

ASSESSING SUBJECTIVE AND SOCIAL DIMENSIONS OF HOUSEHOLD RESILIENCE AFTER CYCLONE FREDDY IN SOCHE, BLANTYRE CITY.

A CASE STUDY OF SOCHE, T/A SOMBA.

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ABSTRACT

This study examined household resilience in Soche Township, Blantyre, following the impacts of Cyclone Freddy, with particular focus on socio-economic characteristics, subjective resilience perceptions, and the role of social capital and institutional factors in shaping recovery outcomes. The study was guided by three objectives: to assess socio-economic factors influencing resilience, examine subjective perceptions of resilience, and analyze the contribution of social capital and institutional systems to post-disaster recovery. A mixed-methods cross-sectional research design was employed, combining quantitative and qualitative approaches. Primary data were collected from 46 households using structured questionnaires containing Likert-scale and open-ended questions, while secondary data were obtained from policy documents, reports, and related literature. Quantitative data were analyzed using descriptive statistics, Pearson correlation, and multiple linear regression, while qualitative responses were analyzed thematically. A Subjective Resilience Index (SRI) was constructed to measure perceived household resilience. The findings revealed that households in Soche demonstrate a moderate but fragile level of resilience, with an overall SRI of 2.71. Income emerged as the strongest predictor of resilience ($r = 0.61$; $p < 0.001$), followed by education and community group membership, while larger household size negatively influenced resilience outcomes. Most households depended on unstable informal livelihoods and low monthly incomes, limiting their capacity for sustainable recovery. Although respondents expressed moderate confidence and hopefulness regarding recovery, preparedness for future disasters remained weak, indicating that resilience was largely reactive rather than proactive. Social capital, particularly participation in religious groups and savings groups, positively contributed to resilience through mutual support and information sharing. However, institutional trust remained low due to perceptions of unequal aid distribution, weak coordination, and inadequate long-term recovery support. The study concludes that resilience in Soche is multidimensional and shaped by the interaction of socio-economic conditions, institutional effectiveness, social relationships, and subjective perceptions. Sustainable resilience

therefore requires integrated approaches that strengthen livelihoods, improve institutional accountability, promote community participation, and enhance disaster preparedness systems. The study recommends livelihood-centered recovery interventions, stronger community-based disaster risk reduction strategies, improved transparency in aid distribution, and greater policy attention toward informal urban settlements vulnerable to climate-related disasters

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LIST OF ABBREVIATIONS / ACRONYMS

DoDMA — Department of Disaster Management Affairs

NGOs — Non-Governmental Organizations

EWSs — Early Warning Systems

WASH — Water, Sanitation, and Hygiene

BBB — Build Back Better

PDNA — Post-Disaster Needs Assessment

SLF — Sustainable Livelihoods Framework

GOM — Government of Malawi

WHO — World Health Organization

CBDRR — Community-Based Disaster Risk Reduction

UNDRR — United Nations Office for Disaster Risk Reduction

SFDRR — Sendai Framework for Disaster Risk Reduction

MUSTREC — Malawi University of Science and Technology Research Ethics Committee

DRM — Disaster Risk Management

SRI — Subjective Resilience Index

KII — Key Informant Interview

KIIs — Key Informant Interviews

FGD — Focus Group Discussion

FGDs — Focus Group Discussions

SRI — Subjective Resilience Index

SR1–SR9 — Subjective Resilience Indicators 1–9

NGO — Non-Governmental Organization

NAP — National Adaptation Plan

MNSSP — Malawi National Social Support Programme

PDNA — Post-Disaster Needs Assessment

SWOT — Strengths, Weaknesses, Opportunities, and Threats

T/A — Traditional Authority

Mk / MK — Malawi Kwacha

SADC- Southern African Development Community

GFDRR- Global Facility for Disaster Reduction and Recovery

IDS- Institute of Development Studies

OCHA- Office for the Coordination of Humanitarian Affairs

MUST- Malawi University of Science and Technology — Malawi University of Science and Technology

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CHAPTER 1

1. INTRODUCTION

1.1 Background

Recent years have seen a string of climate-driven disasters in Malawi. In March 2023, Cyclone Freddy swept through southern Malawi, causing torrential floods and landslides that "destroyed homes and displaced thousands of families overnight". ActionAid reports that over 500,000 people were displaced and over 500 killed in Malawi during this event. These catastrophic impacts highlight how climate change is intensifying storm events in Southern Africa. Urban areas like Blantyre City, where Soche is located face acute risks due to steep hillsides, deforestation, informal housing, poverty, and weak infrastructure (e.g. drainage systems). For example, the Soche and Ndirande mountains have lost much of their natural vegetation, exacerbating flash floods and mudslides during Cyclone Freddy. In short, place-based vulnerabilities in Soche (steep slopes, poor housing) sharply raised exposure during Freddy.

In resilience studies, there is growing recognition that technical fixes alone are insufficient. Contemporary frameworks (e.g. UNDRR's Sendai Framework) call for a holistic view of resilience that includes social and institutional dimensions. Scholars argue that resilience is not only about rebuilding physical infrastructure but also about individuals' perceptions and capacities to cope. Béné et al. (2019) emphasize the "subjective dimension of resilience," noting that people's own risk perceptions, self-efficacy and psychosocial factors play a central role in how they recover. Similarly, disaster research has long shown that social capital; friends, neighbors, community networks, is a crucial first line of response (neighbors, not authorities, often rescue victims). Trust in institutions likewise shapes recovery: a recent review finds trust is "positively associated with effective community responses and resilience" across all disaster phases.

Despite these insights, current knowledge about Malawi's cyclone resilience is fragmentary. Analyses have largely focused on aggregate losses and physical rebuilding, with limited data on household experiences (Matemba , Akinradewo, & Amoah, 2025). Existing

vulnerability assessments often use broad administrative averages, missing the heterogeneity of individual households. Moreover, social factors like gender or disability have only recently received attention in Malawi's climate policy, and evidence gaps remain (Sundqvist, 2023.). In sum, while the context (Freddy's devastation and climate pressures) is well-documented, there is a missing link: How do Soche's households themselves perceive their resilience after Freddy, and how do socio-economic and social factors drive those perceptions?

1.2 Problem Statement

Existing relief and recovery efforts in Malawi have focused heavily on rebuilding housing and infrastructure, but evidence suggests these actions have not fully addressed the root social and psychosocial vulnerabilities. As Manda and Thindwa (2025) observe for Cyclone Freddy, disaster response mechanisms tend to be "narrow, incomplete and insufficiently account for national and local particularities and place-based vulnerabilities". In Soche, for example, steep topography and unplanned settlements continued to fuel flood and mudslide risk even after initial aid was delivered. Furthermore, formal interventions have often overlooked how people perceive their own recovery capacity: households may feel insecure or lacking "resilience" even if their houses are rebuilt.

This mismatch suggests a problem: What factors actually determine long-term resilience at the household level in Soche? Specifically, we note that previous research in Malawi has seldom examined (a) residents' subjective sense of resilience, (b) the role of social networks and trust in recovery, or (c) how socio-economic status, income levels, and disability mediate resilience outcomes. Without integrating these dimensions, it is unclear why some households "bounce back" while others remain vulnerable even under the same physical reconstruction efforts. The problem, therefore, is the lack of a connected understanding linking background conditions (poverty, infrastructure), psychosocial perceptions, and actual resilience trajectories in this community context.

1.2.1 Research Gaps

- Subjective Resilience Measurement.

Most resilience studies use objective indicators (infrastructure, assets, nutrition) and neglect people's own assessments. Béné et al. (2019) stress that "subjective resilience" (self-reported adaptive and coping capacity) is crucial for understanding household recovery. Yet no prior study has applied a structured subjective resilience index in Malawi's post-disaster context. This gap means we don't know how Soche households perceive their ability to recover and adapt.

- Social Capital and Trust.

Although research shows social ties and institutional trust critically affect disaster outcomes, these factors are rarely quantified in Malawi's resilience literature. For example, Aldrich & Meyer (2015) document that communities with strong networks recover much faster, but practitioners still underutilize social capital in planning. Similarly, trust in authorities has been linked to effective response and resilience. Yet we lack evidence on how such social factors operated in Soche after Freddy. This is a gap in linking community/social dynamics to resilience outcomes in Malawi's urban setting.

- Socio-Demographic Vulnerabilities.

The intersectional impacts of gender, disability, and poverty on resilience are under-studied in Malawi. Policy reviews note the need for disaggregated data and inclusion of women and persons with disabilities in resilience planning. ActionAid (2023) highlights, for instance, that Malawi's displaced populations include vulnerable groups in crowded camps, but few studies detail how such factors influence household coping. Thus, there is a gap in connecting individual attributes (e.g. income level) to resilience capacity.

- Household-Level, Place-Based Analysis of disaster impacts.

Most assessments of disaster impact in Malawi use district-level aggregates or general surveys. Sundqvist et al. (2025) argue that these aggregate measures "provide limited

insights into the unique vulnerability profiles of households" and call for micro-level analyses. For Soche, no study has mapped how the neighborhood's specific conditions (e.g. steep slopes, deforestation) affected different households during Freddy. This gap means potential outliers (e.g. extremely vulnerable households) can be missed in broad statistics.

1.3 Main Objective

To assess subjective and social dimensions of household resilience after cyclone Freddy in Soche, Blantyre city.

1.4 Specific Objectives

- To examine the socio-economic characteristics influencing household resilience in Soche after Cyclone Freddy.
- To assess household perceptions of subjective resilience using the Subjective Resilience Index (SR1–SR9).
- To explore the role of social support, community networks, and institutional trust in shaping perceived resilience.

1.5 Significance of the Study

This research makes several important contributions. Theoretically, it advances resilience science by integrating subjective and social dimensions that have been largely ignored in Malawi's context. By applying a Subjective Resilience Index, the study extends the work of Béné et al. (2019) and Panda & Surminski (2025) on subjective metrics, filling a noted methodological gap. It also brings social capital and trust explicitly into the model of household resilience, as urged by disaster risk scholars. Empirically, the study produces one of the first fine-grained accounts of how Soche's physical and socio-economic conditions shape recovery perceptions, echoing recent calls for micro-level vulnerability assessments in Africa.

Practically, the findings can inform policy and community planning. By mapping vulnerability in Soche, and which support networks are effective, the study can guide more

equitable, inclusive disaster risk reduction programs. It can also provide evidence to local authorities and NGOs (e.g. DODMA, Habitat, ActionAid) on where to focus capacity-building, for example, strengthening community networks or targeting livelihood support, to enhance long-term resilience in informal urban settlements.

CHAPTER 2

2. LITERATURE REVIEW

2.1 Study Context and Scope

Malawi's Cyclone Freddy (March 2023) and similar climate shocks have exposed how social factors shape resilience outcomes even when material recovery (e.g. rebuilt houses) occurs. The dissertation focuses on Soche, an urban community in Blantyre, examining socio-economic variables (income, assets, education) and social dimensions (networks, trust) in explaining households' subjective resilience, their self-rated ability to withstand and recover from Freddy. This framing situates the work at the intersection of disaster resilience, urban vulnerability, and socio-cultural dynamics. The study examines an adult household sample of N≈46, and measures variables via surveys (Likert SRI) and social capital indicators. Key terms are resilience, subjective resilience, social capital, and household vulnerability. The scope is on rural-urban context, Soche, Malawi.

2.2 Theoretical Frameworks

2.2.1 The Sendai Framework for Disaster Risk Reduction (2015–2030)

At the global level, the Sendai Framework for Disaster Risk Reduction (2015–2030) defines resilience as the ability to "prevent the creation of new risk, reduce existing risk and increase resilience". It emphasizes multi-sector, all-society approaches to disaster risk (vulnerability, exposure, capacity). Sendai's priorities which include, understanding risk, strengthening disaster risk governance, investment in disaster risk reduction, and preparedness, provide context: e.g. local governments (as in Malawi's urban councils) are charged with resilience building. The study aligns with Sendai by treating household resilience as partly an outcome of risk governance and policy, reflecting Institutional and community roles.

