in activities, but in modified ways. The most common strategy was engagement in informal games (18 respondents),

followed by the use of alternative play areas (15 respondents). This suggests that when formal facilities are damaged or inaccessible, young people turn to more flexible options that require minimal resources and can be organized in available spaces.

Figure 9.Impacts of disasters on sports and recreational activities



Some youth also adapt by using alternative spaces such as streets, school grounds, or open fields. This shows their ability to adjust to changing conditions in order to remain active. However, these spaces are not always safe or suitable for sports, especially after disasters, which may expose them to additional risks.

At the same time, not all youth are able to cope in this way. A number of reported that they stop participating in sports altogether during disaster periods. This highlights the challenges they face, including unsafe conditions, damaged facilities, lack of equipment, and limited access to recreational spaces. In addition, some respondents indicated that they engage in other activities, suggesting a temporary shift away from sports when conditions are not favourable.

The way youth cope also depends on the type of disaster experienced. For example, floods may limit access to playing areas, storms may disrupt outdoor activities, and disease outbreaks such as COVID-19 may restrict group participation. This shows that coping strategies vary depending on the situation.

Another important aspect is the social dimension of coping. Informal games and group activities help young people maintain social connections and peer support, which are

important for emotional well-being during difficult times. However, these coping strategies are not always sustainable, as alternative spaces may lack proper infrastructure and safety.

Overall, the findings show that youth are not passive during disasters; they actively adjust and find ways to continue their activities. However, their ability to cope depends on factors such as access to safe spaces, available resources, and the level of disaster impact.

CHAPTER FIVE: CONCLUSION

This study set out to understand how disasters affect youth participation in sports and recreational activities in Blantyre City, focusing on the impacts, the challenges faced, and how young people cope during such situations.

In relation to Objective (a), which explored how disasters affect youth engagement in sports and recreation, the study found that disasters, especially storms and floods,greatly disrupt participation. These events damage playing grounds, destroy facilities, and make it difficult for young people to access recreational spaces. In many cases, sports grounds are also used as evacuation centres or for relief activities, which further limits their availability. Even when facilities are not directly damaged, challenges such as poor roads and power outages make it difficult for youth to take part in both outdoor and indoor activities. As a result, participation levels tend to drop during and after disasters, affecting not only physical activity but also social interaction and emotional well-being.

For Objective (b), which focused on identifying the barriers that limit participation, the study highlighted several key challenges. These include unsafe playing environments, damaged or poorly maintained facilities, and difficulties in accessing recreational spaces due to flooding or transport disruptions. In addition, there is limited support from institutions, and sports and recreation are often not prioritized in disaster planning and recovery efforts. Because of this, young people struggle to return to their normal activities even after the disaster has passed.

Regarding Objective (c), which examined coping strategies, the study found that young people do try to adapt in different ways. Many continue participating by playing informal games or using alternative spaces such as streets or school grounds. Others temporarily shift to different activities when conditions are not suitable. These responses show that youth are resilient and willing to adjust. However, these coping strategies are not always safe or reliable, mainly because they lack proper facilities and support.

Overall, the study shows that disasters have a clear negative impact on youth sports and recreational activities in Blantyre City. At the same time, it highlights how important these activities are in helping young people cope, stay connected, and maintain a sense of normal life during difficult times. This points to the need for better planning and support to ensure

that sports and recreation are not overlooked in disaster risk management, but instead are strengthened as part of building resilient communities.

CHAPTER SIX: RECOMMENDATIONS

Based on the findings of this study, several recommendations are proposed to reduce the impact of disasters on youth sports and recreational activities and to enhance their contribution to disaster risk reduction in Blantyre City.

First, there is an urgent need to improve the resilience of sports and recreational infrastructure. This can be achieved by installing better drainage systems, elevating playing fields, using flood-resistant materials, and conducting regular maintenance of pitches, parks, and youth centres. Additionally, clear protocols should be established for the dual use of these facilities as emergency shelters or relief distribution points during disasters, ensuring they are quickly restored to normal recreational use once the emergency phase ends.

