

**ASSESSING SUSTAINABLE LIVELIHOOD DIVERSIFICATION IN GODERICH,
FREETOWN, SIERRA LEONE**

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ABSTRACT

This thesis provides a thorough examination of the application of the Sustainable Livelihood Framework (SLF) in Goderich, Sierra Leone, highlighting its importance in addressing the livelihood challenges faced by peri-urban communities in the Global South. The study employed a mixed-methods approach, integrating both qualitative and quantitative data to explore the complexities of livelihood diversification and resilience within the framework of socio-economic and environmental constraints. This study enhances our understanding of how local populations manage risks, disturbances, and resource constraints to sustain their livelihoods. It incorporates livelihood solutions into the broad theoretical frameworks of urban political ecology, sustainable development, and rural-urban dynamics.

The results emphasise the potential of personalised interventions to enhance existing community programs, address urgent needs, and foster long-term sustainability. Significant findings reveal that strategies for diversifying livelihoods, informed by the Sustainable Livelihood Framework and diversification theory, effectively mitigate risks and enhance resilience, particularly in response to global challenges such as the COVID-19 pandemic. The study emphasises the significance of governance frameworks, social capital, and natural resources in influencing livelihood results, promoting policies that amalgamate local viewpoints with global sustainability initiatives.

This thesis contributes to the academic discourse by contextualising the SLF within the intricate interactions of environmental, economic, and social factors. It offers evidence-based recommendations for enhancing livelihood resilience and sustainability in marginalised situations, significantly contributing to academic knowledge and practical policies. The findings are intended to inform development policies that are designed to improve the socio-economic well-being of at-risk regions, including Goderich, by reducing vulnerability and promoting equity.

DEDICATION

This thesis is dedicated to the esteemed memory of my deceased parents, Mr. Elijah Patrick Onyeku Jackson and Mrs. Albertina Esewanu Jackson (née Noldred), and my children – Sona, Hannah, Onyeku (Jnr) and Emerson (Jnr).

APPRECIATION

"Gratitude is the fairest blossom that springs from the soul." - Henry Ward Beecher

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LIST OF GLOSSARY TERMS

APC	All People's Party
BSL	Bank of Sierra Leone
CBNRM	Community-Based Natural Resource Management
COVID-19	Corona Virus Disease – (in 2019)
CQ	Councillor
DFID	Department for International Development
FGD	Focus Group Discussion
FIS	Financial Inclusion Strategies
GDP	Gross Domestic Product
HQ	Headman
IDS	Institute for Development Studies
IISD	International Institute for Sustainable Development
IMF	International Monetary Fund
LDCs	Local Development Committees
LIA	Livelihood Impact Assessment
MLR	Multinomial Logistic Regression
MMCET	Milton Margai College of Education and Technology
MMTC	Milton Margai Teachers College
MMTU	Milton Margai Technical University
NGO	Non-Governmental Organisations
NTFP	Non-Timber Forest Product
NVIVO	A Computer Assisted Qualitative Data Analysis Software (CAQDAS)

PRA	Participatory Rural Appraisal
SAP	Structural Adjustment Programme
SLA	Sustainable Livelihood Approaches
SLF	Sustainable Livelihood Framework
SLPP	Sierra Leone People's Party
SPSS	Statistical Package for Social Sciences
STATA	Statistical Software for Data Science
TCF	Theoretical and Conceptual Frameworks
UK	United Kingdom
UNDP	United Nations Development Programme
UNICEF	United Nations International Children's Fund
USA	United States of America
WAPFoR	Western Area Peninsula Forest
WARDA	Western Area Rural District Administration

CHAPTER 1 – INTRODUCTION: THEORETICAL AND CONCEPTUAL DISCOURSES ON SUSTAINABLE LIVELIHOODS

1. Preamble – Motivation for the Study

Having lived in the UK since the mid-1990s, I have had the opportunity to frequently visit my hometown of Goderich in Sierra Leone. These visits have underscored the stark contrast between the livelihood challenges and dynamics faced by ordinary people in the UK and those in Sierra Leone. In particular, the reliance on natural resource-based livelihoods in Sierra Leone differs greatly from the UK's predominantly service-based economy.

During my first visit to Goderich in 2012 following a 12-year absence, I was struck by the significant changes in the community. For instance, inward migration caused by the civil war, which ended in 2000, had led to the depletion of forests and woodlands to accommodate expanded settlement needs and increased livelihood activities. Simultaneously, the construction of multi-purpose buildings (Figure 1) and the expansion of the local and regional road network (Figure 2) had enhanced access to both Freetown and rural communities along the Freetown Peninsula. These developments helped to drive a slow change towards a more service-based economy, progressively depending on rural-urban travel. Furthermore, the implementation of new fishing rules meant to address overfishing resulted in a drop in nearby fishing operations (Sei, 2011). Nevertheless, for many, fishing-related activities remain the main source of income.

Figure 1: Construction Work at Oba Funkia Bridge



Figure 2: Highway Development around MetChem



Source: Own Photo

Returning to the community sparked my curiosity about how residents earned their livelihoods. As a trained economist, I was particularly drawn to the socio-economic and political challenges of post-civil war Sierra Leone. My interest lay in understanding how factors such as geography, environment, politics, and social circumstances shaped the livelihood strategies people adopted to survive. This was especially relevant given the persistently difficult conditions that define the everyday lives of the majority of Sierra Leoneans.

I found it fascinating and beneficial to examine how people and households navigated financial constraints and adapted to evolving conditions. My aim was to enhance the comprehension of livelihoods in Goderich and to investigate how this understanding could facilitate the improvement and sustainability of local life, thereby benefiting the community's well-being. This drive has remained crucial to this study, which seeks to deliver a detailed assessment of livelihood diversity and diversification as enduring concerns for residents of Goderich.

This study analyses the changing patterns, structure, and dynamics of natural resource-based livelihoods in Goderich, focussing on their reactions to legislative and infrastructural

modifications, along with other interventions impacting the town and surrounding region. Special emphasis is placed on how individuals have reacted or adjusted to these changes and the variables affecting their responses. The study employs pertinent theoretical, conceptual, and applied frameworks to direct data collection, analysis, and interpretation to accomplish its objectives.

By exploring how and why Goderich residents navigate barriers to, and opportunities for, livelihood diversification and sustainability, the thesis is informed by the now well-recognised idea that livelihood interventions are most effective and welcomed when they address actual needs and build on proven or promising initiatives. I hope that the results will be of use to local authorities and development partners. Utilising this information, they may formulate and execute effective initiatives to improve livelihood diversification and sustainability. This will ultimately enhance the well-being of people and groups within the community, particularly the impoverished and marginalised populations.

1.1. Livelihoods as Organising Concept

Human beings engage in daily activities to secure their survival, whether for individual or collective needs. The concept of livelihoods has evolved to explore these efforts across various academic, applied, and policy-oriented disciplines, including development studies, household economics, developmental sociology, human geography, political economy, and anthropology (Scoones, 2015; Owusu, 2009; Ellis & Freeman, 2004; Francis, 2000). Bebbington (1999) elucidates that livelihood thinking entails analysing how individuals sustain themselves through using resources like land, capital, and social networks, while also reflecting on the broader implications and relevance of these activities in their lives. This approach includes both individual and communal aspects, acknowledging the environmental and social impacts of livelihood options.

Sustainable livelihood thinking underscores the preservation of these lifestyles over the long term, ensuring that resources are not depleted, and the environment remains unharmed (Chambers & Scoones, 1998; Conway, 1992). It utilises a particular framework to evaluate livelihood systems, considering the distinct requirements of each socio-ecological environment. The goal is to enable people to sustain their livelihoods in ways that are both environmentally and socially responsible, a theme that will be further illustrated in the empirical chapters of this thesis.

1.2. Research Focus and Aim/Objectives

This research seeks to assess livelihoods in Goderich, encompassing both urban and rural areas, classified by their location and whether they are Natural Resource (NR) based or non-NR based. The livelihood techniques utilised by the inhabitants of peri-urban Goderich are diverse and dynamic, encompassing a complex amalgamation of strategies. Consequently, a diverse array of livelihood activities is present throughout the town and its adjacent villages, varying among households, neighbourhoods, populations, and communities.

Traditionally, activities such as fishing (historically centred at Gondo Water and Shallow Water beaches along the waterfront) and forest-based practices, including firewood collection, charcoal extraction, biodiversity hunting/collection, and farming on the eastern hillslopes, have been significant and widespread. Over time, however, there have been shifts in the prevalence and importance of these activities. Moreover, employment opportunities have arisen in the growing house building sector and in services such as healthcare and education (UNESCO, 2020). In addition to these developments, sand mining and stone quarrying—like forest-based industries—

continue to be substantial yet contentious due to their considerable environmental repercussions and their capacity to jeopardise social sustainability within the community.

This study attempts to identify and examine the many forms of livelihoods in Goderich, focussing on their geographic distribution, reliance on natural resources, and the diverse tactics utilised by practitioners. The results will elucidate the progression of livelihood activities in the region and their allocation among various sectors, neighbourhoods, demographics, and communities.

Both academic and practical approaches to livelihoods aim to promote development interventions that combine economic growth with poverty alleviation, grounded in a thorough understanding of the ways individuals employ livelihoods for self-sustenance. To do this, established surveys and interactive procedures have been devised to analyse these initiatives and their foundational rationale. These approaches are consistently evaluated and improved to augment their applicability, especially for policy-making objectives. This thesis utilises triangulation and mixed-method approaches, as outlined in Appendix 1, to produce policy-relevant findings and highlight the academic significance of the research.

In this context, the main aim of this research is threefold:

- Drawing on Uprety (2004) and others, to establish, for the first time, a comprehensive baseline dataset detailing livelihood systems, practices, and dynamics in and around Goderich.
- Following de Haan & Zoomers (2005) and Sanderson & Westley (2000), to describe, analyse, and explain the extent of contextualisation (the primary issues affecting local individuals and households in their pursuit of livelihoods), differentiation (the socio-economic distinctions

between households), and disaggregation (intra-household diversity in roles, status, etc.) that characterise livelihoods in Goderich.

- To highlight the significance of various livelihood strategies for individuals and groups while demonstrating their implications for policy.

1.3. Theoretical and Conceptual Frameworks on Sustainable Livelihood Thinking

Understanding and improving sustainable livelihoods in Goderich requires a thorough engagement with various theoretical and conceptual frameworks. These frameworks, derived from disciplines such as economics, sociology, ecology, anthropology, and development studies, provide valuable insights into the factors shaping sustainable livelihoods (Carney, 1998; Scoones, 1998).

The Sustainable Livelihoods Framework (SLF) is a fundamental model that characterises sustainable livelihoods as the capacities, assets (which include both material and social resources), and activities necessary for a means of living (Scoones, 1998). It delineates five principal categories of capital assets: natural, physical, financial, human, and social. By recognising the interconnections among these assets, the SLF provides a thorough comprehension of how livelihoods can be maintained and improved.

Nevertheless, comprehending these assets in isolation is inadequate. The Vulnerability Framework introduces a crucial aspect by analysing elements that render individuals and communities vulnerable to shocks and pressures, including economic crises, social instability, and environmental changes (de Haan, 1999). This paradigm is essential for identifying and treating the fundamental causes of vulnerability, which is crucial for promoting resilient livelihoods in Goderich.

The Capability Approach, established by Amartya Sen, enhances this comprehension by emphasising individual agency—the capacity of individuals to make choices and pursue objectives beyond mere money or wealth (Sen, 1999). This methodology prioritises human autonomy and potential, highlighting the significance of enabling persons to enhance their own well-being.

In the context of Goderich, the notion of diversification is very pertinent. Diversification theory emphasises the necessity for flexibility and adaptability in response to changing environmental, economic, and social situations. It also acknowledges that such adaptation may be constrained by limited access to resources or market possibilities. Consequently, any policies or interventions designed to promote diversification must consider these restrictions to achieve success (Ellis, 2000).

Integrating these frameworks is vital for formulating successful policies and actions for sustainable livelihoods in Goderich. Through critical engagement with these notions, we can attain a nuanced comprehension of the complexity associated with livelihood sustainability. This study seeks to contribute to ongoing discussions on sustainable development by examining these frameworks in the context of Goderich's unique circumstances.

The subsequent sections of this chapter will further explore these frameworks, illustrating their interconnectedness and how they collectively enhance our understanding of sustainable livelihoods. This study seeks to deliver a thorough critique by integrating these views, making it accessible to both technical professionals and general audiences. This strategy will aid in shaping policies and interventions that bolster the livelihoods of individuals and communities in Goderich, especially considering the region's constrained asset capacities and environmental issues, including sand mining and stone quarrying.

By tackling these difficulties through a sophisticated application of theoretical and conceptual frameworks, we may formulate more effective solutions to enhance livelihood sustainability for the citizens of Goderich. This should ensure that the study presents facts while also offering a comprehensive analysis to bolster sustainable development initiatives.

1.3.1. Overview of Sustainable Livelihood (SL) Concept

The concept of Sustainable Livelihoods has gained significant traction in the Global South, particularly in low-income and middle-income countries. Nunan, Barnes, & Krishnamurthy (2023) provide a comprehensive analysis of livelihood activities in these regions, emphasising the importance of theoretical concepts such as vulnerability and the need to reform structures and processes to better support livelihoods.