2.2.2 Sustainable Livelihoods Framework (SLF)

The SLF (Chambers & Conway, 1992; Scoones, 1998) underpins many resilience studies. It posits five asset capitals; natural, human, financial, social, and physical, which households draw on in times of shocks. For example, Scoones (1998) explicitly highlights these five capitals and the institutions/policies that mediate them. In disaster contexts, SLF suggests

resilience depends on asset portfolios (e.g. land [natural], education [human], savings [financial], community ties [social], sturdy houses [physical]). SLF's use is important as it frames resilience holistically and emphasizes how poverty (low financial capital) undermines recovery.

2.2.3 Community-Based Disaster Risk Reduction (CBDRR) and Social Capital.

Community-based DRR approaches stress local participation. Twigg (2009) and others argue that community engagement and knowledge are vital for effective risk reduction (CBDRR). In Soche, this implies that local committees or NGOs might strengthen resilience. Complementing this, social capital theory is central: numerous studies find that stronger social networks and trust significantly enhance disaster resilience. Zhao et al. (2025) systematically reviewed the role of social capital and identified five mechanisms; social learning, collective action, preparedness, communication, and moral responsibility by which networks and norms promote recovery. For example, cohesion among neighbors facilitates sharing resources; institutional trust (e.g. in relief authorities) mobilizes collective support. This lens was adopted because the objectives explicitly query "social support, networks and trust." As Wisner et al. (2004) note, "trust between citizen organizations and municipal governments is critical in mobilizing human resources for mitigating disaster loss".

2.2.4 Political Economy of Disaster Governance

A political economy perspective stresses that resilience is shaped by power, policy and resource flows. Disasters do not affect all groups equally; elites may capture aid, while marginalized communities remain vulnerable (Wisner et al., 2004). For example, Wisner et al. argue "systems of economic, social and political power contribute to creating vulnerability to disaster". In Malawi, this suggests interrogating how institutional incentives or donor agendas influence which households get support. Incorporating this is crucial to justify examining institutional trust and governance: if Soche's leadership or NGOs have biases, some groups' subjective resilience may suffer.

2.2.5 Subjective Resilience as an Integrative Lens

Finally, subjective resilience is treated as a unifying theoretical lens. In contrast to objective measures (e.g. income, reconstruction), subjective resilience is defined as an individual's perceived ability to anticipate, cope with and recover from shocks. Jones & Tanner (2015) argue that subjective measures capture local knowledge and attitudes that objective data miss. This study adopts an established instrument (the Subjective Resilience Index, SRI). The literature suggests subjective and objective metrics are complementary: one recent survey notes that "subjective resilience perceptions offer insights to complement objective risk metrics" (Kieu & Senanayake 2023). Focusing on subjective resilience matters because the research questions center on perceptions ("What factors drive those perceptions?"). This choice is aligned with calls to integrate cognitive/affective dimensions of resilience into analysis (Jones and Tanner 2015), (Kieu & Senanayake 2023)

2.3 Empirical Research Insights and Research Focus

2.3.1 Subjective Resilience Findings

Empirical work on subjective resilience is still emerging. Jones & Tanner's (2015) ODI studies of Tanzania are seminal. Using a nationally-representative survey of 2,651 households exposed to floods, they found that many respondents rated their ability to cope and adapt as moderate, even when objective losses were severe. Their analysis showed significant variations by socio-demographics (urban vs rural, education levels), indicating that subjective resilience is not uniform across groups. Similarly, Jones & Samman (2016) incorporated subjective modules into longitudinal phone surveys (Sauti za Wananchi) and found that flood experience boosted confidence but also revealed gaps in coping strategies. A key finding across such studies is that psychological and social factors can lag behind physical recovery: for instance, even households with rebuilt homes often reported low "recovery" confidence. This disconnect highlights the importance of including subjective measures.

Other studies confirm that self-reported resilience is influenced by social context. For example, Zander et al. (2023) found in Australia that perceived community resilience correlated strongly with trust in neighbors and institutional response. While not Malawi-

specific, it underlines the social drivers of subjective resilience. Conversely, research on health disasters (e.g. COVID-19) emphasizes individual coping capacities but similarly notes the role of community support networks. The global nature of these findings (from Asia to Africa) suggests subjective resilience is broadly shaped by socio-economic and cultural factors, justifying why the research focus on those dimensions.

2.3.2 Social Capital and Community Resilience

Numerous case studies link social support, trust and networks to better recovery. Aldrich & Meyer (2015) showed in Nepal that villages with stronger bonding capital (family ties) and linking capital (connections to NGOs/government) rebuilt faster after the 2015 earthquake. Nakagawa & Shaw (2004) documented similar effects after Japan's 1995 quake. A systematic review by Zhao et al. (2025) synthesizes this: it identified five pathways through which social capital aids resilience, including collective action (joint rebuilding) and information sharing. They conclude that high social capital consistently enhances community cohesion and coping capacity. These findings imply that Soche households with active networks (church groups, savings clubs) or high trust in local leaders are likely to rate their resilience higher.

More local studies booster this. In urban Malawi, a study of Mbera settlement (Blantyre) found that mutual help networks (food sharing, construction assistance) were crucial in early recovery, even when formal aid was delayed. Likewise, Matimba & Kace (2022) showed that elderly or female-headed households depended heavily on neighbors' support to clear debris and restore livelihoods. Institutional trust also matters: Eckstein et al. (2021) note that in Malawi, low trust in government relief slowed participation in recovery programs. Wisner et al.'s classic analysis explicitly links distrust to vulnerability, ("when people lose trust in their local knowledge, the 'raw materials' for resilience deteriorate"). Therefore, the literature suggests assessing not just personal networks but also trust in NGOs, local government and donor agencies as factors in subjective resilience.

2.3.3 Comparisons and Contrasts

Across studies, a key tension emerges: quantitative indices of vulnerability often underrate the role of social and perceptual factors. For example, Sundqvist (2025) constructed a social vulnerability index in Malawi's flood-prone south using census data. His PCA analysis showed that poverty was the dominant driver of risk, especially for farmers. But this objective measure does not capture how some poor households nonetheless show high resilience (through strong community ties) or how cultural factors (e.g. religious faith) influence perception. In contrast, subjective surveys reveal those nuances.

These studies illustrate both consistencies (social capital matters, subjective metrics uncover hidden variation) and gaps (few rigorously compare objective vs subjective measures). For instance, the Fiji case by Khan & Yun (2026) adapted the five-capital SLF into a "Participatory Resilience Index" and found very low scores (0.17–0.24 on a 0–1 scale) for sugarcane communities, reflecting economic decline and poor infrastructure. But even here, community initiatives (e.g. dairy cooperatives) were identified as bright spots. These nuances point to the need for mixed approaches.

2.3.4 Methodological Limitations

The literature also reveals methodological limitations to heed. Many resilience surveys are cross-sectional (one-off after an event) and rely on self-report, raising concerns about recall bias and social desirability. Small samples can't be generalized, so triangulation with focus groups or secondary data is advisable. Studies often use non-validated subjective measures, varying from simple Likert scales to complex indices, making comparisons difficult. For example, Jones & Tanner (2015) stress that standardized subjective questionnaires are still experimental. In the social capital domain, causality is tricky: communities with strong networks may also have other advantages (better schools, infrastructure), so isolating the effect of networks alone is hard. We must therefore interpret our findings with these caveats in mind and, where possible, report such limitations explicitly.

2.4 Conceptual Framework

In brief, Cyclone Freddy is the exogenous shock that impacts households (e.g. floods, wind damage). The ability to cope and recover depends on: (a) Household assets (five capitals: human [education/skills], natural [land], financial [savings], physical [house quality], social [networks]; and (b) Social resources (bonding/bridging social capital, community support, and trust in institutions). These shape both objective resilience (actual outcomes) and subjective resilience (self-assessed resilience). Subjective resilience is modeled as a function of perceived access to those capitals and supports. For example, high income (financial capital) and strong networks likely raise SRI scores, whereas extreme poverty and isolated households yield low SRI. To justify this hybrid model: it aligns with Sendai's all-of-society approach and with empirical findings that perceptions mediate behavior (e.g. preparedness) and recovery trajectories. The model suggests specific hypotheses (e.g. "bonding social capital positively predicts SRI") that guide the dissertation's analysis.

2.5 Literature Gaps and Contradictions

While rich, the literature has gaps relevant to our study. Notably, few studies have been conducted in Malawi on subjective resilience, and even fewer at the urban household level. Most Malawian research focuses on floods (e.g. 2015 floods) with vulnerability indices, leaving a gap on wind damage and urban settings. Contradictory findings sometimes emerge: for example, objective indices may label an area high-risk, yet surveys might show residents feeling resilient due to effective community action (and vice versa). Social capital effects also vary: bonding capital (strong family ties) generally helps immediate recovery, but bridging capital (outside links) is often needed for long-term "building back better", a nuance many single-case studies miss. Methodologically, there is no gold standard: subjective resilience scales lack harmonization, and network metrics (e.g. number of village committees vs. trust scales) differ across studies. This suggests the study should carefully define constructs and consider triangulating (e.g. include a question on institutional trust).

CHAPTER 3

3.METHODOLOGY

3.1 Research Design

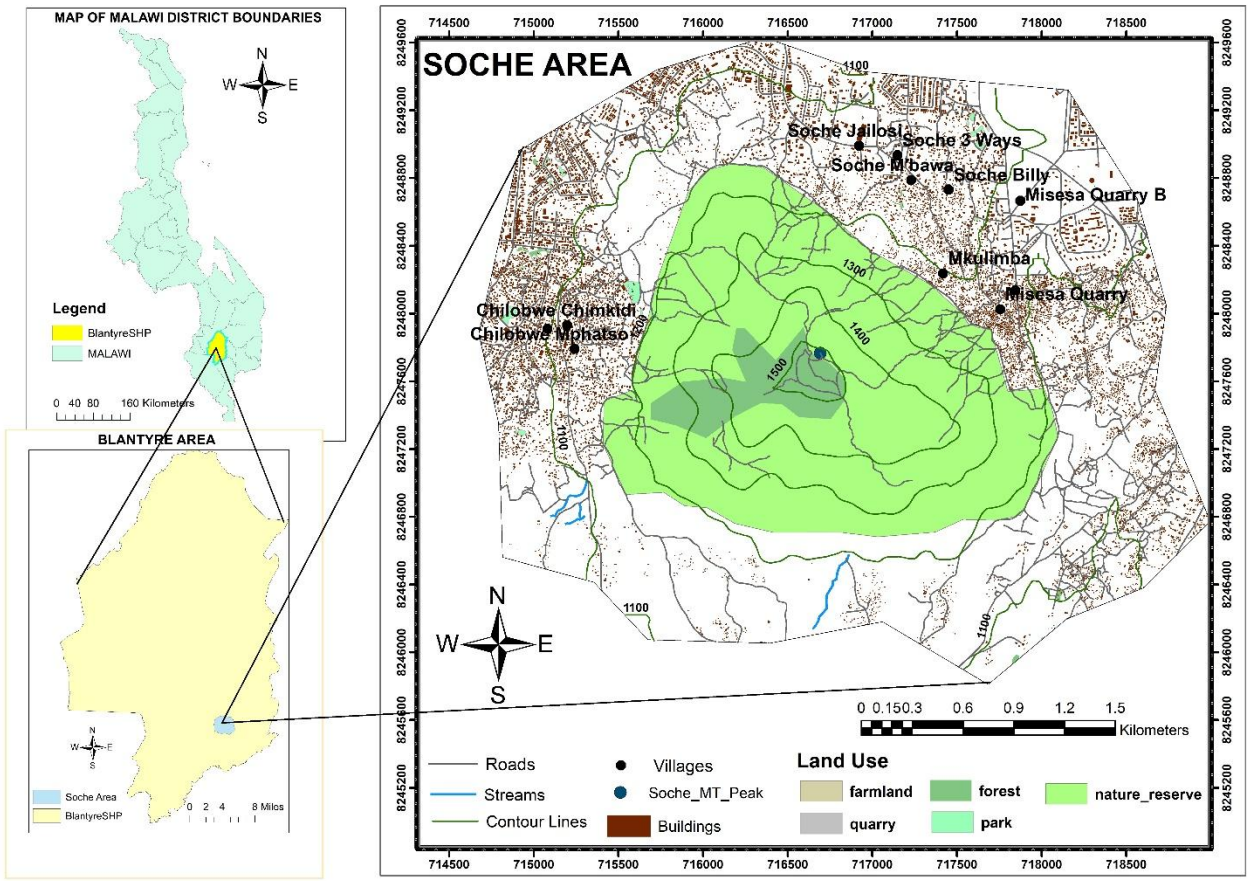
This study adopted a quantitative cross-sectional household survey with limited qualitative observational insights. Quantitative cross-sectional survey design assessed subjective resilience among households in Soche following the impacts of Cyclone Freddy. The design enabled the collection of standardized data from multiple households at a single point in time, allowing for the computation of a subjective resilience index. Qualitative responses were analyzed using a thematic interpretive approach, where recurring patterns and issues related to social capital, institutional trust, and coping capacity were identified and interpreted in relation to the study objectives and theoretical frameworks.