Second, sports and recreation should be fully integrated into disaster risk management planning at all levels. The Department of Disaster Management Affairs (DoDMA), Blantyre City Council, Ministry of Youth and Sports, and other relevant stakeholders should collaborate to mainstream youth recreational activities into national and local disaster preparedness, response, and recovery strategies. This integration will ensure that recreational spaces are no longer overlooked during planning and post-disaster reconstruction.

Third, innovative approaches should be adopted to use recreation as a vehicle for disaster education. Specifically, stakeholders should design and promote disaster-themed educational games — both outdoor and digital — that incorporate realistic scenarios involving floods, storms, cyclones, landslides, and disease outbreaks. Through interactive gameplay, young people can learn essential concepts of disaster preparedness, risk reduction, response, and recovery while enjoying sports and recreational activities. Such games can be developed in collaboration with schools, youth centres, game designers, and NGOs to ensure they are engaging, culturally appropriate, and educationally effective.

Furthermore, continuous disaster risk awareness programmes should be integrated into regular sports training, youth club activities, and community recreational events. Coaches, youth leaders, and facility managers should receive training on disaster preparedness and psychosocial support through sports. This will help young people not only gain knowledge but also develop practical skills and confidence in managing disaster situations.

Finally, the study proposes the adoption of a multi-level framework to strengthen the resilience of sports and recreational activities. At the national level, policies should be

developed to link sports, youth development, and disaster risk management, supported by adequate funding. At the district and city level, local authorities should focus on infrastructure upgrades, preparedness planning, and rapid facility rehabilitation. At the community level, emphasis should be placed on active youth participation, peer support, and the use of both formal and informal recreational spaces for learning and resilience building.

Successful implementation of these recommendations will require strong partnerships between government institutions, NGOs, development partners such as UNICEF and UNESCO, sports federations, and the private sector. By transforming sports and recreational activities into platforms for both enjoyment and learning, Blantyre City can build a more knowledgeable, resilient, and healthier youth population that is better prepared to face future disasters.

A Proposed Multi-Level Framework for Strengthening the Resilience of Sports and Recreational Activities to Disaster Impacts



Figure 10.Proposed multi-level framework

This framework outlines how actions at different levels, national, regional (district/city), and community, can work together to reduce the impact of disasters on sports and recreational activities and strengthen youth resilience in Blantyre City.

1. National Level (Policy and Strategic Direction)

At the national level, the focus should be on policy formulation, funding, and strategic guidance. Government institutions should ensure that sports and recreation are integrated into disaster risk management policies and national development plans. This aligns with the Malawi National Youth Policy, which promotes youth participation in sports and the development of recreational infrastructure.

Key actions include:

I. Developing policies that link sports, youth development, and disaster risk management
II. Allocating funding for resilient sports infrastructure
III. Promoting disaster education and awareness among youth at national scale
IV. Supporting the establishment of recreational centres and talent development programs

2. Regional / District Level (Implementation and Coordination)

At the regional or district level (e.g., Blantyre City Council), the focus should be on implementation, planning, and coordination of activities.

Key actions include:

I. Upgrading and maintaining sports facilities (e.g., drainage improvements to reduce flooding)
II. Developing disaster preparedness plans for recreational spaces
III. Ensuring quick rehabilitation of facilities after disasters
IV. Coordinating with NGOs and community groups to support youth programmes

3. Community Level (Participation and Adaptation)

At the community level, the focus is on youth participation, local adaptation, and awareness.

Key actions include:

I. Encouraging youth to engage in safe recreational activities
II. Promoting community awareness on disaster risks and safety
III. Supporting informal and alternative recreational spaces
IV. Involving youth in local disaster planning and response activities
V. Strengthening peer support networks through sports and group activities

Framework Summary

The effectiveness of this framework depends on coordination across all levels. National policies provide direction, regional authorities ensure implementation, and communities drive participation and adaptation. When these levels work together, sports and recreational

activities can be better protected and used as tools for coping, recovery, and resilience building among youth.

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