This chapter offers a clear and systematic explanation of the key elements of livelihood thinking and the Sustainable Livelihood Framework (SLF), highlighting their relevance in the context of the study location. In Goderich, environmental concerns are particularly pressing due to the hazardous nature of livelihood activities like sand mining. Recognising the importance of vulnerability in this context is essential, as it underscores the need for sustainable practices and policies that reduce environmental risks and foster long-term resilience within the community.

1.3.2. Livelihood Definition

The term livelihood refers to a means to live, intimately linked to individual or household income and consumption patterns (Ellis, 2000: 7). Chambers & Conway (1991) broaden this concept to encompass capabilities and assets, which consist of stores, resources, claims, access, and activities essential for providing a livelihood. This interpretation has been expanded upon by scholars

including Carswell (1997), Scoones (1998), and Brock & Coulibaly (1999). It will be employed in this review to analyse how residents of Goderich access and utilise livelihood assets to mitigate or avert ill-being, promote well-being, and examine the environmental and human consequences of their endeavours.

Messer & Townsley (2003) describe a livelihood as the strategies employed by a household to attain sustainable well-being. In Goderich, these strategies include a variety of activities, such as fishing, charcoal production, stone quarrying, firewood collection, backyard farming, transportation using motorbikes (Okadas) and three-wheeled vehicles (Kekes), running mini-supermarkets, and street trading, all of which contribute to meeting daily household needs (Jackson, 2015b; Jalloh, Jalloh & Cole, 2021; Munro, 2009; The Commonwealth, 2020). However, excessive resource exploitation has resulted in environmental degradation, including deforestation and sand mining, which are common practices among some residents of Goderich (Cline-Cole, 1993; Munro, 2009; Jackson, 2015b).

1.3.3. Livelihood and Poverty

In much of the Global South, the livelihoods of the rural poor often revolve around traditional activities such as the exploitation and management of natural resources (Msangi, 2008). The people of the Western Area Peninsula Forest (WAPFoR) demonstrate that restricted access to a wider array of resources and opportunities hinders their capacity to diversify revenue sources and improve their life conditions (Jackson, 2018). Likewise, in Goderich, inhabitants encounter similar challenges, including the inadequate access to essential infrastructure, education, and healthcare. These constraints substantially impede their ability to participate fully in economic activities that could enhance their livelihoods (Jalloh et al., 2021; The Commonwealth, 2020).

1.3.4. Brief History of Sustainable Livelihood Thinking

The notion of livelihoods has been prevalent for several decades, exerting considerable interdisciplinary impact on rural development ideas and practices. Fardon (1990: 50) identifies the Rhodes-Livingstone Institute in Zambia as a forerunner in research initiatives that advanced the concept of livelihood thinking. This methodology entailed cooperation among ecologists, anthropologists, agriculturists, and economists, collectively striving to reform rural systems and tackle developmental issues.

Livelihoods analysis stands apart from other forms of household studies by focusing on how individuals seek to improve their societal status. The rise of livelihood approaches emerged in response to the shortcomings of earlier strategies used to formulate policies aimed at alleviating poverty in deprived regions of Africa, parts of Southeast Asia, and Latin America (de Haan & Zoomers, 2005). Long (2004) defines livelihood as the persistent endeavour of individuals to sustain an adequate standard of survival, encompassing a series of intricate decisions and actions.

The sustainable livelihood approach highlights the procurement, management, and utilisation of assets or resources, including both tangible goods and social ties. It also involves maintaining interactions with institutions such as NGOs and financial organisations, while proactively combining these activities under conditions of uncertainty (vulnerability) to achieve desired outcomes (Geiser et al, 2011).

Table 1 situates historical events and publications within the context of their contributions to Sustainable Livelihood (SL) thinking. The table illustrates progress with and practical application of sustainable livelihood concepts by connecting each milestone to the foundational principles and

elements of the SL framework; it also clarifies the complex, cohesive, cooperative, sustainable, and dynamic attributes of the SL thinking, providing a good summary of its development and execution.

Table 1: Historical Evolution of Sustainable Livelihood Thinking		
Year	Event/Publication	Sustainable Livelihood Context
1987	The World Commission on Environment and Development published its report. This is titled “Our Common Future” featured in the ‘Brundtland Commission report’	Introduced the concept of sustainable development, emphasising the need for environmental, economic, and social sustainability—foundational for SL thinking.
1988	The IIED published papers from its 1987 conference, which is “The Greening of Aid: Sustainable Livelihoods in Practice” (See Conroy & Litvinoff eds. 1988)	Highlighted the practical application of sustainable livelihoods, bridging theory and practice.
1990	UNDP publishes the first Human Development Report	Emphasised human development indicators, aligning with the SL focus on enhancing human capital.
1991	United Nations Conference on Environment and Development IDS released 'Sustainable Rural Livelihoods: Practical Concepts for the 21st Century' authored by Chambers and Conway in 1991.	Chamber and Conway established the foundation for the SL technique by highlighting the fundamental concepts and ideologies.
1993	Oxfam started the use of the SL approach to define overall goals, improve project planning, and support staff training.	Oxfam started using the SL technique to define overarching objectives, enhance project planning, and facilitate staff training.
1994	CARE adopted household livelihoods security; a programming framework for enhancing developmental works.	Reinforced the SL principle of multidimensionality by integrating various aspects of livelihoods.
1995	This is the UN World Summit for Social Development. This embraces UNDP Employment and Sustainability. IISD also publishes Adaptive Strategies and Sustainable Livelihoods (See Singh & Kalala 1995). SID launched its project on Sustainable Livelihoods and the People’s Everyday Economics	Highlighted the importance of integrating economic sustainability and adaptive strategies in livelihood planning.
1996	This is the Adaptable Livelihoods, which involve coping with food insecurity in the Malian Sahel area (Produced by Davies 1996 – a Macmillan series. The DFID also invites proposals for a major ESCOR	Focused on participatory research and adaptability, key elements of the SL approach.

Table 1: Historical Evolution of Sustainable Livelihood Thinking		
Year	Event/Publication	Sustainable Livelihood Context
	research programme on Sustainable Livelihoods. The IDS-led consortium wins the main award, with another award to ODG, and IISD publishes Participatory Research for Sustainable Livelihoods: A Guidebook for Field Projects (by Rennie and Singh, 1996).	
1997	The New Labour administration issues its first White Paper on foreign development: Eliminating Global Poverty: A Challenge for the 21st Century	Integrated SL thinking into national development policies, emphasizing poverty elimination.
1998	The Natural Resources Department of DFID has initiated a consultation focused on sustainable livelihoods and has formed the Rural Livelihoods Advisory Group. The annual conference of the Natural Resources Advisers centres on Sustainable Livelihoods, featuring a collection of contributory papers, reports, and publications. UNDP, SID, IDS, and FAO/UNDP work together to promote sustainable livelihoods and food security, with the FAO/UNDP Informal Working Group meeting for the first time.	These activities solidified SL as a comprehensive framework, highlighting the importance of natural resource management, participatory methods, and policy integration.
1999	DFID establishes the Sustainable Livelihoods Support Office, appointed Jane Clark as Head. It publishes first Sustainable Livelihoods Guidance Sheets and publishes Livelihoods Approaches Compared. Progress in implementing SL approaches is reported at conferences, and a Sustainable Livelihoods Resource Group is established.	Institutionalisation of SL thinking within DFID, providing practical guidance and comparative analysis of different livelihood approaches.
2000	DFID funds Livelihoods Connect, a learning platform for SLA, and organises an Inter-Agency Forum on Operationalising Sustainable Livelihoods Approaches. DFID publishes Sustainable Livelihoods – Current thinking and practice, Achieving Sustainability: Poverty Elimination and the Environment, and other SL Guidance Sheets.	Expanded SL knowledge sharing and capacity building through Livelihoods Connect, reinforcing SL principles in policy and practice.
2001	DFID commissions research on SLA framework development and policy options for sustainable livelihoods, publishes Sustainable Livelihoods: Building on the Wealth of the Poor, and organizes SLA review meetings.	Ongoing enhancement of the SL framework and the formulation of pragmatic policies to improve livelihood outcomes.
2002	The World Summit on Sustainable Development (WSSD) emphasized the significance of sustainable development and urged the integration of economic,	Reinforced the SL approach by integrating economic, social, and

Table 1: Historical Evolution of Sustainable Livelihood Thinking		
Year	Event/Publication	Sustainable Livelihood Context
	social, and environmental goals into policies and practices.	environmental dimensions in sustainable development policies.
2005	The Millennium Ecosystem Assessment (MEA) conducted in 2005 offered an extensive analysis of the worldwide condition of ecosystems and their services, highlighting the intricate relationship between the vitality of ecosystems and the well-being of humanity.	Highlighted the significance of ecosystem services in supporting livelihoods, in accordance with sustainable living principles.
2012	The Rio+20 Conference sought to revitalise political dedication to sustainable development, highlighting the imperative of a green economy and the establishment of sustainable development goals (United Nations, 2012).	A renewed emphasis on sustainable development goals is critical for long-term livelihood sustainability.
2015	Adoption of the Sustainable Development Goals (SDGs) in 2015 by the UN to end poverty, while at the same time safeguarding the planet, and ensuring peace and prosperity for all.	Aligned with SL objectives by targeting poverty eradication and sustainable development through comprehensive global goals.
2020	The United Nations 2020 underscored the importance of fostering resilient and sustainable societies due to the interconnectedness of human and natural systems.	Demonstrated the importance of resilience and adaptability in livelihoods, core principles of the SL approach.
2022	At the COP26 climate summit, there was an emphasis for global cooperation and partnerships to speed up action on climate change, inclusive of mitigation and adaptation measures.	An emphasis on global cooperation and an integrated approach to climate resilience, which is vital for sustainable livelihoods.
Source: Adapted from Solesbury (2003: 3-4)		

1.3.5. Sustainable Livelihood Approach (SLA)

Discussions on sustainability have addressed the use of environmental resources and its effects on human livelihoods, particularly the necessity of alleviating poverty. Ellis (2000) voiced concerns about the ongoing discussions around the Sustainable Livelihood Approach (SLA). Table 1 shows how the SLA evolved from the concept of sustainability. It provides a comprehensive framework for understanding the intricate linkages between environmental, economic, social, and political

factors that impact individual and community lifestyles. The SLA aims to improve access to livelihood resources, empower individuals and communities, and promote sustainable development in rural and urban settings.

The Sustainable Livelihood Framework (SLF) and the Sustainable Livelihood Approach (SLA) both offer comprehensive perspectives on livelihoods, with an emphasis on sustainability. While the SLF serves as a conceptual framework, the SLA is an operational framework that builds upon the SLF as its theoretical foundation (Carney, 1998). As Table 1 shows, the SLF was created by the UK Department for International Development (DFID) to offer a systematic framework for tackling poverty and promoting sustainable development. The SLF articulates livelihoods as complex systems that encompass a multitude of Assets—encompassing natural, physical, financial, human, and social capital—coupled with the activities and competencies that empower individuals to secure their livelihoods (DFID, 1999a). This underscores the essential function of institutions, policies, and processes in determining access to resources and opportunities, along with the intricate interactions between these assets and activities that affect livelihood outcomes (DFID, 1999b).

The SLA aims to alleviate poverty and promote sustainable development by improving people's livelihoods, strengthening assets, and minimising vulnerability to external shocks (Carney, 1998). This technique is inclusive and adaptable, encouraging joint endeavours. Engaging with communities to understand their livelihood objectives, assets, and difficulties, and developing interventions that capitalise on their strengths while addressing the constraints they face (DFID, 1999b). The SLF offers a comprehensive view on livelihoods, whereas the Sustainable Livelihood Approach (SLA) utilises practical methods such as Participatory Rural Appraisal (PRA),

Community-Based Natural Resource Management (CBNRM), and Livelihoods Impact Assessment (LIA) (DFID, 1999b).

Allison and Horemans (2006) identify five essential principles that form the foundation of SLA:

- **Participatory:** Engaging local communities in the design, execution, and assessment of interventions.
- **Multidimensional:** This takes cognisance of the complexity and vitality of livelihoods, and as well as addressing multiple sides of poverty and vulnerability.
- **Integrated:** Adopting an all-rounded approach that takes cognisance of the interconnections between different livelihood aspects and their broader context.
- **Sustainable:** Promote enduring, equitable, and economically feasible livelihoods.
- **Dynamic:** Emphasising adaptability and resilience to external shocks.

The Sustainable Livelihood Framework (SLF) offers an extensive perspective on livelihoods, whilst the Sustainable Livelihood Approach (SLA) uses participatory and flexible approaches (see Appendix 1). The two frameworks work in synergy, combining theoretical insights with practical applications to address poverty and advance sustainable development. Allison & Horman (2006) express the guiding concepts of engagement, multidimensionality, integration, sustainability, and dynamism that influence the development and execution of interventions for sustainable livelihoods.