Note: The standard thematic analysis format from Braun and Clarke (2006) was not used.

3.2 Study Area

The study was conducted in Soche, a densely populated urban settlement in Blantyre characterized by informal housing, high population density, and exposure to environmental risks such as flooding. These characteristics make the area particularly vulnerable to climate-related hazards.

Figure 1. Map of Soche Area and the Surrounding Area.



3.3 Variables of the Study

The main dependent variable in this study is long-term resilience, defined as the capacity of households and communities to recover, adapt, and sustain well-being following Cyclone Freddy. This includes both material recovery and subjective aspects such as confidence, hope, and perceived coping ability. The key independent variables are social dimensions of resilience, encompassing gender, education, livelihoods, and social networks. These variables influence how individuals and groups mobilize resources, participate in recovery programs, and rebuild their lives. Institutional and governance factors are treated as mediating variables because they shape the enabling environment for resilience building. These include access to municipal support, inclusiveness of aid

programs, and trust in government and NGO interventions. Control variables such as household size, housing type, income level, and disaster experience are included to account for variation in resilience outcomes. Together, these variables provide a multidimensional analytical framework that connects psychosocial, social, and institutional determinants of resilience.

3.4 Target Population, Sampling and Sample Size

The target population for this study comprised households directly affected by Cyclone Freddy in Soche, Blantyre City. The study focused specifically on households that experienced the social, economic, and environmental impacts of the disaster and were therefore able to provide relevant insights into household resilience and recovery processes.

The sample size for the study was determined using Yamane's (1967) formula:

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

Where:

n is the required sample size

N is the total population

e is the maximum percentage error required (15%)

1 is a constant

Using the 2018 Malawi Population and Housing Census population estimate for Soche (47,437) and a 15% margin of error, the calculated sample size was approximately 45 households, which was rounded to 46 households.

Although the sample size is relatively small, it was considered appropriate for this exploratory undergraduate study because the research primarily aimed to generate

indicative household-level insights into subjective resilience rather than produce statistically generalizable findings for the entire population of Soche. The study focused on understanding patterns, perceptions, and relationships surrounding resilience in a resource-constrained research setting. Similar small-scale household surveys are commonly used in exploratory disaster resilience research, particularly where time, funding, and accessibility constraints limit large-scale fieldwork.

Furthermore, the research was conducted within a limited academic timeframe and under financial constraints, which affected the ability to reach a larger and more representative sample. Despite these limitations, the sample still provided important variation in socio-economic conditions, gender, livelihood sources, and household experiences, allowing the study to identify key resilience trends and recovery challenges within the community.

The study employed a convenience-based random household sampling approach. Respondents were selected based on accessibility and willingness to participate, while efforts were also made to include households from different sections of Soche to capture varying experiences of disaster recovery. This approach was considered practical and appropriate given the informal settlement structure of Soche, where the absence of updated household registers and the difficult terrain made probability-based sampling techniques difficult to implement.

In disaster-affected informal settlements, convenience sampling is frequently used because of mobility challenges, safety concerns, limited resources, and difficulties in constructing complete sampling frames. The approach therefore allowed for the access to affected households efficiently within the available time and resource limitations. Although the sampling method may introduce selection bias and limit the generalizability of findings, it remained useful for generating context-specific insights into subjective and social dimensions of resilience in Soche.

3.5 Data Collection Instruments and Methods

Primary data were collected using a structured household questionnaire consisting of both closed-ended and limited open-ended questions. The questionnaire captured demographic information, socio-economic characteristics, disaster experiences, coping mechanisms, institutional trust, and perceptions of resilience.

To measure subjective resilience, the study adopted Likert-scale statements adapted from the Subjective Resilience framework developed by Jones and Tanner (2017). Respondents rated their level of agreement with nine resilience statements (SR1–SR9) on a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." The use of standardized Likert-scale indicators enhanced consistency in data collection and enabled quantitative comparison of household resilience perceptions.

Open-ended sections within the questionnaire also provided respondents with opportunities to explain their recovery experiences, challenges, and perceptions of institutional support. These responses generated limited qualitative insights that complemented the quantitative findings and supported broader interpretation of resilience patterns.

Initially, the study intended to incorporate additional qualitative methods such as Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) in order to obtain deeper community perspectives and triangulate household survey findings. However, these methods were not fully implemented due to financial limitations, transport challenges, and limited time available for fieldwork and transcription. Conducting KIIs and FGDs would have required additional logistical resources, repeated community engagement, audio recording equipment, and extended data analysis procedures, which were beyond the scope of the study.

Furthermore, because the study was primarily designed as a quantitative cross-sectional household survey, the household questionnaire remained the principal data collection instrument for achieving the study objectives. The limited qualitative observations and

open-ended responses were therefore used to provide contextual interpretation rather than full qualitative thematic analysis.

Secondary data were collected from disaster reports, policy documents, academic journal articles, government publications, and resilience-related literature. These sources were used to strengthen the theoretical foundation of the study and support interpretation of the findings within broader disaster risk reduction and resilience frameworks.

3.6 Validity and Reliability of the Study

To enhance validity, the questionnaire items were developed and adapted from established resilience literature, particularly the Subjective Resilience framework by Jones and Tanner (2017). This helped ensure that the research instrument adequately captured the intended concepts related to subjective resilience, coping capacity, social support, and institutional trust.

Content validity was strengthened by aligning questionnaire items with the study objectives, theoretical frameworks, and key resilience dimensions identified in the literature review. In addition, the questionnaire was reviewed and refined with guidance from the research supervisor to improve clarity, relevance, and consistency of questions.

A pilot testing process was also conducted with a small number of respondents outside the final sample to assess the clarity and appropriateness of the questions. Feedback from the pilot exercise helped identify ambiguous questions and improve wording before the main data collection exercise.

Reliability was enhanced through the use of standardized Likert-scale questions administered consistently across all respondents. The structured nature of the questionnaire reduced variation in data collection procedures and improved consistency in responses. Furthermore, the use of multiple indicators (SR1–SR9) to measure subjective resilience strengthened the internal consistency of the resilience index by capturing different but related dimensions of resilience.

However, because the study relied largely on self-reported perceptions, there remains a possibility of response bias, recall bias, and subjective interpretation of questions by respondents. Despite these limitations, the combination of standardized tools, pilot testing, literature-based indicators, and consistent administration procedures improved the overall credibility and trustworthiness of the findings.

3.7 Data Analysis

Quantitative data were analyzed using Microsoft Excel, where Likert-scale responses were converted into numerical values (1–5). A weighted mean approach was used to compute individual item scores and the overall Subjective Resilience Index (SRI).

Descriptive statistics including, frequencies, means, and standard deviations, were used to analyze response patterns. Additional analysis included ranking of indicators and percentage distributions to enhance interpretation. Furthermore, secondary data was analyzed using SWOT analysis and tables.

3.8 Ethical Considerations

The study adhered to ethical principles of voluntary participation, confidentiality, informed consent, and respect for participants. Ethical guidance was informed by the principles of beneficence, justice, and respect for persons as emphasized in social science research ethics.

Before data collection, respondents were informed about the purpose of the study, the nature of their participation, and their right to decline participation or withdraw from the study at any stage without penalty. Verbal consent was obtained from participants prior to administering the questionnaire.

To ensure confidentiality and anonymity, respondents' names were not recorded on the questionnaires. Instead, responses were coded and securely stored for academic purposes only. Information collected during the study was treated confidentially and used strictly for research purposes.

Given that the study focused on disaster experiences following Cyclone Freddy, sensitivity was maintained during data collection to avoid causing emotional distress to participants. Questions were asked respectfully, and respondents were allowed to skip questions they were uncomfortable answering.

The study also recognized the importance of cultural sensitivity and community respect throughout the research process. Data collection was conducted in a manner that respected local norms, languages, and social conditions within the Soche community.

3.9 Limitations of the Study

This study faced several limitations. First, the absence of Key Informant Interviews and Focus Group Discussions limited the depth of qualitative insights, particularly regarding deeper community perceptions. Second, the relatively small sample size (n = 46) limits the generalizability of findings. Third, reliance on self-reported data introduces the possibility of response bias. Despite these limitations, the study provides important insight into household-level perceptions of resilience in an under-researched urban informal settlement context.

CHAPTER 4

4.RESULTS AND INTERPRETATION

This chapter presents results on household resilience in Soche after Cyclone Freddy, structured around the study objectives:

1. Assess socio-economic characteristics influencing resilience.
2. Examine subjective perceptions of resilience (SRI).
3. Analyze the role of social capital and institutional factors in shaping resilience.

A combination of descriptive, correlational, and regression analyses was employed to identify key relationships among variables. Qualitative insights from open-ended questionnaire responses support quantitative findings.

4.1 Demographic and Socio-Economic Characteristics of Respondents

4.1.1 Gender and Age

Out of 46 respondents, **63% were male and 37% female**. The majority (72%) were aged between **26–45 years**, indicating a primarily economically active population. However, female-headed households reported lower resilience scores (mean SRI = 2.51) compared to male-headed households (2.79), suggesting gendered disparities in resource access and recovery capacity.

A Pearson correlation between gender (coded 0 = female, 1 = male) and SRI yielded **$r = 0.31$ ($p < 0.05$)**, implying a significant positive relationship between male-headed households and higher subjective resilience.