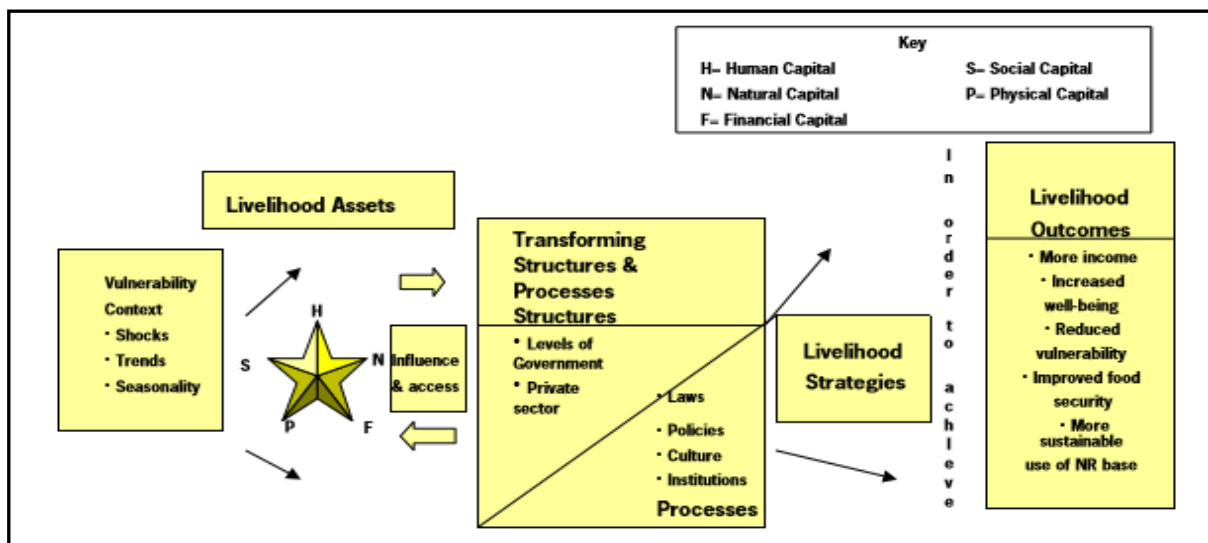
1.4. The Sustainable Livelihood Framework (SLF)

The Sustainable Livelihood Framework seeks to enhance comprehension of livelihood dynamics, especially within marginalised populations (DFID, 1999). The fundamental objective is to alleviate

poverty by empowering the impoverished to utilise their existing resources sustainably and effectively. The framework aims to delineate the principal elements affecting individuals' lives and the interconnections among these factors (Figure 2). The framework was developed with contributions from the DFID Sustainable Rural Livelihoods Advisory Committee, the Institute of Development Studies (IDS), and additional stakeholders:

- Offers an exhaustive inventory of essential concerns and demonstrates their interconnections
- Focuses on core influences and processes impacting livelihoods.
- Highlights the complex relationships between numerous variables that influence livelihoods (Ibid).

Figure 3: The Sustainable Livelihood Framework (SLF)



Source: Krantz, 2001: 19

The Sustainable Livelihood Framework has four interrelated components: assets, structures, processes, and strategies (Department for International Development, 1999).

Assets or capital refer to the resources people possess to sustain their lives. Human capital refers to the skills, knowledge, and competencies of individuals; social capital encompasses the networks, relationships, and institutions that enable social interaction; and natural capital represents the essential ecosystemic resources of land, water, and forests necessary for sustainable development. Physical capital denotes the inventory of equipment and structures utilised in production, whereas financial capital signifies monetary resources including cash, savings, and credit (Department of International Development, 1999).

Transforming Structures refer to the institutions that affect livelihoods, both governmental and commercial sector organisations. They create the policies, rules and regulations that govern the utilisation of resources and shape the economic, social and political context in which livelihoods function. Government policies on taxation, trade and investment have the potential to increase or reduce livelihood opportunities, while the private sector is key to securing employment and access to markets (Department for International Development, 1999).

Processes: this includes policies that promote the sustainable use of resources for improved quality of life but cultural practices that entrench gender inequality may hinder women's economic paths (Department of International Development, 1999).

Strategies: These strategies are among the tools used to generate sustainable outcomes that fulfil the social security needs of individuals or households. Coping strategies are short-term responses to shocks or stresses while adaptive strategies broadly include changing livelihood activities to suit changing realities. Transformative methods may include exploring new avenues for influencing the structures and processes that shape livelihoods, while defensive tactics are used to protect existing livelihoods against external threats (Department for International Development, 1999).

Utilising the SLF enables the formulation of customised solutions to tackle the distinct requirements and challenges encountered by the Goderich community in Sierra Leone (Department for International Development, 1999). As initially published by Farrington et al. (1999: 1), De Haan & Zoomers (2005: 31) highlight that the SLF must be used intelligently to preserve its relevance and efficacy in a variety of settings, as quoted below:

“not intended to depict reality in any specific setting [but] rather [used] as an analytical structure for coming to grips with the complexity of livelihoods, understanding influences on poverty and identifying where interventions can best be made. The assumption is that people pursue a range of livelihood outcomes (health, income, reduced vulnerability, etc.) by drawing on a range of assets to pursue a variety of activities. The activities they adopt and the way they reinvest in asset-building are driven in part by their own preferences and priorities. However, they are also influenced by the types of vulnerability, including shocks (such as drought), overall trends (in, for instance, resource stocks) and seasonal variations. Options are also determined by the structures (such as the roles of government or of the private sector) and processes (such as institutional, policy and cultural factors), which people face. In aggregate, their conditions determine their access to assets and livelihood opportunities and the way in which these can be converted into outcomes. In this way, poverty, and the opportunities to escape from it, depends on all of the above (Farrington et al., 1999: 1)”.

The framework for studying livelihoods and poverty suggests that individuals aim to achieve multiple outcomes, such as improved health, increased income, and reduced vulnerability, through various assets and activities. Individuals' preferences and priorities affect their decisions, but these

choices are also influenced by factors such as exposure to shocks like Ebola and COVID-19, variations in resource availability, seasonal changes, and societal structures and processes. These factors affect individuals' access to resources and employment prospects, as well as their ability to convert these chances into favourable results.

The Sustainable Livelihood Framework (SLF) serves as a valuable tool for examining the complexity of livelihoods and identifying optimal points for interventions to support sustainable livelihoods and mitigate vulnerability to shocks (de Haan & Zoomers, 2005). The SLF's key strengths lie in its holistic and participatory approach, acknowledging the multidimensional aspects of livelihoods and the significance of understanding local contexts and perspectives (Chambers & Conway, 1992). Furthermore, its focus on livelihood assets—natural, physical, human, financial, and social—and their interrelations offer a framework to evaluate the strengths and weaknesses of various livelihood strategies (Ellis, 2000).

As a result, other scholars have employed the paradigm to examine livelihoods in diverse contexts, illustrating its practical relevance (Ellis & Bahiigwa, 2003; Ruddle & Hickey, 2008). In rural Ethiopia, Ellis and Bahiigwa (2003) utilised the SLF to examine the effects of diverse assets and activities on household livelihoods, alongside the impact of elements such as rainfall variability and market fluctuations. In Indonesia, Ruddle and Hickey (2008) utilised the framework to examine the influence of fishing gear and social networks on the livelihood outcomes of fishers, alongside the repercussions of changes in fisheries regulations and market dynamics. However, the SLF indeed has specific limitations that require recognition. One major critique of the framework is that its abstraction can hinder guidance for prioritising interventions or measuring their success (Krätli & Hülsebusch, 2013). In addition, the individual and household-level focus

may leave larger structural factors such as economic and political systems unaddressed that have a huge impact on livelihoods (Scoones, 1998). The limitations are discussed in Section 1.4.2 together with the consequences for theoreticians and practitioners.

The SLF serves as a robust framework for evaluating livelihoods and facilitating sustainable endeavours. The strengths are deeply embedded in a thorough, inclusive methodology and a concentrated emphasis on livelihood resources. Nonetheless, its abstraction and inadequate consideration of structural variables persist as shortcomings. The operational SLF presents a certain way to address the vulnerabilities met around the world (even in Goderich) and become resilient to future challenges (Liebling et al., 2014).

1.4.1. Sustainable Livelihood Assets / Capitals

The livelihoods framework defines the various assets that individuals or groups use to develop and sustain their livelihoods:

H - Human Capital: This signifies the calibre and volume of labour available within a household. According to Carney (1998), investing in education and diversifying skills can improve human capital, thereby increasing the ability to undertake various activities. As Ellis (2000) points out, labour as an asset works when it is healthy and well. Household human capital composition is dynamic, shaped by processes including births, deaths, marriage, migration, and family size, as well as by external shocks, such as economic restructuring or divorce (Moser, 1998). Policies concerning health and education, which make up the bedrock of human capital, are generally encompassed within the realm of "macro policy". In developing nations, budget reductions from structural adjustment programs in the 1980s impeded access to vital services such as housing and healthcare for impoverished rural households (Cornia, Jolly & Steward, 1987).

F - Financial Capital: Assets that can easily be liquidated into cash, such as stocks, savings, credits, remittances, grants, pensions, and loans. In many underdeveloped regions in rural Africa, Southeast Asia, and Latin America, the conditions of living are precarious; thus, liquid financial resources are hard to access. Consequently, people often use barter systems, such as cattle exchange, to address immediate needs such as schooling fees or household expenses (Afodu et al, 2019; DFID, 1999a). Access to Financial Resources The presence and ease of access to financial resources significantly influence the livelihood strategies adopted by such communities.

S - Social Capital: This refers to the network of social connections inside a society that enriches life, provides economic prospects, and fosters resilience in times of crisis. Social capital is founded on trust and reciprocity, shown via cooperation and networks. Investing time and money to improve social capital may greatly strengthen future livelihood security, especially in rural areas. Social capital may manifest in vertical or horizontal dimensions, with horizontal linkages, such as credit unions or farmers' groups, being particularly beneficial for achieving common goals. In varied societies, social capital may encounter obstacles arising from conflicts about race, age, or religion, therefore undermining its function as a vital resource for sustenance (DFID, 1999a; DFID, 1999b).

P - Physical Capital: This denotes the physical assets used in the economic production process, including buildings, irrigation and transportation infrastructure, equipment, and machinery. These productive assets are classified as producer goods, resulting in a sustained production that supports livelihoods (Ellis, 2000). They provide basic income resources in difficult periods (Maxwell & Smith, 1992) and represent one of the main forms of physical capital, namely, residence buildings.

Infrastructure, encompassing roads, electrical networks, and water systems, is crucial for improving livelihood diversification and promoting community resilience.

N - Natural Capital: This includes essential natural resources required for households, such as land, water, forests, and fisheries. They are crucial for agricultural practices, livestock management, and various subsistence activities. While this principle allows for the conservation and sustainable use of natural resources, it also provides a case for bringing resource use under more scrutiny for human goods and services, jobs, and income, to avoid unsettling the broad consensus of support for sustainable resource use. The livelihood framework highlights how these diverse kinds of assets contribute to improving economic production, sustaining livelihoods and reinforcing community resilience. Recognising and effectively utilising these assets can boost people and households' livelihood stability and promote more resilient communities.

1.4.2. Critiques of Sustainable Livelihood Framework

The Sustainable Livelihood Framework (SLF) is a significant instrument for analysing livelihoods; nonetheless, it has encountered considerable criticism, especially over its approach to power, politics, and gender dynamics (Jackson, 2021). Scoones (2009) notes a significant gap in the SLF, citing its failure to effectively address the complex power relations and political structures important to sustainable development. This observation corresponds with the assertions of Ellis (2000) and Bryant & Bailey (1997), who contend that the framework reduces power imbalances and socio-cultural factors to simplistic terms, hence constraining its capacity to comprehensively represent livelihood choices. Conceptually, Scoones (1998) critiques the SLF for its static treatment of assets, failing to account for the dynamic nature of livelihood strategies, while Harriss (1997) critiques the oversimplification of social capital. Empirically, Scoones (2009) and Bryant

& Bailey (1997) highlight the framework's misapplications and lack of contextual sensitivity, underscoring the need for a more adaptable and context-specific approach. Further critiques point to the framework's gender-blind stance (Razavi & Miller, 1995) and its neglect of structural inequalities (Sen, 1999), which are crucial for understanding and addressing disparities in livelihood outcomes.

These critiques are especially pertinent to the context of livelihood diversification in Goderich. They emphasise the importance of a context-specific and politically informed approach to effectively comprehend the community's needs and to devise sustainable responses. Razavi & Miller (1995) contend that the SLF's inability to incorporate gender views constrains its effectiveness in addressing the interplay between gender dynamics and livelihood choices. The paradigm lacks comprehensiveness by excluding the distinct impacts of livelihood strategies on men and women. Sen (1999) offers a critique of the SLF's capacity to address the ramifications of structural disparities in livelihood outcomes. These critiques need the revision of the SLF to incorporate gender sensitivity and structural disparities, hence providing the most thorough framework for analysing livelihoods.

Bebbington (1999) presents a crucial dimension to these discussions by suggesting that "access" should be recognised as an independent asset, rather than merely serving as a facilitator for other forms of capital. Grounded in an empirical critique of the Sustainable Livelihood Framework (SLF) concerning rural lifestyles in impoverished settings like the high Andes, this perspective can contest the frequently pro-GNR food systems initiatives that Swindale (2023) contends are inherently orientated towards agricultural land use, potentially resulting in areas of specialisation exemplified by the Deutsche Gesellschaft für Internationale Zusammenarbeit (2010) initiated

approach, which parallels studies of more capital-intensive agricultural production and business. He provides a holistic strategy that encompasses access to produced, human, natural, social, and cultural capital. This insight provides a platform for comprehending livelihood solutions that amalgamate materialist and interpretative frameworks for analysing poverty and livelihoods.

De Haan (2005) further examines access-related concerns and the relationship between livelihood opportunities and decision-making. His critique highlights the important roles of social relations, institutions, and organisations which are often neglected as an important factor driving access. De Haan presents concepts such as styles, paths, and livelihood trajectories, fostering a nuanced understanding of livelihood strategies. His work underscores the need to analyse power dynamics and proposes a comprehensive research plan to further the area of livelihood studies.

Empirical investigations conducted by Scoones (2009) and Bryant & Bailey (1997) demonstrate the limits of the SLF in adjusting to various circumstances. Misapplications and the lack of contextual sensitivity demonstrate the need for a more adaptable framework that accounts for socio-cultural and political processes shaping livelihood outcomes. Likewise, Mensah (2011) faults the SLF for its excessive emphasis on micro-level household analysis. He advocates for the redefinition of assets according to user rights and underscores the cumulative impact of household interactions with institutions. This theoretical reconstruction provides a more dynamic framework for comprehending livelihoods, while it requires empirical validation.

De Haan's (2012) later work critiques the SLF's neglect of power relations and calls for a shift from localised studies to meta-analyses for broader generalisations. This strategy, although advantageous, must balance the need for generality with the potential for oversimplification. Natarajan et al (2022) augment the critique by analysing the shortcomings of the SLF in addressing

pressing global challenges, including climate change and globalisation. They promote a technique that is structural, spatially disaggregated, and dynamic, by modern developmental difficulties.

Within the context of Goderich, these critiques underscore the deficiencies of the SLF in effectively addressing generational and gender dynamics, power structures, and socio-political pressures. Overlooking these facets jeopardises a thorough evaluation of livelihood alternatives and may lead to the formulation of inadequate interventions. Given the crucial significance of young individuals in the political economy of Sierra Leone, it is essential to incorporate diverse generational perspectives to fully understand community requirements and foster sustainable development.

By addressing these issues, the evaluation of livelihoods in Goderich can embrace a more sophisticated and inclusive methodology. Incorporating local viewpoints and acknowledging socio-political factors facilitates the identification of issues and possibilities specific to the community. Integrating these insights into the SLF guarantees that interventions are customised to the distinct requirements of Goderich, fostering sustainable livelihoods and favourable socio-economic results.

1.4.3. Vulnerability Framework, Resilience and Adaptation in Livelihood Thinking

The Vulnerability Framework hypothesis delineates vulnerability as external conditions that lie beyond the control of individuals, significantly influencing their existence. These elements may include natural calamities, international market fluctuations, seasonal variations, and other external influences (DFID, 1999a). Vulnerability can result in various adverse outcomes, such as poverty, hunger, and social instability (Jones, 2013). Vulnerability, resilience, and adaptation are essential

concepts inherently connected to the sustainable livelihood framework. Resilience denotes the ability of individuals or communities to withstand, recover from, and adapt to external shocks or disruptions, including natural disasters, economic crises, or political changes (Pendall, Foster & Cowell, 2010). Whereas adaptation refers to the strategies that individuals or communities are employing to cope with external shocks and maintain or even improve their livelihoods (DFID, 1999a).

DFID's (1999a) classification of vulnerability variables (Table 2) delineates five principal categories affecting individual and household livelihoods: socio-economic, physical, institutional, attitudinal, and natural. Socio-economic factors include poverty, low education, and restricted access to resources. Physical considerations encompass exposure to dangers such as floods and droughts, along with insufficient infrastructure, including water and sanitation systems. Institutional factors include limited access to credit and markets, as well as inadequate governance frameworks. Attitudinal factors denote the beliefs and attitudes of individuals and groups about risks and uncertainty. Ultimately, natural variables relate to the susceptibility of critical natural resources, including forests and fisheries, which are needed for sustenance.

The Vulnerability Framework highlights external factors that affect individuals' livelihoods and are beyond their control. DFID (1999a) introduced a sustainable livelihood framework that defines a model for comprehending vulnerability, resilience, and adaptation within the realm of sustainable development. The classification of vulnerability qualities in Table 2 offers critical insights for formulating policies and initiatives aimed at mitigating vulnerability and fostering sustainable livelihoods.

Table 2: Vulnerability Factor		
Trends - Population trends - Resource trends incorporating conflicts - National and International trends - Governance tends to incorporate various politics - Technological advancement	- Human health shocks, for example, COVID-19 - Covariate shocks - Natural shocks - Economic disruptions - Conflicts or disputes - Crop/livestock health shocks	Seasonality - price like production - like health - like employment opportunities
Source: DFID (Sustainable Livelihoods Guidance Sheets – Section 2.2 (1999b))		

Table 2 delineates the diverse vulnerability factors that impact sustainable livelihood diversification, as examined in this analysis of livelihood diversification in Goderich. The growth of populations and conflicts over resources significantly influence the well-being of the local populace. The growth of population can lead to a shortage of land, which adversely affects agricultural practices and reduces the potential for revenue generation for farmers. Competition for resources such as water or land may cause community relocation, leading to the loss of livelihood assets.

Covariate shocks provide considerable difficulties to livelihoods. Covariate shocks are disruptions that affect whole populations or areas, including natural disasters such as floods, droughts, or earthquakes. Messer and Townsley (2003) assert that farmers may choose to cultivate crops that are of lesser value or productivity but are better suited to the altered environmental circumstances. This strategy yields uneven sustainability and may exacerbate various threats to livelihood security stemming from factors such as climate change, pandemics like COVID-19 (as noted by Owusu-Sekyere et al., 2022), market volatility, or other unpredictable occurrences. Seasonality is a crucial

factor of susceptibility that affects livelihood diversification. Variations in price or health circumstances may substantially impact the financial stability of households. Jackson (2020a) and Ellis (2000) contend that resilience to external shocks is affected by several aspects, such as economic accumulation, food reserves, family support, and the accessibility of alternative coping mechanisms.

The review emphasises the susceptibility of rural communities in developing regions, especially in Africa, Southeast Asia, and Latin America, to external pressures including droughts, civil unrest, and the lack of essential resources or social support systems to maintain livelihoods during challenging times (DFID, 1999a). Consequently, evaluating livelihood diversification in Goderich necessitates a meticulous examination of these susceptibility characteristics and the formulation of suitable policies and methods to alleviate their detrimental impacts.

1.5. Livelihood Strategies and Indicators for Assessing Livelihood Outcomes

This section outlines livelihood approaches, with a focus on geographical and household structures. Livelihood is defined as the capabilities, assets (including both material and social resources) and activities required for a means of living (DFID, 1999, p. 2). Access to a range of assets is a key factor influencing livelihood approaches (Geiser et al., 2011). Livelihood strategies denote the methods individuals take to achieve their livelihood goals, typically encompassing a combination of activities including agriculture, fishing, trade, and wage work.

Livelihood outcomes signify the consequences of these tactics, which may be either beneficial or detrimental. A range of variables, including income, assets, health, education, and social capital,

is used to assess these outcomes. These characteristics are often combined to provide a more comprehensive understanding of livelihood outcomes (Carney, 1998; Ellis, 2000).

The livelihoods paradigm has been widely used in development practice and research, particularly in relation to poverty alleviation and sustainable development (Carney, 1998; Scoones, 1998). It recognises the intricate and evolving character of livelihoods and emphasises the need to comprehend the interrelations among many methodologies and resources. Nonetheless, it has faced criticism for favouring individual families while often overlooking wider structural elements such as market dynamics, governance, and power relations (Leach, Mearns, & Scoones, 1999; Moser, 1998). Consequently, a rigorous application of the framework, augmented by supplementary theoretical perspectives, is essential for analysing livelihoods.

1.5.1. Livelihood Strategies

Livelihood strategies are essential for attaining favourable results in livelihood activities, both at the micro and macro levels. Ellis (2000) defines livelihood strategies as the combination of activities that people choose to undertake to achieve their life goals. These activities may encompass income creation from agriculture or farming, as well as non-agricultural income sources, such as employment in rural development banks. These measures improve resistance to unforeseen disruptions (Ellis, 2000).

Households are increasingly diversifying their livelihood activities, with mobility—both intra- and inter-regional—emerging as a significant alternative influenced by asset availability and policy or institutional frameworks. (Ellis, 2000). Dorward et al (2005) identify three broad types of livelihood strategies:

- **Hanging in:** Engaging in activities to maintain livelihood levels despite adverse socio-economic conditions.
- **Stepping up:** Investing in current activities to increase production and income, thereby improving livelihoods. This may involve acquiring productive assets such as livestock.
- **Stepping out:** Leveraging current operations to amass resources that can facilitate the shift to new, potentially more lucrative ventures necessitating initial investments.
- These solutions are adaptable and offer a contextual framework, especially for sectors such as cattle husbandry. In impoverished rural communities common in developing nations, one or a combination of these measures may be implemented to attain sustainable livelihoods.

Diversification of livelihoods is a crucial technique for combating poverty and attaining sustainable development. Strategies including perseverance, escalation, and withdrawal are essential for attaining favourable results. This literature review assesses these tactics to comprehend their ramifications for sustainable development, highlighting significant policy and practical consequences for advancing sustainable livelihoods and alleviating poverty in emerging nations, especially Sierra Leone.

1.5.2. Livelihood Outcomes

Livelihood outcomes denote the consequences of techniques employed to attain sustainable living for the impoverished. These techniques may encompass revenue production, enhanced well-being, augmented food security, diminished vulnerability, and sustainable resource utilisation, including the management of maritime resources in Goderich (Ellis & Biggs, 2001). A substantial amount of research on livelihoods has focused on poverty and vulnerability, particularly in regions such

as Latin America, Asia, and Africa (Adger et al., 2001; Carney, 1998; Scoones, 1998). Livelihood outcomes are influenced by contextual factors, including terrestrial activities such as forestry and aquatic endeavours, as well as the requirements of families and individuals. A multitude of methods and indicators are available for the evaluation of quality of life and the sustainability of livelihoods. Parkins et al. (2001) delineate these approaches into three overarching methods, whereas Diener & Suh (1997) articulate three perspectives for conceptualising and quantifying livelihood sustainability:

1. **Societal Values:** Attributes of a fulfilling existence grounded in commonly recognised societal values or ideals, shaped by religious, economic, or cultural frameworks. These values often underpin objective statistics such as GDP and average household income.
2. **Economic Preferences:** A viewpoint on economics that focuses on the ability of individuals to achieve desired outcomes, considering the resources available to them and their individual preferences. This approach diverges from the initial one by prioritising personal autonomy over societal norms.
3. **Subjective Well-being:** Concentrates on personal experiences, highlighting intangible aspects of life satisfaction, including joy, contentment, and overall well-being. This method emphasises subjective indicators essential for comprehending societal situations and advancement towards intended objectives.

This study seeks to amalgamate subjective and objective quality-of-life metrics to develop social indicators in partnership with the community. This method seeks to provide a comprehensive understanding of well-being in Goderich by synthesising empirical economic data with the lived experiences and viewpoints of its residents.

1.6. Diversification Theory

Diversification theory asserts that expanding income sources may enhance family resilience and reduce vulnerability to shocks and pressures (Ellis, 1998). It indicates that families engaged in several economic activities are more adept at addressing economic and environmental challenges than those dependent on a single income source (Ellis, 2000). Diversification mitigates risks and offers a safeguard against revenue disruptions resulting from crop failures, market volatility, or unforeseen expenses (Barrett, Reardon, & Webb, 2001).

Diversification can take various forms, such as broadening the range of economic activities, diversifying crops or livestock, or engaging in pursuits beyond agriculture (Ellis, 1998). Agricultural diversification is a common technique in rural regions designed to increase household income and reduce vulnerability (Barrett et al., 2001). This may entail the cultivation of diverse crops, the incorporation of novel crops or livestock, or the implementation of advanced agricultural methodologies. Participation in non-agricultural endeavours, such as artisanal production, small-scale commerce, and wage employment, substantially enhances income diversification (Ellis, 2000). In the absence of land or agricultural prospects, these activities are particularly suitable for individuals devoid of such resources. Furthermore, non-agricultural enterprises can promote the migration of rural families to urban regions, thus enhancing their economic participation (De Janvry et al., 2006).

Nevertheless, the effectiveness of diversification as a strategy for reducing vulnerability and promoting sustainable livelihoods is not universally applicable. In specific circumstances, it could lead to increased competition and reduced profitability (Ellis, 2000). Furthermore, certain households face limitations in employing diversification strategies, particularly those with

constrained access to resources or markets (Barrett et al., 2001). The influence of gender on livelihood diversification is significant. Individuals of varying genders possess unique duties and roles within home and community environments, influencing their access to and control over resources and chances for variety (Quisumbing & Pandolfelli, 2010). Women often meet obstacles such as limited access to land, financial resources, and market possibilities, which hinder their capacity to diversify income streams (FAO, 2014). Understanding these gender patterns is crucial for developing policies that ensure fair access to diversification opportunities.