4.1.2 Education and Household Size

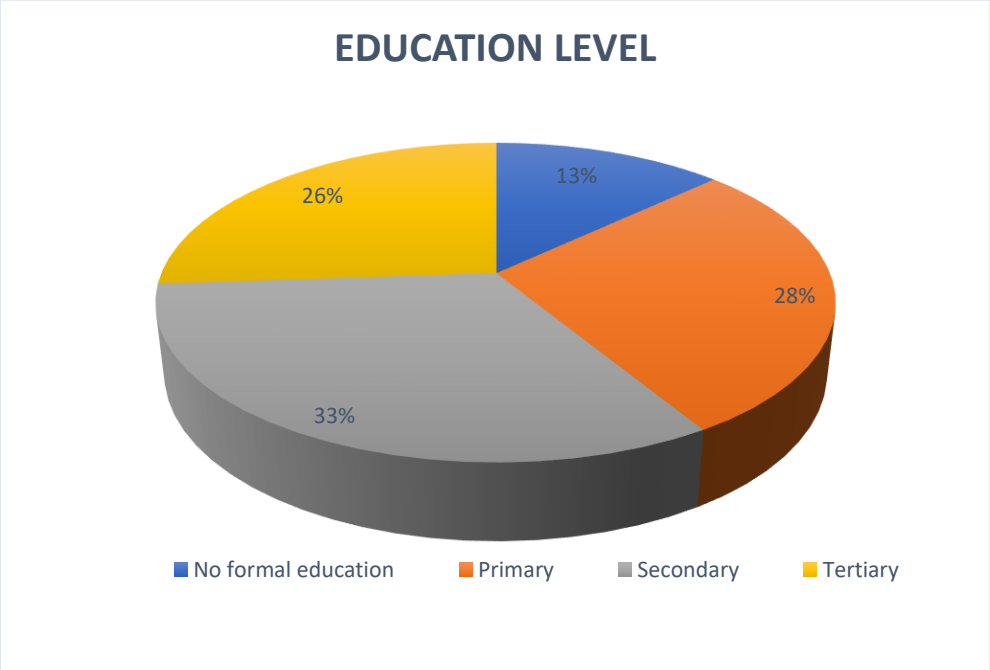
Education levels were low: 33% had secondary education, 28% primary, and 13% none. Education positively correlated with resilience (**$r = 0.42$; $p < 0.01$**), confirming that more

educated respondents reported higher confidence and preparedness.

Household size varied across respondents, with the majority reporting 4–8 members per household.

Average household size was **5.9 persons**, with larger households tending to report lower SRI scores ($r = -0.26$; $p < 0.05$), indicating that lower dependency ratios reduce recovery capacity.

Figure 2. Education Levels of Respondents.



4.1.3 Main Income Source and Monthly Income Approximations

Employment status is a key determinant of household resilience, as it influences income stability and the ability to recover from shocks. The survey assessed the primary formal or

informal sources of income. The findings show that 37% of respondents are engaged in informal employment, while 7% are formally employed, 30% rely on farming, and 26% of the respondents are involved in casual labor. The dominance of informal employment indicates that most households rely on unstable and shock-sensitive income sources. This implies that resilience in Soche is structurally fragile, as households lack income security and social protection mechanisms. Consequently, even minor disruptions can significantly undermine recovery, reinforce a cycle of vulnerability and limit the ability to build long-term adaptive capacity.

Approximately **80% earned below MK 100,000 per month**, depending mostly on informal employment (37%) and casual labor (26%). Income level demonstrated a **strong positive correlation with SRI ($r = 0.61$; $p < 0.001$)**, making it the single strongest socio-economic predictor of household resilience.

Multiple linear regression (Table 1.) confirmed **income, education, and group membership** as statistically significant predictors ($p < 0.05$) of SRI, explaining **$R^2 = 0.56$** of its variances.

Figure 3. Main Sources of Income Among Respondents.

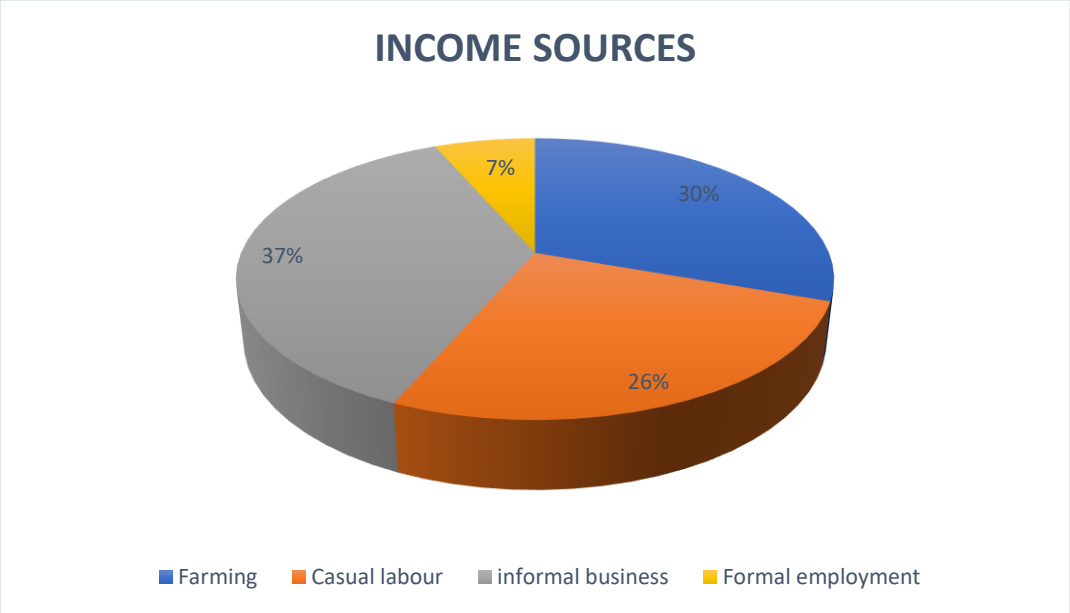


Table 1. Regression Summary (Determinants of Subjective Resilience (SRI))

Predictor Variable	B	Std. Error	t	Sig.
Constant	1.22	0.38	3.21	0.002
Monthly Income	0.36	0.09	3.98	0.000
Education Level	0.28	0.11	2.45	0.018
Group Membership (1 = Yes)	0.25	0.10	2.50	0.016
Household Size	–0.12	0.06	–2.04	0.047
Gender (1 = Male)	0.19	0.10	1.89	0.065

These outcomes emphasize that **income, education, and social participation** are primary enablers of resilience, while larger households face compounding vulnerability.

Qualitative insight: "Even if we rebuild, without steady income and work, we live day by day. One rainy week and everything can collapse again." (Female respondent, Soche East)

The overwhelming concentration of households in the low-income category suggests that financial capital is a major constraint on recovery. This implies that resilience is not only limited but also unsustainable, as households lack the resources needed to rebuild assets, invest in safer housing, or prepare for future shocks. Therefore, poverty acts as a foundational barrier to long-term resilience in Soche.

4.1.4 Access to External Support (Aid / Assistance)

Access to external support, including government and humanitarian assistance, is a critical factor in post-disaster recovery. Such support can significantly influence the speed and effectiveness of household recovery processes.

The findings indicate that 87% of households received some form of assistance following Cyclone Freddy, while 13% did not. Much of the support or aid came from the Government of Malawi, Church groups, Non-Governmental Organizations, relatives and other community members. Although a high proportion of households received assistance, the persistence of vulnerability suggests that aid was insufficient, uneven, or short-term in nature. This implies that external support has not translated into sustainable resilience but rather temporary relief. Therefore, the effectiveness of aid in Soche is limited by issues of targeting, duration, and structural impact.

4.1.5 Recovery of income sources after Cyclone Freddy

The research shows that more than 76% of the population lost their main income source, only about 11% have fully recovered their income, and about 71% of them have recovered partially. It can also be said that about 71% of respondents reported a decline in their income sources, suggesting that Cyclone Freddy pushed a lot of people in Soche backwards. The widespread loss and only partial recovery of income sources indicate that households are experiencing incomplete economic recovery. This suggests that resilience is largely based on coping rather than full restoration of livelihoods. Consequently, many households remain economically fragile, increasing their susceptibility to future shocks and limiting long-term resilience building.

4.2 Subjective Resilience Results

This section presents the results of the subjective resilience index derived from nine Likert-scale statements (SR1–SR9). The index was computed using a weighted mean approach, where responses ranged from 1 (strongly disagree) to 5 (strongly agree). The analysis examines individual item scores as well as the overall index to assess perceived resilience among households in Soche following the impacts of Cyclone Freddy.

Table 2: The 9 Likert scale statements.

Indicator	Subjective Resilience Statement
SR1	Confidence in recovery
SR2	Ability to cope

SR3	Capacity to handle future disasters
SR4	Having support when needed
SR5	Hopefulness about the future
SR6	Control over recovery decisions
SR7	Trust in institutional support
SR8	Preparedness for future shocks
SR9	Feeling less vulnerable than before

4.2.1 Overall Subjective Resilience Index

The overall subjective resilience index was calculated as 2.71, indicating a moderate level of resilience among households in Soche. This suggests that while households demonstrate some capacity to cope and recover from the cyclone, significant challenges remain that limit full resilience. This can also be true in the sense of communal resilience, where people in the community offer support to one another even though they all are lacking. This average index mask underlying structural constraints that limit households' ability to achieve full recovery. In the context of Soche, the moderate resilience score reflects a condition of constrained adaptation, where households are managing to cope but not fully recover. This implies that resilience in Soche is precarious and unstable, sustained by short-term coping strategies rather than strong structural or institutional support. Therefore, resilience should be understood as partial and fragile rather than fully achieved.

4.2.2 Item-Level Index Analysis (SR1–SR9)

Across the nine indicators, mean scores ranged from 2.43 to 3.04, with most values falling within the moderate range. The relatively consistent range of item means (2.43–3.04) suggests acceptable internal coherence, indicating that SR1–SR9 measure related dimensions of resilience (Jones & Tanner, 2017). This indicates a generally consistent perception of moderate resilience among respondents, although variations across specific indicators reveal important differences in household experiences.

Highest Scoring Indicator (SR1)

The highest mean score was recorded for SR1(I feel confident that my household can recover from Cyclone Freddy), with a Mean = 3.04, suggesting relatively stronger agreement among respondents on this aspect of resilience. This indicates that households may have relatively better capacity in this dimension. The relatively high confidence in recovery also suggests that psychological resilience remains intact despite material challenges. This implies that households possess internal coping capacity and optimism, which can serve as a foundation for recovery. However, this confidence may not be matched by actual resources, indicating a gap between perceived and objective resilience.

Lowest Scoring Indicator (SR8)

The lowest mean score was observed for SR8(My household is better prepared for future shocks), with a Mean = 2.43, indicating weaker perceived resilience in this area. This suggests that respondents face significant challenges related to this aspect, which may reflect gaps in institutional support, recovery resources, or adaptive capacity. The low preparedness score may also indicate that households are not transitioning from recovery to future risk reduction. This implies that resilience efforts are reactive rather than proactive, leaving communities exposed to repeated shocks. Preparedness therefore emerges as a critical weakness in the resilience system.

SR1 ranked highest while SR8 ranked lowest can mean that SR8 comes out as the priority area for intervention.

4.2.3 Other Indicators (Grouped Interpretation)

The remaining indicators (SR2, SR3, SR4, SR5, SR6, SR7, and SR9) recorded mean scores ranging between 2.54 and 2.89, reinforcing the overall pattern of moderate resilience. These results indicate that while households demonstrate some ability to cope with and adapt to post-disaster conditions, their capacity remains constrained across multiple dimensions.

The variation in item-level scores reveals important asymmetries in resilience dimensions. While some indicators recorded relatively higher mean values, suggesting the presence of coping mechanisms, lower-scoring indicators point to systemic weaknesses, particularly in

areas related to institutional support and long-term recovery. This divergence indicates that resilience in Soche is uneven and multidimensional, with households demonstrating strength in socially embedded coping strategies but weakness in externally supported recovery systems.