The principle of diversity emphasises the necessity for flexibility and adaptation in response to environmental, economic, and social changes. It highlights the importance of diversity in enhancing family resilience and reducing susceptibility to shocks and stresses (Ellis, 2000). For the people of Goderich, this is especially relevant due to their constrained asset base, which complicates the attainment of sustainable living circumstances. By participating in a wider array of economic activities, diversifying agricultural methods, or pursuing alternative income-generating opportunities, inhabitants might enhance their income stability and mitigate their susceptibility to external shocks (Scoones, 1998). The efficacy of diversification methods is contingent upon local conditions and household attributes, with gender considerations being crucial for promoting equitable access. Comprehending the complexities of diversification theory is essential for formulating effective policies and actions to improve livelihoods in Goderich. By addressing local challenges and promoting inclusive strategies, authorities may aid communities in achieving sustainable and resilient livelihoods.

1.7. Knowledge, Contribution, and Expected Outcomes of the Research

This thesis addresses a gap in the literature by conducting a detailed analysis of livelihood activities in Goderich, a topic little explored in previous studies. The study seeks to provide novel insights into how local communities adapt to changing economic and environmental conditions by analysing various livelihood patterns and their socio-economic effects. This approach is essential for comprehending the resilience of these communities in the face of external challenges and possibilities.

A thorough methodology was utilised to fulfil the study's aims, integrating surveys, focus group talks, and participant observation with pertinent stakeholders to capture the complete range of livelihood activities in Goderich. This analysis is slightly unusual, since the use of diverse research tools adds a new perspective to the study. Additionally, the study integrates social sciences approaches with basic econometrics to assess livelihood consequences, an approach infrequently employed in previous research (Afodu et al 2019; Block & Webb, 2001).

Prior research, including works by SLURC (2018), Conteh (2010), Konteh (1997), and Cline-Cole (1987), has examined various aspects of livelihoods on the Freetown Peninsula and in other regions of Sierra Leone. This research enhances the field by concentrating on the livelihood context of Goderich, particularly the obstacles inhabitants encounter in accessing resources. The research examines community dynamics and actions that have elicited environmental concerns, as emphasised in national disaster discourse and media discourses (Jackson, 2015; Munro, 2009).

This research is expected to contribute to scholarly discourse by clarifying how diverse livelihood activities and varying degrees of access to assets can enhance livelihood outcomes. The study

presents a methodological framework that can be applied to similar communities for the assessment and improvement of livelihood options, while demonstrating the effectiveness of combining qualitative and quantitative methods to clarify the complexities of livelihood activities.

The findings of this study will enhance academic understanding by establishing a basis for further research and practical implementation. They are expected to provide more targeted and efficient solutions to bolster community resilience and development, therefore enhancing both scholarly discourse and practical policy.

1.8. Thesis Overview

This thesis has eight chapters, beginning with Chapter 1, which functions as the introduction. This chapter provides essential contextual insights, clarifying the fundamental logic of and reasons for the research, while outlining its goals and objectives. Furthermore, it examines the importance of Theoretical and Conceptual Frameworks (TCF) and outlines the historical evolution of sustainable livelihood ideas. These conversations are crucial for scholars and policymakers to recognise the necessity of enhancing livelihoods, especially in the context of Goderich (Sierra Leone) and its adjacent communities. The chapter emphasises the study's significance in enhancing our comprehension of sustainable livelihood theory.

Chapter 2 outlines the political economy of livelihoods in Goderich. This chapter primarily examines the interplay between power, politics, and governance in shaping socioeconomic processes. It emphasises the influence of local governance structures, decentralisation, and community divisions on the accessibility of natural and social resources, as well as the diversification of livelihoods in reaction to environmental and sociopolitical changes.

Chapter 3 outlines the study hypothesis, design, and methodology adopted in investigating sustainable livelihood diversification in Goderich. The text addresses the integration of mixed methods approaches, ethical considerations, and the role of triangulation to ensure data validity, so creating a robust foundation for understanding complex socio-economic and environmental processes that influence local livelihoods.

Chapter 4 analyses the interrelated dynamics of local governance, cultural leadership, and livelihood strategies in Goderich, Sierra Leone, demonstrating how these components collectively influence socio-economic resilience. It emphasises the significance of leadership, spatial livelihood patterns, and inventive responses to challenges, providing insights into the dynamic relationship between community structures and sustainable development.

Chapter 5 offers an extensive narrative examination of the livelihood activities of the inhabitants of Goderich. It underscores their ambitions, obstacles encountered in asset procurement, and the interaction between natural and social capital that affects their existence.

Chapter 6 presents a thematic analysis of vulnerability, shocks, and barriers to asset access in Goderich. It analyses how inhabitants allocate their resources and validates its findings via the use of various research approaches.

Chapter 7 examines the environmental issues resulting from resource exploitation in Goderich. The essay emphasises the significance of sustainable resource management and examines efforts that engage essential players, including government agencies, NGOs, and local councils, to improve resource accessibility and foster environmental sustainability in the area.

Chapter Eight concludes by outlining the study goals and objectives, affirming the acquisition of information. This chapter provides a thorough analysis of policy suggestions designed to enhance the living circumstances of Goderich's residents, with wider ramifications for Sierra Leone. These concepts include reassessing current frameworks and regulations set by the government and local authorities to enhance the quality of life while protecting the environment from overexploitation.

CHAPTER 2 –POLITICAL ECONOMY AND LIVELIHOOD CONTEXTS IN AND AROUND GODERICH

2.1 Introduction

Livelihoods in Goderich, as elsewhere in Sierra Leone, reflect pre- and post-independence, as well as post-civil war influences (Conteh & Maconachie, 2019; Fanthorpe & Gabelle, 2013). Not least, civil-war-induced population redistribution has seen the population of the Freetown or Western Area Peninsula rise from approximately 500,000 before the conflict to over 1.2 million in the early 2000s, with further growth in subsequent years (Statistics Sierra Leone, 2015). This substantial increase has contributed to the physical expansion of Freetown, which has progressively absorbed formerly discrete suburbs and peri-urban areas like Goderich (Figure 4b & 4c). This shift has induced transformative changes in landscape and settlement patterns, with the Western Area Peninsula Forest (WAPFoR), a statutory forest reserve along the central spine of the peninsula, emerging as a convenient site for expanded settlement and intensified livelihood pursuits in a manner reflective of urbanisation processes seen in both the global north and south (Figure 4b; McHale et al., 2015; O’Kane & Ménard, 2015).

Against this background, competing interests represented by demand for land resources, on the one hand, and central and local government regulations controlling access to, and control over natural resources of all kinds, on the other, have led to increased local livelihood diversity and diversification (See Oviedo et al, 2022; Davies & Bennet, 2007, for a similar example in Ethiopia’s Afar region). Furthermore, that Goderich's ongoing growth and expansion are explained by concurrent processes of gradual physical incorporation into the 'Freetown Municipality' and ongoing population drift from central Freetown to the city’s suburbs, suggests the need for close

study of new and evolving socio-economic and political structures and relations, community dynamics and landscape change (see, for example, Bebbington, 2007). Central to any investigation of the specific drivers, dynamics and outcomes of livelihood change in peri-urban Goderich must be an appreciation of the complex and intertwined roles of power, politics and economics, what Blaikie et al (1994) and Follmann (2022) describes as political economy, in their conceptual elaboration of the background to, or context for, the everyday pursuit of a living for individuals and groups. This chapter provides just such a context for pursuing livelihoods in Goderich, paying particular attention to interactions within and between the local, national and larger scales.

Figure 4a: Map of Sierra Leone Showing Western Area



Figure 4b: Map of Western Area Showing Goderich



Figure 4c: Map of Goderich indicating Wards



Source: World Atlas (Online)

2.2. Power and Politics in Sierra Leone

Comprehending the complex interplay of power and politics in Sierra Leone, especially with livelihood difficulties in the post-war period, requires a thorough examination of the changing political frameworks and their socio-economic consequences. The concentration of power among political elites has influenced resource distribution, perpetuated structural inequities, and restricted access to key services for a significant portion of the population (Jackson, 2005; Richards, 2003). Post-war reconstruction initiatives frequently exacerbate these disparities, as persistent political patronage systems dominate, favouring exclusivity over inclusivity in the distribution of resources.

Jackson (2005) conducts a comprehensive analysis of how entrenched power structures have sustained socioeconomic inequalities. His analysis highlights how political elites, through established governance structures, have maintained control over economic resources, thereby limiting opportunities for equitable advancement. Richards (2003) emphasises the significance of historical legacies in perpetuating power hierarchies, especially in rural regions where livelihoods are mostly reliant on access to land and resources controlled by local authorities.

Meyers (2003) analyses the intersection of formal and informal power networks, highlighting how these dual systems intensify socio-economic vulnerabilities. In Sierra Leone, informal power structures, based on traditional hierarchies and social networks, function alongside official institutions to regulate access to employment, services, and political participation (Macarthy, 2024). This paradox establishes a convoluted socio-political landscape that exacerbates the marginalisation of vulnerable populations, especially in rural and peri-urban areas. Peters (2011) and Fanthorpe (2001) elucidate the relationship between local political authority and overarching governance structures. In rural and peri-urban areas like Goderich, these exchanges manifest as

patron-client relationships, which are intricately woven into the socio-political framework of Sierra Leone. These partnerships, although providing instant access to resources, may undermine long-term economic stability and sustain dependence on political elites. Rectifying these power disparities is crucial for promoting inclusive development and strengthening the resilience of local communities. Rectifying these power disparities is crucial for promoting inclusive development and strengthening the resilience of local communities.

2.3. Patron-Client Relationships

This section examines the intricacies of patron-client relationships in Sierra Leone and their influence on livelihoods in peri-urban regions like Goderich. Patronage networks are vital to the political and socio-economic framework, influencing access to resources, services, and opportunities. Zack-Williams (1999) and Kandeh (2021; 1992) contend that these networks play a vital role in shaping political loyalty and resource distribution, frequently serving as a means of survival for marginalised communities.

Historically, patron-client relationships in Sierra Leone have developed as informal survival mechanisms due to systemic governmental failures. These alliances, established on personal connections, grant access to resources and services that are otherwise inaccessible through formal avenues. This dependence on patronage cultivates exploitation and subjugation, as patrons wield considerable authority over their clients, governing access to employment, social services, and political engagement (Richards, 1996).

Recent research by Menzel (2017) and Ménard (2023) highlights the functioning of patronage networks in conjunction with official governmental organisations, establishing a dual authority

framework that impacts political and economic relations. In peri-urban areas such as Goderich, these networks influence livelihood options by presenting both possibilities and constraints. On the one hand, they offer immediate access to resources and employment; on the other, they perpetuate systemic inequalities by prioritising loyalty over merit, undermining broader efforts toward equitable development.

This section highlights the noteworthy influence of patron-client relationships on livelihoods by situating them within Sierra Leone's socio-political framework. These networks determine not only resource allocation but also persistent socio-economic inequalities that constrain the autonomy of marginalised groups. To mitigate these dynamics, dependence on benefactors must be diminished, and equitable access to existing resources must be established, enabling every resident to be able to access a reasonable means to a living. Such arrangements in Sierra Leone will only demonstrate feasibility with the passage of time, and they are already starting to yield results.

2.4. Power, Politics, and Economy in Contextualising Livelihoods

Sierra Leone continues to experience numerous social, structural, and resource challenges, with historical, political, and economic factors profoundly impacting the intricate interrelations of its social fabric and livelihood systems across spatial and temporal dimensions (Bhattacharya, Oya, & Piper, 2016; Oya, 2016). After the civil war from 1991 to 2002, coupled with ongoing political instability and economic difficulties, the rise in poverty has stabilised (Collier & Hoeffler, 2004; Hentz & Bas, 2003). The Corruption Perceptions Index rankings indicate that widespread corruption constitutes a significant obstacle to sustainable economic development (Transparency International, n/d; Ismaila, 2020).