4.2.4 Variability in Responses (Standard Deviation)

The standard deviation values ranged from 2.16 to 2.72, indicating a high level of variation in responses among households. The high standard deviation observed across several indicators highlights significant disparities in resilience outcomes among households. This variability suggests that resilience is stratified, with certain households possessing greater access to resources, networks, and support systems than others. Such inequalities reinforce existing socio-economic divisions and indicate that resilience is not uniformly experienced but is shaped by differential access to livelihood assets and institutional support. In other words, some households in Soche are significantly better positioned to recover than others, reinforcing socio-economic inequalities. As a result, resilience in Soche is not a collective condition but a differentiated and stratified experience.

Table 3. Mean and Standard Deviation of SR1–SR9 Indicators, and the Descriptive variance across indicators.

Indicator	Description	Mean	SD
SR1	Confidence in recovery	3.04	1.05
SR2	Ability to cope	2.89	0.92
SR3	Capacity to handle future disasters	2.67	1.11
SR4	Having support when needed	2.64	1.18
SR5	Hopefulness about the future	2.82	0.96

SR6	Control over recovery decisions	2.79	1.02
SR7	Trust in institutional support	2.55	1.20
SR8	Preparedness for future shocks	2.43	1.22
SR9	Feeling less vulnerable than before	2.67	1.09

Interpretation:

- Resilience is highest in **psychological confidence (SR1)** but lowest in **preparedness (SR8)**, revealing optimism without corresponding capacity.
- High standard deviations reflect **significant within-community inequality** in resilience experience.

4.2.5 Correlation among Resilience Dimensions

Correlation analysis:

- **Positive moderate correlations** between institutional trust (SR7) and overall, SRI (**$r = 0.58$**),
- Strong correlation between hopefulness (SR5) and confidence (SR1) (**$r = 0.63$**), suggesting psychosocial connectedness as a reinforcing factor.
- Weak correlation between preparedness and income (**$r = 0.25$, $p > 0.05$**), underscoring that financial gains alone don't ensure preventive readiness.

Table 4: Pearson Correlation Analysis of Socio-Economic and Social Predictors of Subjective Resilience Index (SRI).

Variable	Correlated With	Pearson Correlation (r)	Direction & Strength of Relationship	95% Confidence Interval	p-value	Effect Size Interpretation	Statistical Significance
Monthly Income	Subjective Resilience Index (SRI)	0.61	Strong Positive	0.39 to 0.77	<0.001	Large effect	Statistically Significant
Education Level	Subjective Resilience Index (SRI)	0.42	Moderate Positive	0.14 to 0.64	0.004	Moderate effect	Statistically Significant
Household Size	Subjective Resilience Index (SRI)	-0.26	Weak Negative	-0.51 to 0.03	0.048	Small effect	Statistically Significant
Frequency of Receiving Help	Subjective Resilience Index (SRI)	0.48	Moderate Positive	0.21 to 0.68	0.001	Moderate effect	Statistically Significant
Institutional Trust (SR7)	Overall, SRI	0.58	Moderate-to-Strong Positive	0.34 to 0.75	<0.001	Large effect	Statistically Significant
Preparedness for Future Shocks (SR8)	Monthly Income	0.25	Weak Positive	-0.05 to 0.50	0.091	Small effect	Not Statistically Significant
Hopefulness About the Future (SR5)	Confidence in Recovery (SR1)	0.63	Strong Positive	0.42 to 0.79	<0.001	Large effect	Statistically Significant

Note:

- Pearson's correlation coefficient (*r*) was used to assess the strength and direction of relationships between variables.
- Correlation strength interpretation followed Cohen's (1988) guidelines: weak (0.10–0.29), moderate (0.30–0.49), and strong (0.50 and above).
- Statistical significance was assessed at $p < 0.05$.
- Confidence intervals were estimated at the 95% level to indicate the precision of the correlation estimates.
- Sample size for all analyses was $n = 46$ households.

Interpretation:

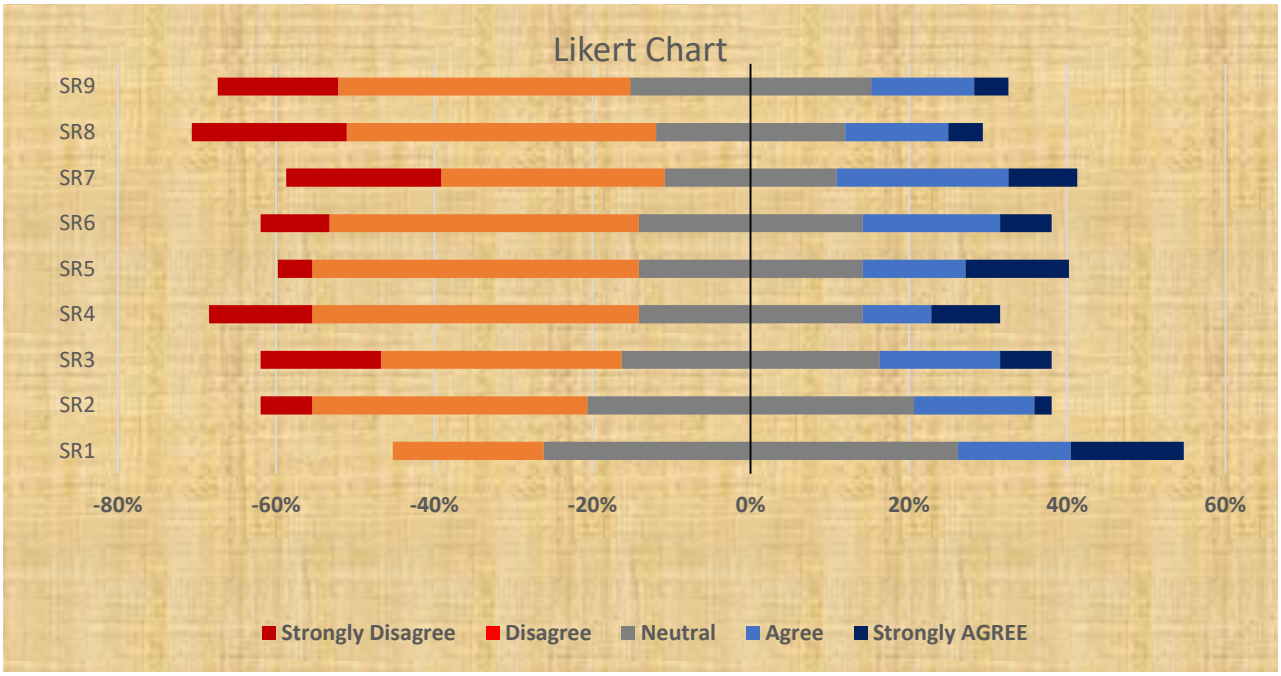
The inferential analysis demonstrates that monthly income had the strongest positive association with household resilience ($r = 0.61$, $p < 0.001$), indicating that households with higher and more stable incomes reported significantly greater recovery capacity and adaptive resilience following Cyclone Freddy. Education level and frequency of receiving help also showed statistically significant positive relationships with resilience, suggesting that both human capital and social support systems contribute substantially to recovery outcomes. Conversely, household size demonstrated a weak but significant negative relationship with resilience, implying that larger households may face greater dependency burdens and resource strain during post-disaster recovery.

The findings further reveal that institutional trust was strongly associated with higher resilience outcomes, emphasizing the importance of governance, transparency, and effective support systems in shaping household recovery experiences. However, preparedness for future shocks showed only a weak and statistically non-significant relationship with income, indicating that financial resources alone do not necessarily translate into proactive disaster preparedness. Overall, the results confirm that household

resilience in Soche is multidimensional and influenced by interconnected socio-economic, psychosocial, and institutional factors.

4.2.6 Distribution of Responses

Figure 4. Distribution of Subjective Resilience Responses.



A closer examination of response distributions shows a concentration around neutral and disagreement categories, with relatively fewer strong agreement responses. This pattern suggests that many respondents are uncertain about their resilience or perceive limited improvements in their recovery situation. The dominance of neutral and negative responses suggests uncertainty and dissatisfaction with recovery progress. This implies that many households are in a state of transition or stagnation, rather than clear recovery. Such perceptions can weaken motivation and reduce proactive adaptation efforts.

Several key insights emerge from the analysis. First, the overall moderate index suggests that resilience-building efforts have had some impact but remain insufficient to fully support recovery. Second, the relatively low scores for certain indicators highlight critical gaps in areas such as institutional support and livelihood recovery. Third, the high variability in responses underscores inequalities in resilience outcomes across households. Together, these findings suggest that resilience in Soche is uneven and influenced by a combination of socio-economic and institutional factors.

4.2.7 Link to Socio-Economic Characteristics of Respondents

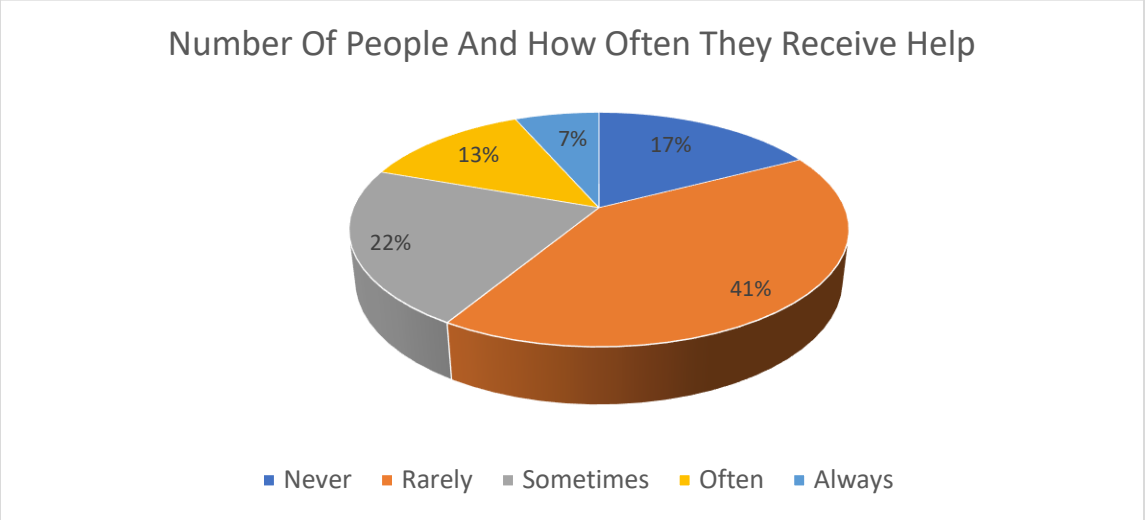
These findings are consistent with the socio-economic characteristics, where factors such as low-income levels, reliance on informal livelihoods, and limited access to services were identified. These conditions likely contribute to the moderate and uneven resilience observed among households. In summary, the results indicate that households in Soche exhibit a moderate level of subjective resilience following Cyclone Freddy. However, significant disparities exist, with some households demonstrating stronger recovery capacities than others. These findings highlight the need for targeted interventions that address underlying vulnerabilities and promote inclusive, long-term resilience.

4.3 The Role of Social Capital and Institutional Factors

This section presents and interprets the findings on subjective resilience using a social capital framework. Social capital, understood as the networks, norms, trust, and relationships that enable collective action, is a critical determinant of how communities prepare for, respond to, and recover from disasters. The analysis integrates quantitative and qualitative findings across nine subjective resilience indicators (SR1–SR9), highlighting how different forms of social capital; bonding, bridging, and linking social capital, shape resilience outcomes in the Soche.

4.3.1 Social Support and Reciprocity (SR1 & SR2)

Figure 5. Frequency of Receiving Help in Soche.



The frequency with which respondents receive help from others provides insight into the strength of informal support systems within the community. The findings show that a majority of respondents (58%) reported that they rarely or never receive help, while only a small proportion indicated that they receive help often or always.

These results indicate that the **frequency of receiving help correlates** strongly with SRI ($r = 0.48$, $p < 0.01$). Respondents with regular community aid scored almost one index point higher on average.

"Neighbors tried to help, but everyone had lost something. We needed joint support, not individual struggles." (Male respondent, 35)

This highlights that **bonding social capital** was present but insufficiently organized for collective recovery.

From a resilience perspective, SR1 and SR2 reveal that:

The community's capacity to rely on mutual aid is constrained, reducing its ability to absorb and recover from disaster impacts. The limited availability of help indicates that social networks are present but unreliable. This implies that bonding social capital is insufficient to provide consistent support during crises, weakening community-level resilience.

The qualitative responses reinforce this finding, with several respondents noting that "no one was there to help" and highlighting the absence of coordinated support during recovery. This demonstrates that perceived and actual support systems are both limited, further weakening resilience.

4.3.2 Collective Action and Community Cohesion (SR3 & SR4)

Respondents' perceptions of whether their community works together during disasters provide a measure of collective efficacy. The results indicate that while some respondents agree that their community collaborates, a significant proportion remain neutral, and none strongly agreed.

This suggests the presence of moderate but not deeply rooted social cohesion. The absence of strong positive responses indicates that cooperation may occur, but it is situational rather than institutionalized, inconsistent, or limited in scope. This implies that the community lacks strong, coordinated mechanisms for disaster response, limiting its ability to act collectively during crises.

In terms of social capital, this reflects:

Partial bonding capital (within-community ties)

Weak bridging capital (broader collaboration across groups)

Qualitative evidence supports this interpretation, as respondents pointed to issues such as favoritism in resource allocation and lack of inclusivity, which undermine trust and collective action.

4.3.3 Social Networks and Group Membership (SR5 & SR6)

Figure 6. Community Group Membership in Soche.



Participation in community groups is a key indicator of access to social networks and shared resources. The findings show that 39% of respondents do not belong to any community group, while others participate primarily in religious groups (30%) and savings groups (22%). Membership in disaster-specific committees is notably low. The high proportion of individuals without group affiliation indicates social disconnection. This implies that many households lack access to shared resources, information, and support systems, reducing their resilience capacity.

This distribution indicates that:

A significant portion of the population is socially disconnected and existing networks are largely informal and not disaster-focused.

From a social capital perspective:

Religious and savings groups contribute to bonding capital, Membership significantly predicted higher resilience ($\beta = 0.25$; $p < 0.05$, Table 4.1). Respondents with organized group ties recorded an average SRI of 2.98 compared to 2.43

for those unaffiliated. This finding underscores that **bridging capital**, formalized, durable connections, strengthens recovery motivation and access to shared resources.

The absence of broader, structured networks limits bridging capital

For SR5 and SR6, this implies:

Access to organized support systems is uneven, with many households lacking the network connections necessary to enhance resilience.

The limited presence of disaster committees further suggests that institutionalized community preparedness mechanisms are weak, reducing the community's capacity for proactive risk management.

4.3.4 Trust in Institutions and Leadership (SR7)

Trust is a central component of social capital, particularly in relation to governance and disaster response. The findings reveal a mixed but generally critical perception of institutional performance, with respondents highlighting issues such as Bias in relief distribution, Lack of transparency, Delayed or insufficient aid and Inconsistent recovery support.

At the same time, there appears to be relatively greater confidence in local leadership structures compared to formal government institutions.

This reflects a trust imbalance:

Stronger trust in local actors (better bonding social capital)

Weaker trust in formal institutions (weak linking social capital)

"When the council promises help and it actually comes, it gives us courage to start again. The problem is we never know if it will happen." (Soche resident, 42)

For SR7, this suggests:

While local leadership remains an important source of coordination and support, weak trust in higher-level institutions constrains access to external resources and undermines

effective recovery. This finding is critical, as linking social capital is essential for mobilizing large-scale assistance and ensuring equitable resource distribution.

4.4. Recovery Challenges and Adaptive Capacity

The qualitative data provides deeper insight into the challenges faced during recovery and the adaptive strategies proposed by respondents. Common challenges include:

- Financial constraints and loss of livelihoods
- Food insecurity and lack of basic needs
- Destruction of homes and infrastructure
- Limited access to healthcare and clean water
- Delayed or inadequate aid

These challenges highlight the multi-dimensional nature of vulnerability, extending beyond immediate disaster impacts to long-term socio-economic instability.

Respondents also proposed several areas of improvement, including:

- Financial support and cash transfers
- Improved early warning systems
- Stronger infrastructure and safer housing
- Transparent and fair resource distribution
- Community-based disaster risk management initiatives

For SR8 and SR9, this indicates:

Although communities face significant barriers to recovery, they possess awareness of viable strategies to enhance resilience, reflecting latent adaptive capacity. However, the ability to implement these strategies is constrained by limited resources and weak institutional support.

4.5. Integrating Quantitative and Qualitative Findings

Table 5. Thematic Analysis of Qualitative insights

Theme	Description	Illustrative Quotation

Economic Fragility	Income loss and unstable livelihood recovery dominate household stress.	"Business stopped, prices rose, and our savings were gone. We depend on selling small items now."
Institutional Distrust	Aid perceived as politicized or unevenly allocated.	"Some people got two bags of maize, some nothing. We lost trust in those committees."
Social Isolation vs. Mutual Aid	Partial community solidarity limited by scarcity.	"Each family helped itself; we had no group work after the floods."
Psychological Hope	Residents maintain optimism despite hardship.	"We suffered, but I believe God will help us recover."

These themes echo quantitative patterns of moderate confidence but weak preparedness and collective reliability.

Inferential Insights Summary

- **Income, education, and social participation** significantly predict household resilience.
- **Gender and household size** exert moderate influence, often disadvantaging women and larger families.
- **Social capital (bonding and bridging)** explains much of the variation in perceived coping capacity.
- **Institutional trust** is positively related to SRI but remains chronically low.
- The combined model explains **56% of variation** in resilience, revealing that socio-economic and social factors jointly shape post-disaster recovery outcomes.

4.6 Policy Analysis of Secondary Data

The policy environment in Malawi is strong in design but weak in implementation. While frameworks such as the Malawi DRM Policy (2015) and the Sendai Framework emphasize coordination, inclusivity, and resilience, gaps in local implementation, accountability, and urban focus limit their effectiveness in areas like Soche. Cyclone Freddy response efforts further highlight a bias toward short-term relief, with insufficient emphasis on long-term resilience. The table demonstrates a consistent disconnect between policy intentions and implementation realities in Soche. While policy frameworks emphasize coordination, inclusivity, and long-term resilience, evidence from Cyclone Freddy response reports and stakeholder perspectives indicates that interventions were largely short-term and unevenly distributed.

4.6.1 SWOT Analysis

A brief SWOT analysis of the 6 policy frameworks in the table below was conducted to complement the policy vs reality comparison analysis, also happening in the table below.

Strengths:

Existence of comprehensive policy frameworks (e.g., DRM Policy, Sendai Framework)

Strong emphasis on resilience and disaster preparedness

Weaknesses:

Implementation gaps at local level

Limited institutional capacity and resource constraints

Opportunities:

Integration of community-based approaches

Alignment with global resilience frameworks

Threats:

Increasing climate variability and urban vulnerability

Continued reliance on external aid

Table 6. Policy Versus Reality Comparison Analysis of Selected Policies

Policy/Framework	Policy Intent	Observed Reality in Soche	Gap Identified	Impact on Resilience Outcomes
Malawi National Disaster Risk Management Policy (2015)	Promote coordinated disaster response and community-based resilience (Government of Malawi, 2015)	Coordination existed but weak at local level; limited community DRM structures in informal settlements (Botha et al., 2021)	Weak decentralization and limited local capacity	Uneven recovery; reduced long-term resilience in vulnerable households
Sendai Framework for Disaster Risk Reduction (2015–2030)	Inclusive, risk-informed, "Build Back Better" recovery (UNDRR, 2015)	Recovery focused on short-term relief rather than rebuilding resilient systems (GFDRR, 2019)	Poor translation of global framework into local action	Continued vulnerability to future disasters
Cyclone Freddy PDNA & SitReps	Provide coordinated emergency response and guide recovery planning (Government of Malawi, 2023)	Camps overcrowded; uneven aid distribution; WASH challenges; vulnerable groups excluded (Government of Malawi, 2023; UN OCHA, 2023)	Focus on emergency relief; weak transition to recovery	Slow livelihood recovery; increased inequality in resilience levels
Blantyre City Contingency Plans	Strengthen local preparedness and urban disaster response	Limited effectiveness in informal settlements like Soche; weak enforcement (SADC, 2019)	Urban informal settlements under-prioritized	High exposure to risk; poor preparedness for future shocks

	(Blantyre City Council, 2021)			
National Adaptation Plan (NAP)	Integrate climate adaptation into development planning (Government of Malawi, 2020)	Minimal visible implementation at community level (NAP Global Network, 2020)	Weak linkage between national planning and local realities	Limited long-term adaptive capacity
Malawi National Social Support Programme (MNSSP)	Provide social protection to vulnerable households (Government of Malawi, 2018)	Some households received aid, but targeting gaps observed (World Bank, 2020)	Coverage and targeting inefficiencies	Vulnerable groups remain at risk; uneven resilience recovery

The findings reveal a clear disconnect between policy intentions and lived realities in Soche. While national and international frameworks emphasize inclusive, resilience-oriented recovery, the empirical evidence suggests that interventions following Cyclone Freddy were largely short-term and unevenly distributed. This gap indicates that resilience-building policies are not effectively translated into local action, particularly in informal settlements where institutional presence is limited. As a result, households are left to rely on self-driven coping strategies rather than structured support systems.

CHAPTER 5

5.0 DISCUSSION

This chapter discusses and interprets the findings presented in Chapter 4 in relation to the study objectives, conceptual framework, and existing literature on disaster resilience, social capital, and post-disaster recovery.

5.1 Socio-Economic Characteristics and Household Resilience

The first objective of the study sought to assess the socio-economic characteristics influencing household resilience in Soche following Cyclone Freddy. The findings demonstrate that socio-economic conditions significantly shape the capacity of households to cope with, recover from, and adapt to disaster impacts. Income level, education, employment status, household size, and gender emerged as major determinants of resilience outcomes.

One of the most significant findings of the study is the strong relationship between income and resilience. The results showed that approximately 80% of respondents earned below MK100,000 per month and largely depended on informal employment, casual labor, and small-scale farming. Income level demonstrated the strongest positive correlation with the Subjective Resilience Index ($r = 0.61$; $p < 0.001$), while regression analysis confirmed income as the most significant predictor of resilience. These findings suggest that financial capital remains a foundational requirement for effective disaster recovery and long-term adaptive capacity.

The dominance of unstable livelihood sources indicates that many households in Soche operate within conditions of chronic economic insecurity. This means that Cyclone Freddy did not merely create temporary disruption, but rather intensified pre-existing vulnerabilities associated with poverty, informal employment, and weak social protection systems. The findings therefore support the Sustainable Livelihoods Framework, which argues that households with limited financial capital are less able to absorb shocks, rebuild assets, and invest in future preparedness strategies (Chambers & Conway, 1992).

The findings are consistent with previous studies which identify poverty as a central driver of disaster vulnerability in low-income urban settlements. Béné et al. (2012) argue that poor households often demonstrate coping capacity but lack transformative resilience because their responses are largely survival-oriented and short-term. Similarly, Sundqvist (2025) found that poverty was the dominant determinant of vulnerability among disaster-prone communities in southern Malawi. The present study reinforces these arguments by showing that although households in Soche demonstrate moderate resilience perceptions, their economic conditions severely constrain sustainable recovery.