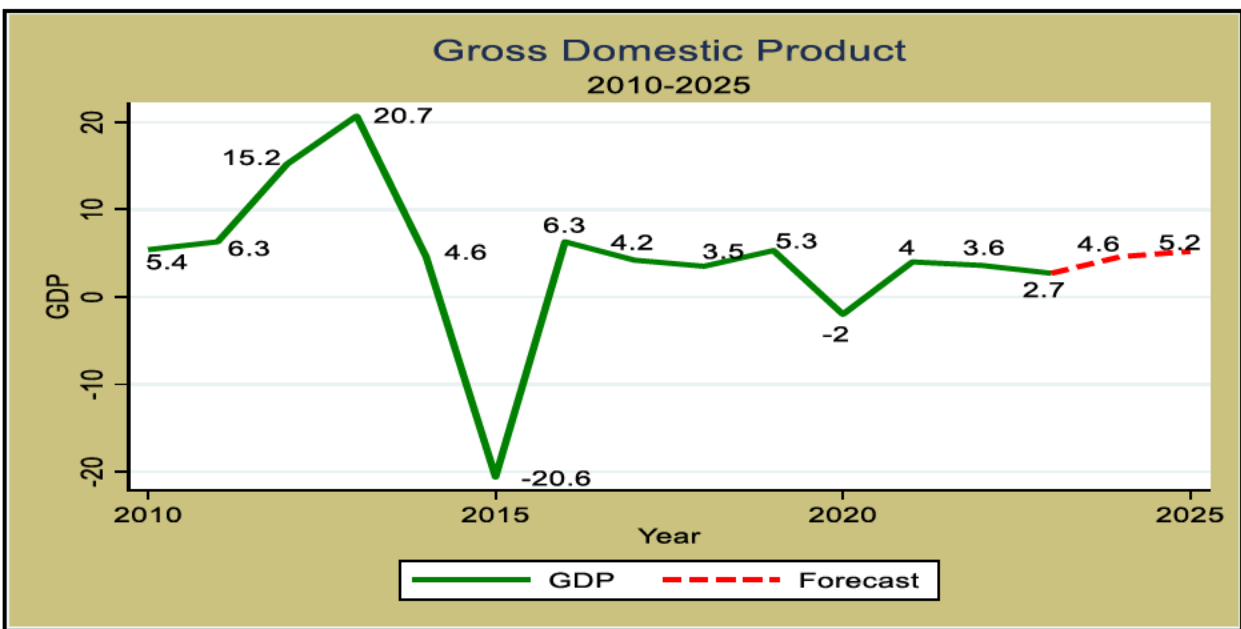
The national economy exhibits profound susceptibility to the vicissitudes of international market dynamics, primarily owing to its pronounced dependence on mineral exports, with diamonds constituting a particularly pivotal component (World Bank, 2021). The economic conditions that intensified the Ebola epidemic were aggravated by challenges that led to a significant decline in economic growth during 2014-2015 (IMF, 2019; Werner, 2017). Figure 5 depicts the trajectory of Sierra Leone's GDP, clearly showing the gradual evolution of an economy plagued by significant internal strife and external disturbances over the past 61 years (1960 - 2021). Annualised statistics span the years 1960 to 2022. Projections for 2023 and 2024 suggest a likely rise based on a stable national and global environment.

This anticipated GDP growth is significant for livelihoods, extending beyond rural or peri-urban areas such as Goderich. The enhancement in economic activities suggested here may facilitate job creation, elevate income, broaden livelihood choices, and enhance living standards. GDP growth frequently correlates with improved economic well-being, potentially generating positive ripple effects that benefit towns such as Goderich, thereby promoting local development and regional prosperity (Jackson, 2024; Warburton & Jackson, 2020).

Notwithstanding attempts at economic diversification, such as fostering development in agriculture and services (World Bank, 2021), ongoing problems impede sustainable economic growth and enhanced wealth redistribution and social welfare. This macroeconomic backdrop significantly impacts livelihoods, with over half the population below the poverty line (World Bank, 2021; Jackson & Jabbie, 2020). Goderich mirrors these challenges, particularly in its fishing industry, historically the dominant livelihood sector. The disruption caused by the civil war and its aftermath, coupled with climate change, shifts in government policies and, more recently, the

COVID-19 pandemic and its long-term consequences has severely and variously impacted livelihoods in and around Goderich, as elsewhere in the country (Davies et al., 2020; Van Leeuwen & Van der Haar, 2016).

Figure 5: Gross Domestic Product (GDP) Growth for Sierra Leone (1960-2021)



Source: Bank of Sierra Leone Dataware house

In short, although conflict, war and epidemics have dominated Sierra Leone's recent political economy, it is extractive politics and development which provide a longer-term historical backdrop, and which accounts for what Cline-Cole (2003: 38-39) has described as involving 'political failure, economic collapse and social disruption [but also] widespread poverty and abysmal levels of human development and social indicators [resulting from] bad governance, the denial of fundamental rights, economic mismanagement and social exclusion'. And, as Krijn Peters (2010; 2011), among others, has pointed out, the livelihood and other challenges faced especially but not exclusively by Sierra Leonean youth before the civil war have still not been satisfactorily resolved into the present, despite post-war governance reforms (see also Conteh,

2017). Indeed, post-civil war tensions would culminate most recently in, first, a dispute over the results of the 2023 general and presidential elections, which saw President Bio and his Sierra Leone People's Party (SLPP) win re-election; and, second, a reported failed coup attempt a few months later, leading to criminal and military convictions of some 35 people, and the negotiated exit into exile of ex-president Ernest Koroma, President Bio's immediate predecessor and opposition All People's Congress (APC) party stalwart, who had also been charged but not prosecuted in connection with the failed coup (Reuters/Africanews, 2024).

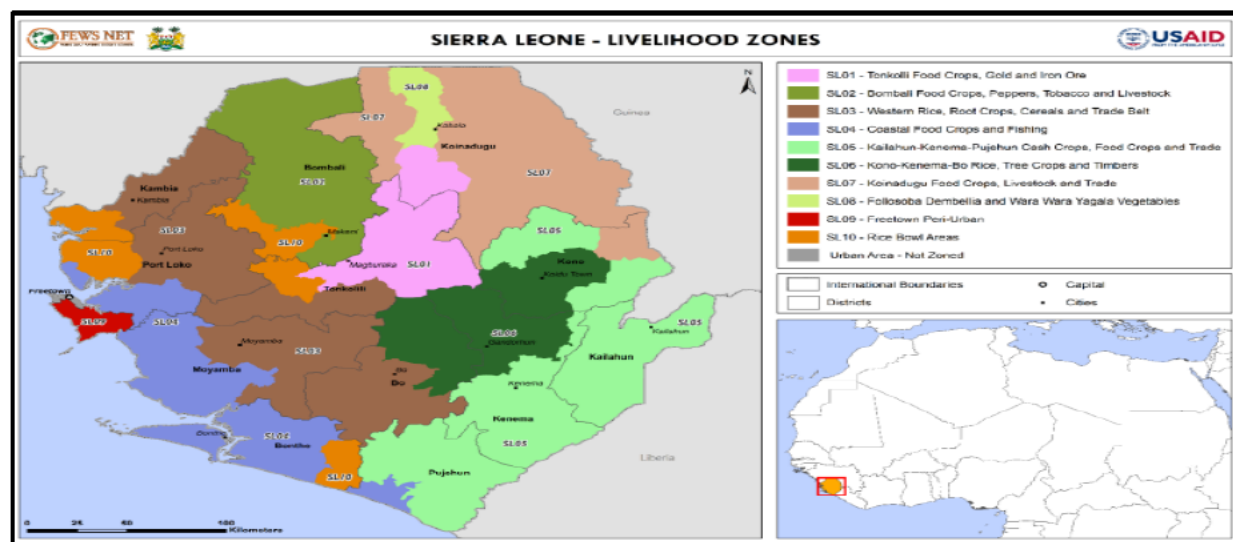
While speculation was rife about whether what had transpired amounted to a genuine coup attempt or not, few could deny the existence of a familiar combination of intensifying economic stress and political tensions leading up to this latest political crisis (Bangura, 2019); or that the roots, as always, lay in contests over access to, and control over resources, particularly state political power, the main 'resource' facilitating elite accumulation and state capture, as well as the continued informalisation of the economy via the operation of patronage, kinship and other informal networks (Conteh, 2017). However, in this adversarial post-war political economy, 'the political class [has] reconstructed the post-war state based on political party accommodation and compromises, which have ensured that, whether in opposition or government, the country's two largest political parties – the APC and SLPP – have been part of the governance of the state, even if such compromises have been unobvious, unintended and tenuous' (Conteh, 2017: 34). Yet, the improved livelihood prospects inherent in such compromises rarely extend to the ordinary party faithful, whose open, frequently bloody and sometimes fatal confrontations with opposition 'foot soldiers' serve as a reminder of how closely the imperative for survival can be tied to political affiliation and the rare hope of an enhanced livelihood, which it engenders (Bangura, 2019). Not surprisingly, it is to the perceived socio-economic origins and livelihood-related implications of

the seeming ‘winner take all’ mentality in local politics that ordinary Sierra Leoneans turn when explaining the mutually reinforcing combination of persistent and widespread public discontent and recurrent political crises, which has long bedevilled their country. People bemoan high unemployment and/or a lack of employment and informal sector opportunities; restricted access to, and limited effectiveness of, patron-client networks; and a bleak economic outlook (Jones, 2023). Above all, however, they decried government preoccupation with regime survival in the face of ongoing legal and other challenges from the APC, as well as its perceived abject failure, inability or unwillingness to (be seen to) address a long-running and worsening cost-of-living crisis (Mammone, 2023). Even worse, the government has insisted that widespread popular cost-of-living protests in 2022, and earlier were politically inspired and aimed at regime change (Mammone, 2023), rather than genuine expressions of frustration at widespread suffering and a yearning for improved life chances and enhanced livelihood opportunities (Jones, 2023), which needed to be disparaged, discouraged or suppressed (Cline-Cole, 2022).

It is, therefore, the totality of macro- and political-economic influences, which are reflected in the details of Sierra Leone’s main livelihood zones (Figure 6 and Table 3). In turn, the zones hint at complex and dynamic relationships within and between nature and society, notably in the patterns and other livelihood outcomes, which both define and are themselves defined by these zones. Thus, in the high-density Freetown Peri-Urban Zone (SL09), which includes Goderich and its surroundings, livelihood activities are notably diverse, with individuals and groups relying on commodity production, small-scale commerce and casual labouring, alongside a heavy dependence on the market for food and cash, as well as on mobility, as an important livelihood strategy (Davies et al., 2020; FEWS Net, 2017). Furthermore, in what could easily have been written with Goderich in mind, Table 3 highlight the significance of ‘urban-linked activities and

the sale of fish as defining features of regional livelihoods. ‘Regionalising’ livelihood realities in this way calls attention to the ‘unity in diversity’ characterising survival opportunities and challenges within and between zones, thereby emphasising the importance of local, as well as regional and larger-scale political economic and other contexts in livelihood structures, processes and dynamics (Cline-Cole, 2005). A sound understanding of livelihood context will be crucial to all attempts to identify and build on in Goderich and is crucial for crafting targeted interventions that consider the unique challenges faced by different zones, ensuring sustainable development.

Figure 6: Livelihood Zones in Sierra Leone



Source: FEWS NET, 2017

Table 3: Descriptive of Livelihood Zones in Sierra Leone

SL01: Tonkolili Food Crops, Gold and Iron Ore	The Tonkolili district features a combination of hills and plains, characterised by reasonably fertile soil and an annual precipitation above 2000mm. Main crops farmed include rice, cassava, sweet potato, groundnut, maize, pigeon pea, yam, and vegetables, while livestock consists mostly of goats and poultry. Households mostly rely on rain-fed agriculture and irrigated cultivation of inland valley swamp rice and vegetables for their livelihoods. The availability of widespread surface gold deposits has led to small-scale gold mining, and some households also possess small numbers of poultry and small ruminants. The primary
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	markets are constrained by an inadequate road network and comprise Magburaka, Mile 91, Yele, Matotoka, Makali, and Masengbe.
SL02: Bombali Food Crops, Peppers, Tobacco, and Livestock	The Bombali district zone is characterised by open bush and grasslands and less forest cover than the southern part of the country. The main crops grown are rice, cassava, tobacco, pepper, sweet potato, and onion, while livestock consists of goats, chickens, and cattle. The zone receives an average annual precipitation of over 3000mm, and households rely mainly on rain-fed agriculture and some irrigated farming of inland valley swamp rice and onion. Main markets for households in this zone are Makeni, Kamakwie, Batkanu, Makoth, and Mayawlo, with cross-border trade of crops (rice, pepper, palm oil) via the Tambaka market to Guinea. The road network is relatively good, making markets easily accessible.
SL03: Western Rice, Root Crops, Cereals and Trade Belt	The most populated and one of the largest livelihood zones in Sierra Leone is located mainly in Bo, Kambia, Moyamba, and Port Loko districts. The zone serves as a transit area between the east and the coast, and some inland fishing occurs. Main crops grown include upland rice, swamp and riverine rice, cassava, sweet potato, maize, millet, groundnut, and vegetables. Livestock consists of goats, chickens, and cattle. The zone has a trading advantage in rural areas with Guinea through Kambia.
SL04: Coastal Food Crops and Fishing	The coastal strip in Sierra Leone has an annual precipitation of over 3000mm and is the highest rainfall area of the country. Rice, cassava, sweet potato, maize, and groundnuts are the main crops produced and traded, with rice being sold in Freetown or Guinea via the Barmoi weekly market in Kambia district. Cassava is processed into gari and follows the same market route as rice. Palm oil is a major sales product, particularly in the south, and coconuts are sold for coconut oil. Fish sales are also important, but the dependence on this income varies from community to community. Livestock consists of chickens and small ruminants.
SL05: Kailahun-Kenema-Pujehun Cash Crops, Food Crops and Trade	The zone is characterised by hilly terrain and tropical forest cover, and is home to a concentration of palm, cocoa, coffee, and kola nut trees. Main crops include cocoa, rice, coffee, oil palm, cassava, maize, and rubber. Livestock consists of poultry, small ruminants, and cattle. The zone borders Guinea and Liberia and Kailahun acts as a major frontier market for trading commodities in large quantities, with palm oil, rice, and cassava being the most highly sought after. These commodities are a primary source of income for most households in the region.
SL06: Kono-Kenema-Bo Rice,	This zone shares similarities with Zone 5 in terms of its major crops (cocoa, rice, coffee, oil palm, cassava, maize, and rubber) and livestock