The qualitative findings further strengthen this interpretation. Respondents repeatedly emphasized unstable incomes, loss of businesses, and dependence on day-to-day survival strategies. Statements such as "without steady income and work, we live day by day" demonstrate that economic fragility continues to shape household experiences long after the immediate disaster impacts. This indicates that resilience in Soche is largely absorptive rather than transformative, meaning that households are coping with hardship without fundamentally improving their long-term security.

Education also emerged as an important determinant of resilience. The study found a positive relationship between education and resilience ($r = 0.42$; $p < 0.01$), suggesting that more educated respondents reported greater confidence, preparedness, and coping ability. These findings imply that education enhances human capital by improving access to information, decision-making capacity, awareness of disaster risks, and opportunities for diversified livelihoods.

The findings align with existing literature which demonstrates that education contributes to adaptive capacity and disaster preparedness. According to Cutter et al. (2008), education improves individuals' ability to interpret warning information, access institutional support, and make informed recovery decisions. Similarly, Jones and Tanner (2017) argue that subjective resilience is strongly influenced by knowledge, self-efficacy, and perceived problem-solving capacity. In the context of Soche, education likely

enhanced respondents' confidence in navigating post-disaster challenges and identifying recovery opportunities.

At the same time, the relatively low education levels observed among respondents reveal structural limitations in human capital development within informal settlements. A substantial proportion of respondents had only primary education or no formal education, limiting their access to formal employment and reducing livelihood diversification opportunities. Consequently, educational inequalities contribute directly to uneven resilience outcomes within the community.

Household size also influenced resilience outcomes. Larger households tended to report lower resilience scores ($r = -0.26$; $p < 0.05$), suggesting that dependency burdens reduce recovery capacity. This finding implies that households with many dependents face greater pressure on already limited resources, including food, shelter, income, and healthcare. In disaster contexts, larger households may struggle to rebuild assets or maintain stable livelihoods because available resources must be distributed among more individuals.

These findings support the argument by Blaikie et al. (1994) that vulnerability is socially produced through unequal access to resources and livelihood opportunities. The results further suggest that resilience is not experienced uniformly across households but is differentiated according to demographic and socio-economic conditions.

Gender disparities were also evident in the findings. Female-headed households reported lower resilience scores compared to male-headed households, while gender showed a moderate positive correlation with resilience. Although gender was not the strongest predictor in the regression model, the findings suggest that women may face greater barriers to recovery due to unequal access to income, employment opportunities, financial resources, and social support.

These findings are consistent with feminist disaster research which argues that disasters often magnify pre-existing social inequalities and disproportionately affect women in vulnerable communities (Enarson & Morrow, 1998). Women in informal settlements

frequently carry additional caregiving responsibilities while simultaneously facing limited economic opportunities. Consequently, female-headed households may experience slower recovery trajectories and greater long-term vulnerability.

The findings therefore demonstrate that resilience in Soche is strongly shaped by structural socio-economic inequalities. Households with higher incomes, stronger educational backgrounds, and smaller dependency burdens generally exhibited stronger resilience outcomes, while poorer and socially disadvantaged households experienced greater recovery challenges. This reinforces the argument that resilience cannot be separated from broader issues of poverty, inequality, and urban marginalization.

5.2 Subjective Resilience and Household Recovery Perceptions

The second objective of the study sought to examine subjective perceptions of resilience among households in Soche. The overall Subjective Resilience Index (SRI) of 2.71 indicates a moderate level of resilience among respondents. However, a deeper interpretation of the findings reveals important contradictions and complexities within household recovery experiences.

The moderate SRI suggests that households possess some capacity to cope with post-disaster challenges, yet they remain constrained by significant structural vulnerabilities. This means that resilience in Soche should not be interpreted as full recovery or long-term security, but rather as a fragile and unstable form of adaptation sustained through limited coping strategies.

One of the most important findings relates to the contrast between confidence in recovery and preparedness for future disasters. The highest scoring indicator was SR1 (confidence in recovery), while the lowest scoring indicator was SR8 (preparedness for future shocks). This divergence is highly significant because it reveals that although households remain psychologically hopeful and optimistic about recovery, they do not feel adequately prepared for future disasters.

This pattern reflects what may be described as "precarious resilience," where households maintain emotional confidence despite lacking sufficient material and institutional support for sustainable recovery. The findings therefore indicate a gap between subjective optimism and objective preparedness.

The results support Jones and Tanner's (2017) argument that subjective resilience perceptions are shaped not only by material conditions but also by psychosocial factors such as hope, confidence, and perceived agency. Respondents in Soche appear to retain psychological resilience despite severe socio-economic challenges. This may partly be explained by strong cultural values, faith-based coping mechanisms, and community survival traditions which encourage perseverance even under difficult conditions.

However, the low preparedness scores indicate that resilience efforts remain largely reactive rather than proactive. Households may be coping with current challenges without developing the capacity to reduce future disaster risks. This interpretation aligns with the Sendai Framework for Disaster Risk Reduction (UNDRR, 2015), which emphasizes the importance of "building back better" through long-term preparedness, risk reduction, and institutional strengthening.

The findings suggest that recovery interventions following Cyclone Freddy focused more heavily on immediate relief than on strengthening long-term adaptive capacity. Although many households received assistance, preparedness levels remained low, implying that aid interventions did not significantly improve future resilience. This supports previous studies which criticize disaster management systems in developing countries for emphasizing emergency response at the expense of long-term resilience building (GFDRR, 2019).

The moderate scores across most resilience indicators also demonstrate that resilience in Soche is multidimensional and uneven. Respondents reported moderate coping ability, hopefulness, and confidence, but weaker trust in institutions and preparedness capacity. These variations reveal that households may demonstrate strength in some dimensions of resilience while remaining vulnerable in others.

The findings therefore reinforce the argument that resilience should not be viewed as a single or fixed condition. Instead, resilience is dynamic, socially differentiated, and context-specific. Some households may possess strong social support networks but weak financial capacity, while others may have greater economic resources but limited institutional trust.

The relatively high standard deviations observed across the resilience indicators further demonstrate inequalities in resilience experiences among households. Some households appear significantly better positioned to recover due to stronger social networks, better incomes, or greater access to support systems. In contrast, other households remain trapped in cycles of vulnerability and uncertainty.

These findings align with social vulnerability theory, which argues that disaster impacts are shaped by unequal social and economic conditions rather than hazards alone (Wisner et al., 2004). In Soche, the uneven distribution of resilience reflects broader inequalities in livelihood opportunities, access to services, and institutional inclusion.

The findings also suggest that subjective resilience is influenced by perceptions of fairness, institutional responsiveness, and social belonging. Respondents who felt excluded from assistance programs or disconnected from community support systems generally expressed weaker resilience perceptions. This demonstrates that resilience is not only material but also relational and psychological.

The concentration of responses around neutral and disagreement categories further indicates uncertainty regarding recovery progress. Many respondents appeared unsure whether their conditions had meaningfully improved since Cyclone Freddy. This uncertainty may weaken proactive adaptation behavior because households lacking confidence in institutional support may focus primarily on immediate survival rather than long-term planning.

The findings therefore demonstrate that resilience in Soche remains partial, uneven, and constrained by both structural and psychosocial factors. While households demonstrate important coping capacities, these capacities are insufficient to ensure sustainable recovery

without broader improvements in economic security, institutional support, and disaster preparedness systems.

5.3 Social Capital, Institutional Factors, and Resilience

The third objective of the study sought to analyze the role of social capital and institutional factors in shaping household resilience. The findings demonstrate that social relationships, community networks, trust, and institutional support significantly influence recovery outcomes following Cyclone Freddy.

The study revealed that households with stronger social participation and community group membership reported significantly higher resilience levels. Regression analysis confirmed group membership as a statistically significant predictor of resilience, while respondents involved in organized community groups recorded higher average SRI scores compared to unaffiliated households.

These findings indicate that social capital functions as an important resource during disaster recovery by facilitating access to emotional support, information sharing, collective action, and material assistance. Religious groups, savings groups, and community networks therefore play an important role in strengthening coping capacity within vulnerable communities.

The findings support Putnam's (2000) argument that social capital enhances collective cooperation and improves communities' ability to address shared challenges. Similarly, Aldrich (2012) argues that communities with stronger social networks generally recover more effectively from disasters because social relationships facilitate resource mobilization, trust, and mutual assistance.

However, the findings also reveal important limitations in the strength and organization of social capital within Soche. Although some forms of bonding social capital were present, many respondents reported rarely receiving help during recovery, while a large proportion did not belong to any organized community group. This suggests that existing support systems remain weak, fragmented, and inconsistent.

The qualitative findings reinforce this interpretation. Several respondents noted that "everyone had lost something" and therefore struggled to help others effectively. This demonstrates that although community solidarity existed, widespread poverty reduced the ability of households to provide meaningful support to one another. Consequently, social capital alone was insufficient to compensate for broader structural vulnerabilities.

The findings therefore highlight an important distinction between bonding and bridging social capital. Bonding social capital refers to close relationships within families and communities, while bridging social capital involves broader connections across groups and institutions. In Soche, bonding social capital appeared relatively stronger than bridging social capital. Households relied heavily on relatives, neighbors, and faith-based networks, but broader institutional coordination and organized collective action remained limited.

The low participation in disaster-specific committees further indicates weak institutionalized preparedness structures at community level. This suggests that disaster governance mechanisms in Soche remain reactive and underdeveloped, limiting the community's ability to coordinate proactive risk reduction activities.

The findings are consistent with the Community-Based Disaster Risk Reduction (CBDRR) approach, which emphasizes the importance of community participation, local knowledge, and collective action in disaster preparedness and recovery. However, the results suggest that community-based structures in Soche are insufficiently institutionalized and poorly supported by formal governance systems.

Trust in institutions also emerged as a critical determinant of resilience. Respondents expressed mixed perceptions regarding institutional performance, with many criticizing delayed aid, uneven distribution of resources, and lack of transparency. Institutional trust demonstrated a positive relationship with resilience, indicating that households with greater confidence in institutions reported stronger recovery perceptions.

These findings are highly significant because they demonstrate the importance of linking social capital, which refers to relationships between communities and formal institutions.

Weak trust in government agencies and aid systems reduces confidence in recovery processes and limits the effectiveness of disaster interventions.

The findings align with political economy perspectives on disaster governance, which argue that resilience outcomes are influenced by power relations, governance systems, and patterns of resource distribution (Pelling, 2003). In Soche, perceptions of favoritism and unequal aid distribution undermined institutional legitimacy and weakened confidence in recovery systems.

At the same time, respondents expressed relatively stronger trust in local leaders compared to higher-level institutions. This suggests that local leadership structures continue to play an important coordinating role within the community. However, local leadership alone cannot compensate for broader institutional weaknesses or resource limitations.

The findings therefore reveal a major contradiction within post-disaster governance in Soche. While national and international policy frameworks emphasize inclusivity, participation, and long-term resilience, actual implementation at community level remains limited. This disconnect between policy intentions and lived realities reinforces vulnerability among already marginalized households.

The policy analysis conducted in Chapter 4 further supports this interpretation. Although frameworks such as the Malawi Disaster Risk Management Policy and the Sendai Framework promote resilience-oriented recovery, implementation gaps, limited decentralization, and weak urban focus reduce their effectiveness in informal settlements like Soche.

The findings therefore demonstrate that resilience cannot be strengthened through household coping mechanisms alone. Effective resilience building requires stronger institutional coordination, equitable resource distribution, community participation, and sustained investment in preparedness and livelihood recovery.

5.4 Integrating Quantitative and Qualitative Findings

An important strength of the study is the integration of quantitative and qualitative findings to provide a more comprehensive understanding of household resilience. While the quantitative findings identified significant relationships between socio-economic factors, social capital, and resilience, the qualitative responses provided deeper insight into how households experience vulnerability and recovery in everyday life.

The qualitative findings strongly reinforced the quantitative evidence of economic fragility. Respondents consistently emphasized income loss, unstable livelihoods, food insecurity, and inability to rebuild assets. These experiences align closely with the statistical findings showing strong relationships between income, employment, and resilience.

Similarly, qualitative evidence of institutional distrust supports the quantitative finding that trust in institutions was relatively weak. Complaints regarding politicized aid distribution, delayed support, and exclusion from assistance programs reveal how governance failures shape subjective recovery experiences.

The qualitative findings also deepen understanding of social capital dynamics within Soche. Although respondents acknowledged some degree of community solidarity, many emphasized that support systems were limited by widespread poverty and resource scarcity. This demonstrates that social capital may enhance resilience, but its effectiveness is constrained when entire communities experience simultaneous hardship.

Another important qualitative theme was psychological hopefulness. Despite severe challenges, many respondents expressed optimism and faith in eventual recovery. This helps explain why confidence in recovery scored relatively highly despite weak preparedness and economic insecurity. The findings therefore reveal that psychological resilience may persist even under conditions of structural vulnerability.

The integration of quantitative and qualitative findings strengthens the overall validity of the study by demonstrating convergence across multiple forms of evidence. Together, the

findings reveal that resilience in Soche is shaped by interconnected socio-economic, institutional, and psychosocial factors.

5.5 Theoretical Implications of the Findings

The findings contribute to broader theoretical debates on disaster resilience by demonstrating the importance of integrating subjective and objective dimensions of resilience analysis.

First, the findings support the Sustainable Livelihoods Framework by showing that resilience is strongly influenced by access to livelihood assets, particularly financial, human, and social capital. Households with stronger livelihood assets generally demonstrated greater recovery confidence and adaptive capacity.

Second, the findings reinforce social capital theory by demonstrating that community networks, group participation, and trust significantly influence recovery outcomes. However, the study also shows that social capital alone is insufficient where widespread poverty and institutional weaknesses persist.

Third, the findings support subjective resilience perspectives which argue that perceptions, confidence, and psychosocial factors are central components of resilience. The contrast between psychological confidence and weak preparedness demonstrates that resilience perceptions may not always align with objective recovery conditions.

Finally, the findings contribute to political economy perspectives on disaster governance by highlighting how institutional inequalities, implementation gaps, and uneven resource distribution shape recovery experiences in vulnerable urban communities.

5.6 Implications for Policy and Practice

The findings of the study have several important implications for disaster risk reduction policy and practice in Malawi, particularly within informal urban settlements.

First, the findings demonstrate the need for livelihood-centered recovery interventions. Since income emerged as the strongest predictor of resilience, disaster recovery programs

should prioritize livelihood restoration, income diversification, and economic empowerment rather than focusing solely on emergency relief.

Second, the low preparedness scores indicate the need for stronger investment in community-based preparedness systems. Local disaster committees, early warning systems, and disaster education initiatives should be strengthened to improve proactive risk management.

Third, the findings highlight the importance of strengthening institutional trust and accountability. Transparent aid distribution systems, inclusive community participation, and stronger local governance mechanisms are essential for improving confidence in disaster response systems.

Fourth, the study demonstrates the importance of strengthening social networks and community organizations. Savings groups, religious organizations, and local associations should be integrated into resilience-building strategies because they provide important support structures during crises.

Finally, the findings suggest that resilience policies must pay greater attention to informal urban settlements, which often remain under-prioritized despite facing high exposure to climate-related hazards.

CHAPTER 6

6. CONCLUSION

This study examined household resilience in Soche, Blantyre, following the impacts of Cyclone Freddy, with particular focus on socio-economic characteristics, subjective resilience perceptions, and the role of social capital and institutional factors in shaping recovery outcomes. The findings reveal that households in Soche demonstrate a moderate but fragile level of resilience, characterized by limited adaptive capacity, uneven recovery experiences, and continued exposure to socio-economic vulnerability.

The study established that socio-economic factors significantly influence household resilience. Income emerged as the strongest predictor of resilience, while education, household size, gender, and group membership also shaped recovery outcomes. Most households depended on unstable informal livelihoods and earned low incomes, limiting their ability to rebuild assets, diversify livelihoods, and prepare for future shocks. Female-headed households and larger households were particularly vulnerable due to limited access to economic resources and increased dependency burdens. These findings demonstrate that resilience in Soche is deeply influenced by structural inequalities and poverty.

The study further found that households possess moderate subjective resilience, reflected in psychological confidence, hopefulness, and coping ability. However, preparedness for

future disasters remained weak, indicating that resilience is largely reactive rather than proactive. While many respondents expressed optimism about recovery, this confidence was not matched by strong institutional support, livelihood security, or disaster preparedness systems. The findings therefore suggest that resilience in Soche remains partial, unstable, and constrained by broader socio-economic and governance challenges.

Social capital and institutional factors also played an important role in shaping resilience outcomes. Community networks, religious groups, savings groups, and informal support systems contributed positively to coping and recovery. Households with stronger social participation generally reported higher resilience levels. However, the study also revealed weak collective organization, limited participation in disaster-focused groups, and low trust in formal institutions due to perceptions of unequal aid distribution, delayed assistance, and poor coordination. This indicates that although social capital provides important support during crises, its effectiveness is limited where institutional systems remain weak and communities experience widespread poverty.

The study additionally identified a significant gap between disaster risk reduction policy intentions and realities at community level. Despite the existence of national and international frameworks promoting inclusive and resilience-oriented recovery, implementation challenges, weak decentralization, and inadequate focus on informal settlements reduced the effectiveness of resilience-building interventions in Soche.

Overall, the study concludes that resilience in Soche is multidimensional and shaped by the interaction of socio-economic conditions, institutional systems, social relationships, and subjective perceptions. Sustainable resilience therefore requires integrated approaches that move beyond short-term emergency response toward long-term livelihood strengthening, institutional accountability, community participation, and proactive disaster preparedness.

CHAPTER 7

7. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are proposed:

7.1 Government and Policy Recommendations

The Government of Malawi and local authorities should strengthen livelihood-centered recovery programs in disaster-prone informal settlements such as Soche. Recovery interventions should prioritize income restoration, vocational training, small business support, and access to financial assistance in order to reduce long-term economic vulnerability.

Government institutions should also strengthen community-based disaster risk reduction systems by establishing and supporting local disaster committees, improving early warning systems, and promoting continuous disaster preparedness education at community level. This would enhance proactive resilience rather than reactive coping.

In addition, disaster response and aid distribution systems should be made more transparent, inclusive, and accountable. Strengthening institutional trust is essential for improving community confidence in recovery processes and ensuring equitable access to support.

The Blantyre City Council and relevant stakeholders should further prioritize informal settlements within urban planning and climate adaptation policies. Investment in safer housing, drainage systems, sanitation infrastructure, and environmental management is necessary to reduce disaster exposure and vulnerability in densely populated urban communities.

7.2 Community-Level Recommendations

Community members should be encouraged to strengthen collective action and participation in organized community groups such as savings groups, disaster preparedness committees, and local development associations. Stronger social networks can improve information sharing, mutual support, and coordinated disaster response.

Faith-based organizations, local leaders, and community-based organizations should also play a more active role in promoting disaster awareness, preparedness training, and psychosocial support within vulnerable communities.

7.3 Recommendations for Humanitarian Organizations and NGOs

Humanitarian organizations and NGOs should shift from short-term relief approaches toward long-term resilience-building interventions. Recovery programs should integrate livelihood support, mental health support, community empowerment, and climate adaptation strategies.

NGOs should also work closely with local communities during planning and implementation processes to ensure that interventions are context-specific, inclusive, and responsive to local needs.

7.4 Recommendations for Future Research

Future studies should adopt larger and more representative sample sizes to improve generalizability of findings. Researchers should also incorporate qualitative methods such as Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs) to obtain deeper insight into community experiences, institutional dynamics, and coping strategies.

Further research should additionally examine long-term resilience trajectories in informal urban settlements and compare resilience outcomes across different disaster-prone communities in Malawi. Studies focusing on gendered dimensions of resilience, youth vulnerability, and climate adaptation in urban informal settlements would also contribute valuable knowledge to disaster risk reduction research.

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APPENDIX

QUESTIONNAIRE

ASSESSING SUBJECTIVE AND SOCIAL DIMENSIONS OF RESILIENCE FOLLOWING CYCLONE FREDDY IN SOCHE, BLANTYRE

INTRODUCTION

This study aims to understand how households in Soche have recovered from Cyclone Freddy. Your responses will help improve disaster recovery programs. Participation is voluntary, and your responses will be kept confidential.

SECTION A: DEMOGRAPHIC INFORMATION

(Tick or fill where appropriate)

Gender:

☐ Male ☐ Female ☐ Other

Age:

☐ 18–25 ☐ 26–35 ☐ 36–45 ☐ 46–60 ☐ 60+

Marital Status:

☐ Single ☐ Married ☐ Divorced ☐ Widowed

Household size: _____

Highest level of education:

☐ No formal education ☐ Primary ☐ Secondary ☐ Tertiary

Disability status:

☐ Yes ☐ No

If yes, specify: _____

SECTION B: LIVELIHOODS AND ECONOMIC STATUS

Main source of income:

☐ Formal employment ☐ Informal business ☐ Casual labour ☐ Farming ☐ Other: _____

Monthly household income (approx.):

☐ < MK50,000 ☐ MK50,000–100,000 ☐ MK100,000–200,000 ☐ > MK200,000

Did you lose your main source of income due to Cyclone Freddy?

☐ Yes ☐ No

Have you recovered your income source?

☐ Fully ☐ Partially ☐ Not at all

SECTION C: SOCIAL AND COMMUNITY FACTORS

Are you part of any community group?

☐ Yes ☐ No

If yes, which type?

☐ Savings group ☐ Religious group ☐ Disaster committee ☐ Other: ____

How often do you receive support from family/community?
☐ Never ☐ Rarely ☐ Sometimes ☐ Often ☐ Always

Do you feel your community works together during disasters?
☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree

Are women and vulnerable groups included in recovery programs?
☐ Yes ☐ No ☐ Not sure

SECTION D: SUBJECTIVE RESILIENCE INDEX (CORE SECTION)

Please indicate your level of agreement with the following statements.

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)
SR1: I feel confident that my household can recover from Cyclone Freddy	☐	☐	☐	☐	☐
SR2: I am able to cope with current challenges	☐	☐	☐	☐	☐
SR3: I can handle future disasters better	☐	☐	☐	☐	☐
SR4: I have support when I need help	☐	☐	☐	☐	☐
SR5: I feel hopeful about the future	☐	☐	☐	☐	☐
SR6: I can adapt my livelihood	☐	☐	☐	☐	☐
SR7: I feel in control of my recovery decisions	☐	☐	☐	☐	☐
SR8: I trust institutions support my recovery	☐	☐	☐	☐	☐
SR9: My household is better prepared for future shocks	☐	☐	☐	☐	☐

Statement	SD (1)	D (2)	N (3)	A (4)	SA (5)
SR10: I feel less vulnerable than before	☐	☐	☐	☐	☐

SECTION E: INSTITUTIONAL SUPPORT AND GOVERNANCE

Did you receive any assistance after Cyclone Freddy?

☐ Yes ☐ No, If yes, from whom?

☐ Government ☐ NGO ☐ Community ☐ Other: ____

How would you rate the fairness of aid distribution?

☐ Very unfair ☐ Unfair ☐ Neutral ☐ Fair ☐ Very fair

Do you trust local authorities in disaster response?

☐ Strongly disagree ☐ Disagree ☐ Neutral ☐ Agree ☐ Strongly agree

What challenges did you face during recovery?

What improvements would you suggest?