Tree Crops and Timbers	(poultry and small ruminants), but timber plays a greater role. Diamond and gold mining also occur on a localised level, with more importance to household income than in Zone 5.
SL07: Koinadugu Food Crops, Livestocks and Trade	Zone 7, located in the northeast highland area, is dominated by savannah, forest, and grasslands, with crops grown on relatively fertile soil. Main crops include rice, cassava, groundnuts, sweet potato, maize, sorghum, pulses and millet, with appreciable amounts of groundnuts grown. Livestock, particularly cattle owned by ethnic Fulani, is important. The road network is poor and the main food crops traded at local markets are rice, pulses, sorghum, and millet.
SL08: Follofaba Dembelia and Wara Wara Yagala Vegetables	Zone 8 is a compact, elevated region recognised for its vegetable cultivation, especially chilli peppers, along with cabbage, carrots, and various other crops. Livestock comprises chickens, small ruminants, and cattle. The inadequate road infrastructure and distance to markets present obstacles for farmers who depend significantly on vegetable sales.
SL09: Freetown Peri-Urban	Livestock in this rural zone includes poultry. It consists of four wards in the Western Area Rural district: Koya, Mountain, Waterloo and York. The population is dense and provides both commodities and casual labor. The long shoreline and the high Peninsula Mountain ridge in the hinterland affect the distribution of the population. Most households rely on markets for their food, and the cash for this and other essential expenses comes primarily from urban-linked activities and the sale of fish.
SL10: Rice Bowl Areas	Zone 10 covers parts of Port Loko, Bombali, and Bonthe, and is known for its significant production of inland rice, as well as upland rice and cassava. Although rice is the predominant crop in the region, there are minor variations in livestock ownership and staple crops among the various locations. Market access for non-rice and cassava commodities is constrained by insufficient road networks and inadequate market infrastructure. The livestock in this area predominantly comprises chickens and small ruminants.
Source: FEWS NET, 2017	

2.5. Goderich Governance Structure

Goderich has seen tremendous change since the 19th century, when it operated largely as a settlement for liberated Africans. With a present population of over 81,000, the community relies primarily on fishing, forestry, and agriculture for survival (CONCERN Worldwide, 2012). Understanding the nature and dynamics of livelihoods in Goderich needs a thorough understanding

of the local political economy and governance structure, which influence the many local and other contexts within which livelihoods are pursued.

2.5.1. Governance Structure

The governance system in Goderich is based on the Decentralisation Act of 2004, which establishes the legal and constitutional basis for municipal government. This Act requires the formation of local councils and specifies their functions and duties, granting them corporate authority to oversee local development projects, community welfare, and environmental conservation efforts (FAO, 2004; Zhou, 2009). In this framework, district chairpersons occupy the highest position, succeeded by area and local councillors, as well as local chiefs, all elected for five-year terms (CONCERN Worldwide, 2012; FAO, 2014).

The local governance structure functions hierarchically, with considerable authority assigned to ward heads, known as 'headmen' or 'headwomen', who are essential in managing community administration and daily activities (Jackson, 2022a; CONCERN Worldwide, 2012). Furthermore, local committees, consisting of voluntary representatives, enhance governance by tackling issues such as conflict settlement, land allocation, and livelihood monitoring (Zhou, 2009).

The implementation of a multi-party government system at the national level has created problems in local administration. Political affiliations increasingly affect administrative appointments and influence decision-making processes at the municipal level. Thus, the multi-party framework integrates national political and economic interests into local government, resulting in complex layers of influence that frequently hinder the unbiased operation of local entities (CONCERN

Worldwide, 2012; Jackson, 2022a). These difficulties reflect wider national dynamics, as local administrators strive to combine community concerns with politically motivated appointments.

2.5.2. Role of Decentralisation in Sustainable Livelihoods and Development

Decentralisation, as stipulated by the Local Government Act of 2004, serves as an essential instrument for improving lifestyles in Goderich (United Nations Development Programme, 2006). This governance approach mandates accountability among local administrations and leaders, fostering openness, responsibility, and democratic ideals (Mbate, 2017). Decentralisation enhances community involvement in decision-making, enabling locals to manage and control resources, thereby aligning governmental policies with community interests.

Inclusivity is a fundamental characteristic of decentralisation, guaranteeing representation for under-represented groups, including women and youth (Mbate, 2017). The resultant policies specifically cater to the distinct needs of different groups, cultivating a responsive environment that acknowledges the varied wants of the wider community.

Local Development Committees (LDCs), shown as those in Goderich, are integral to this structure, orchestrating and executing development initiatives (World Bank, 2004). Composed of representatives from several industries, these committees allocate funding to infrastructure and agriculture, fostering sustainable development in the region.

Empirical research underscores the beneficial effects of decentralisation on critical services, such as healthcare and education (Jackson, 2022a; Ménard, 2023). When local leaders provide money to health clinics and educational institutions, it not only increases access to these services but also

elevates the overall well-being of the community (United Nations Development Programme, 2015).

The participation of civil society, facilitated by decentralisation, is exemplified by vigilante groups like the Community Development Unit (CDU) and the Oba Funkia Vigilante Group, which address specific community needs (Jackson, 2022a). This inclusivity improves policy responsiveness, demonstrating the concrete impacts of decentralisation on local governance. The decentralisation in Goderich has significantly enhanced community livelihoods by promoting accountability, transparency, and inclusive governance. Ongoing investment in agricultural production, infrastructure, and key services is vital for maintaining and enhancing these achievements.

2.6. Sub-Communities in Goderich

This section delineates and describes the sub-communities in Goderich (Figures 4c and 17), highlighting their distinctive characteristics, socioeconomic and ethnic compositions, and the varied activities that influence the local socio-economic landscape and livelihood (sub-)zones. Central to social interaction within and across all of Goderich's (sub-)communities are social networks, including patron-client exchanges, which function as often valuable social and cultural capital in negotiations over access to, and control over everyday life and livelihood. As secret societies, church organisations, and credit clubs, among many such institutions, these sometimes-complex alliances help to shape the local socio-political and cultural landscape, acting as mutual aid systems and crucial support networks providing financial, material, and emotional assistance in ways which are integral to the functioning of local livelihoods (Jackson, 2015a).

The substantial population increase in Goderich, rising from 19,209 in 2004 to 46,147 by the 2015 Census as outlined in Appendix 2, underscores the transformative developments inside these communities. This growth, representing around 41% of the 2015 population of the “Goderich-York Urban Area”, which was 113,185, highlights the region's significance as a swiftly developing socio-economic centre (City Population, Online). Such demographic shifts inevitably amplify the role of the networks and institutions, as they increasingly bear the weight of the challenges and opportunities associated with accommodating a growing population. In many ways, these local structures are reminiscent of their alumni network counterparts at the national level, which Conteh (2017) considers as important to the operation of accommodation strategies favoured by the elite of both the SLPP and APC.

2.6.1. Oba Funkia Sub-Community

Oba Funkia, situated in the Goderich region of Freetown, is noted for its profound cultural and religious variety. Approximately 85% of the population identifies as Christian, primarily from the Creole/Krio ethnic group, while the remaining 15% predominantly comprises Muslims from diverse ethnic backgrounds (Richards, 1996). The variety of religious affiliations fosters a strong feeling of community since different faiths cultivate social networks that promote solidarity and encourage investment in social and cultural capital among members.

Gender distribution statistics within Oba Funkia are notably scarce. However, according to the 2015 Population and Housing Census conducted by Statistics Sierra Leone, the Western Area Urban district—which includes Freetown and its suburbs such as Goderich—had a population of approximately 1,055,964, with a male-to-female ratio of 49% to 51% (Statistics Sierra Leone,

2015). While this figure provides a general sense of the gender composition in the broader region, it may not accurately reflect the distribution within Oba Funkia itself.

Regarding the proportion of Oba Funkia's population relative to the entire Goderich area, precise data specific to neighbourhoods like Oba Funkia is not readily available in public records. Goderich, a prominent suburb of Freetown, comprises multiple communities, complicating the extraction of population statistics for specific neighbourhoods in the absence of localised census data. For an accurate proportion, localised surveys or municipal records about Oba Funkia would be required.

Figure 7: Ebenezer Methodist Church



Figure 8: St. Luke's Parish Church



Figure 9: Countess of Huntingdon Church



Sources: Own Photo

In addition to religious affiliations, members of Oba Funkia engage in traditional cultural activities that have considerable social and economic ramifications. This includes involvement in secret societies such as Egba Emaleh (also known as Oro), traditionally including male rites of passage and community protection rituals, and the Hunting Society, often male-oriented, related to heritage preservation and ceremonial traditions involving the use of licensed guns to hunt bush meats that are paraded as part of their ritual activities, mainly during the Dry and Harmattan seasons (Jackson, 2015; Alie, 1990). Women participate in gender-specific organisations such as the Bondo Society, which is essential for female socialisation and cultural identity, enhancing cohesion and social capital within the community (Jackson, 2015). These societies are crucial in cultivating communal links, enhancing social capital, and safeguarding cultural identity across genders.

Economic activities in Oba Funkia also reflect gendered roles. The development of road infrastructure (Figures 10 and 11) has had a marked impact on local livelihoods by improving access to external markets and creating economic opportunities. This infrastructure supports diverse forms of employment: men often engage in skilled labour such as road construction and maintenance, while both men and women participate in locally based activities, such as roadside trading and small-scale retail. Women sometimes oversee retail establishments or function as sellers, bolstering household incomes and enhancing economic resilience. The cultural and economic activities underscore the importance of gendered responsibilities in shaping the social and economic structure of Oba Funkia, amalgamating male and female contributions to bolster social capital and economic resilience within the community.

Figure 10: Shops along York Road at Oba Funkia



Figure 11: Freetown Road under construction



In Figure 10, road construction is already complete, and people have begun exploring the potential for setting up shops in front of their houses. Figure 11 shows road construction still underway which, once completed, will provide increased accessibility to various means of transportation, as well as expanded opportunities for commerce for residents.

Source: Own Photo

2.6.2. Antar Town and the Beach Community

Antar Town is a culturally diverse hamlet notable for its substantial population of Fanti individuals, who emigrated from Ghana in the late 1960s, with their descendants still inhabiting the region. Alongside the Fanti, other prominent ethnic groups, including the Limba, Temne, and Fulani, contribute to the town's rich social and economic tapestry. These groups are involved in a variety of livelihood pursuits, which are influenced by both historical migration patterns and the community's strategic coastal location. According to Jackson (2015a), the Shallow Water Wharf, as depicted in Figure 12, represents the primary fishing hub within Antar Town and a focal point for economic activities linked to marine resources.

The post-civil war period, particularly since the 1996 elections, has brought considerable immigration to Antar Town's waterfront areas. This influx has exerted increasing strain on local natural resources, jeopardising the sustainability of the fishing industry (Jackson, 2015a). Figure 12 demonstrates that the heightened population density has exacerbated the community's ability to properly manage its natural wealth.

The enhancement of transport facilities has greatly bolstered economic operations in Antar Town, enabling the transit of commodities, fish and passengers from Goderich to broader Freetown. Enhanced transport alternatives—such as kekes, motorbikes and 32-seater buses—coupled with recent road improvements, have increased the accessibility of Antar Town to adjacent areas, hence strengthening economic connectivity with other regions of the country (UNDP, 2007). The development of infrastructure has been essential for sustaining livelihoods in Antar Town, particularly due to the varied ethnic composition and the unique contributions of each group to the local economy.

Studies on ethnic distribution in Sierra Leone indicate that the Fanti, along with the Limba, Temne, and Fulani populations, are the predominant groups participating in various aspects of economic life in Antar Town, with distinct gender-based roles in fishing, trade, and market activities (Statistics Sierra Leone, 2015). Fanti males primarily participate in fishing, whereas Limba and Temne women frequently engage in market trading of fish and other commodities, as well as petty trading and subsistence farming, thereby bolstering the supply chain and household income. Such gender-specific tasks have ramifications for household livelihoods and underline the contributions of the different group within Antar Town.

Figure 12: Shallow Water Beach



Source: Own Photo

Membership in the male 'Ojeh' and female 'Bundo' secret societies, alongside participation in 'esusu/Osusu' or credit union groups by both men and women, represents significant investments in social and cultural capital. These affiliations contribute notably to the livelihoods of individuals and groups alike. The Antar Town mosque, is a highly frequented house of worship for the largely Muslim local community, with a distinctive status that sets it apart from other religious sites. This significance can be partially ascribed to its nearness to the marketplace, where traders, customers, and clients congregate during prayer times. This combination has enabled the mosque to transform into an important centre for both worship and commercial endeavours, including shoe repairs, food sales, and market selling (Figure 13).

Figure 13: Antar Town (Central Mosque)



Source: Own photo

2.6.3. Sherbro Town / Bush Water

Sherbro Town and Bush Water are two closely proximate communities in Goderich, situated opposite each other, as depicted in Figure 15. Recently, due to the influence of politically prominent individuals, the Bush Water Road has become commonly identified as Solo B Drive Road, while the road in Sherbro Town (or Shabra, as some refer to it) is now popularly known as Wharf Road.

The designation change of Bush Water Road to Solo B Drive is linked to Mr. Solomon Berewa, a former High Court Judge and Vice President of Sierra Leone affiliated with the SLPP party (Berewa, 2011). His presence in the neighbourhood has elevated the area's importance, attracted wealthy individuals, and fostered an environment of prestige and influence. The presence of influential figures has altered social dynamics, significantly increasing demand for land and property values. This has stimulated local economic activity, with businesses flourishing to satisfy the demands of the expanding population. The progression of Solo B Drive illustrates the impact of influential figures on community advancement and economic growth. Significant livelihood activities encompass the establishment of retail establishments and localised sand extraction, both of which cater to the increasing demand for residential construction.

Likewise, Sherbro Town, now mostly known as Wharf Road (see Figure 15), has garnered attention owing to the construction of a jetty intended for fish preservation and the production of iced water. This jetty includes a refrigeration chamber to produce solid ice, enabling the storage and transportation of smoked and frozen fish to both urban and remote markets. Recent improvements to the regional road infrastructure have increased accessibility for vehicles transporting these goods. The region has experienced an increase in livelihood opportunities,

enabling residents to engage in diverse activities that sustain their existence. Economic activities in Sherbro Town and Bush Water frequently illustrate gender-specific roles. Women primarily engage in small-scale agriculture, a crucial element of household sustenance and local commerce. Historically, women in Sherbro Town have been the principal growers of crops like cassava, yam, and vegetables, which function as both sustenance and commodities for sale. Over 60% of the female demographic in these localities engages in agricultural labour (Jackson, 2021).

The beginnings of both villages date back to the early 19th century. Sherbro Town mostly comprises Sherbro folks, with a little Creole element, resulting in a distinctive cultural synthesis that has influenced local customs and economic activities (Little, 1967; Kup, 1975). The Sherbro, an indigenous community in the coastal parts of Sierra Leone, has a well-documented history that predates the resettlement era. This era subsequently witnessed the incorporation of Creole settlers after the end of slavery and the founding of Freetown (Kup, 1975). The ethnic makeup of the villages illustrates this historical amalgamation, with Sherbro origin prevailing and Creole cultural influences apparent from the 19th century forward (Alie, 1990). Recent surveys indicate that approximately 15–20% of the population is Creole (Statistics Sierra Leone, 2021). This demographic composition facilitates a synthesis of Sherbro and Creole cultural traits, evident in language, social structures, and economic activities.

Gender disparities are apparent in economic engagement. Men predominantly participate in fishing, an essential source of income and nourishment. Residents of these regions frequently depend on artisanal fishing for sustenance, employing traditional methods such as small fishing nets near the estuaries. Research indicates that over 65–70% of men in Sherbro Town and Bush Water are involved in fishing, underscoring its significance to the local economy (Olapade &

Sesay, 2019; Jackson, 2015). Fishing operations encounter difficulties, notably diminishing fish populations attributed to seasonality and, more significantly, industrial fishing practices and the utilisation of banned nets, jeopardising the lives of local communities (Okeke-Ogbuafor, Grey, & Stead, 2020). The cultural and political complexities intensify these issues, making solutions more difficult to implement. Notwithstanding these constraints, there exists a cooperative endeavour among individuals in both sectors to diversify revenue streams. This entails the commercialisation of agricultural and fishery products, enhancing economic resilience and alleviating the effects of market volatility (Jackson, 2022). Such efforts demonstrate the resilience and inventiveness of these communities in addressing economic issues.

Figure 14: Subsistence Agriculture in Bush Water



Figure 15: View of Bush Water & Sherbro Town Roads
(<https://mapcarta.com/W313926221>)

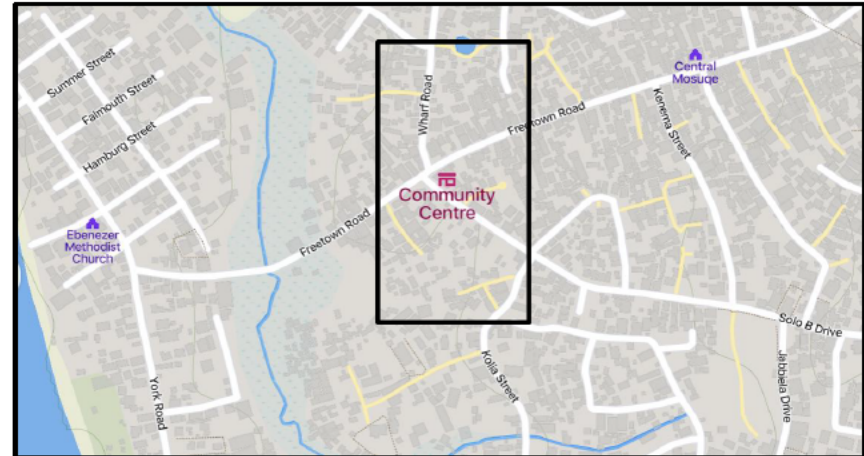


Figure 16: Informal or “Slum” settlement populated by recent migrants on the edge of Sherbro Town / Bush Water



Source: Own Photo

Like other communities, Sherbro cultural practices—such as music, dance, and storytelling—significantly enrich the local social fabric, functioning as vital elements of social and cultural capital (Sarjoh, 2020). Sherbro Town and Bush Water function as essential economic and social hubs for the larger Goderich region, whereas the Antar Town market offers a central venue for livelihood activities primarily conducted by the inhabitants of Sherbro Town and Bush Water, particularly emphasising fishing and subsistence agriculture. Goods derived from these activities are typically transported via keke, cars, and vans to major markets in Freetown (see Figure 17). Furthermore, the village Community Centre, which also houses the Local Council’s main administrative office, is strategically located between these communities and is commonly utilised by residents of Oba Funkia and Antar Town for hosting social events (see Figures 15 and 18).

Figure 17: Sherbro Town Street Activities



Source: Own Photo

Figure 18: Community Centre



Source: Own Photo

2.6.4. Milton Margai Community

The Milton Margai Community, headquartered around the Milton Margai Teachers College (MMTC), which attained university status in 2021, has undergone significant structural and socio-economic growth and transformation. The area has developed into a centre of opportunity, drawing people from many backgrounds, both locally and from afar. This transition has been greatly

influenced by the university's development and its increasing importance in the educational and economic domains.

The upgrade from MMTC to Milton Margai Technical University (MMTU) has served as a catalyst for local development, generating a ripple effect across other industries and livelihood activities. The anticipated \$18 million investment announced in July 2021 to promote university development is a significant milestone in this dynamic trajectory (Sierra Express Media, 2021). This investment is designated for the construction of new facilities, including lecture halls, dormitories, and additional campus infrastructure. This expansion will enhance the educational environment and provide substantial employment opportunities for both academic and non-academic workers. This includes an opening in the construction sector, where the need for workers in building and infrastructure projects is anticipated to rise, with duties for educators, administrative personnel, and supplementary support staff inside the institution.

This university initiative has wider socio-economic implications for the community. The university's development will increase the need for housing, commercial establishments, and other services. The increasing number of students and workers has necessitated the formation of new companies, including educational institutions, retail outlets, guesthouses, pharmacies, confectionery shops, and a paint production plant (See Figures 20 & 21). Each of these enhancements creates employment opportunities and produces cash, eventually revitalising the local economy. The enhancement of regional road networks has increased accessibility, hence increasing the appeal of the Milton Margai Community for habitation, relocation, and investment. However, the rapid growth and advancement, whilst generating new opportunities, also present certain obstacles. A significant challenge for the community is the increasing cost of living,

especially with land and property values. Residential rentals have increased markedly as demand for housing exceeds availability. The increase in property values indicates the gentrification process, characterised by an influx of affluent individuals and enterprises, resulting in the displacement of lower-income citizens. The economic inequalities within the community are more apparent, as some inhabitants grapple with the escalating costs of housing and other items, notwithstanding the emergence of new work opportunities (Jackson, 2022). Moreover, the university is regarded as being ideally positioned to capitalise on first-choice placements and even (part-time or full-time) job opportunities for students enrolled in the undergraduate Laboratory Science programmes at the Emergency Hospital, which is conveniently located within walking distance of the university's main campus in Goderich.

Figure 19: Milton Margai Technical University (MMTU) Campus



Source: Own Photo

Figure 20: Commercial and educational buildings along MMTU Street



Source: Own Photo

Figure 21: Paint Factory along MMTU Street



Source: Own Photo

2.6.5. Maggay Town (incorporating Femi Turner, MetChem and Fonima)

Maggay Town (also spelt by some as Marjay), a notable community within the Goderich area, includes sub-areas such as Femi Turner, MetChem, Fonima, and the 7th Battalion Military Barracks (See Figure 22). This community presents a distinct socio-economic profile within Sierra Leone's peri-urban landscape, combining established family networks, recent migrants, and a large youth population engaged in diverse livelihoods. The area's unique combination of local resilience, economic variety, and population diversity showcases how Goderich's communities balance development opportunities and traditional networks in response to urban challenges (Department of Economic and Social Affairs, 2021).

The population in Maggay Town is diverse and growing, reflecting Goderich's overall expansion due to migration and growing employment opportunities. Many families here represent long-established networks, while new residents, particularly youth, are drawn to the area's economic

prospects. According to Statistics Sierra Leone (2023), the Goderich region has seen a 2.1% annual increase in population, much of it concentrated in areas like Maggay Town that are located near to construction and retail centres. Compared with neighbouring communities such as Lumley, Maggay Town has a denser and more youthful demographic, with a large proportion of working-age individuals supporting household incomes through informal sector activities (Statistics Sierra Leone, 2023). Due to its central proximity to other local towns and good access to the road network, it also serves as a dormitory location for professionals working at the prominent Emergency Hospital, which is situated near the Milton Margai community (Emergency, Online).

Figures 22 and 23 illustrate the rapid growth in economic activities in Maggay Town. Figure 22 highlights the vibrant intersection at Femi Turner, a centre for small businesses providing food, electronics, and many services. Figure 23 depicts the locations of building material enterprises and timber supply outlets in MetChem, emphasising the region's association with the construction boom in Sierra Leone. This phenomenon is evident in the entrepreneurial activities of the youth around Maggay Town, who mostly participate in the informal sectors of retail and transportation to mitigate the lack of formal work opportunities (Cubitt, 2011).

The Femi Turner neighbourhood, situated in Maggay Town, has become well known due to its association with former President Ernest Bai Koroma, who owns a property locally. This has increased the area's reputation, significantly improving its socio-economic profile. The presence of a prominent political figure has enabled the area to get significant attention, hence facilitating its modernisation. New structures have been constructed, as seen in Figure 22, to attract a diverse array of livelihood activities, including building material stores for house construction, restaurants, mini-marts and car auto repair facilities. These changes emphasise the influence of prominent

persons on urban planning decisions and local economic activity. This phenomenon of political impact on urbanisation has been thoroughly examined by Harpham & Boateng (1997). This interaction between politics and peri-urban development corresponds closely with worldwide trends, as Rondinelli (1983) has shown by highlighting how important individuals may stimulate economic and infrastructure investments in urban peripheries.

Generally, economic activity around the vicinity of Maggay Town is characterised by a blend of formal employment, mostly linked to the Military Battalion Barracks, and Emergency Hospital, which is approximately two miles away, and informal trade concentrated in locations such as Femi Turner and MetChem. The construction industry's rapid expansion has further elevated MetChem's significance, with businesses in the area providing critical materials and employment (Environmental Protection Agency, 2021; Jackson, 2015a). Informal savings groups and lending initiatives have also fostered economic resilience, enabling residents to navigate economic volatility while supporting small business investments (Jackson, 2023).

The findings of SLURC's Community Action Area Plans (CAAPs) highlight the importance of participatory planning in addressing urban challenges. This approach is exemplified in Maggay Town, where communal lending and mutual support networks enhance household stability. The networks illustrated in the daily operations of informal marketplaces in Femi Turner (Figure 24) aid the community's adaptation to economic and infrastructural limitations (SLURC, 2023a).

Although Maggay Town benefits from better service access than informal settlements like Cockle Bay, challenges persist in areas such as healthcare and infrastructure. SLURC's research on urban health and wellbeing highlights the interconnectedness of socio-economic and infrastructural

factors in shaping wellbeing, which is evident in Maggay Town's efforts to navigate these challenges while maintaining economic vibrancy (SLURC, 2023b).

Compared with neighbouring areas, Maggay Town's socio-economic attributes align closely with SLURC's findings on communities such as Cockle Bay and Dworzark. While Cockle Bay faces challenges like flooding and poor housing, Maggay Town capitalises on its proximity to construction hubs for economic opportunities. However, both areas exhibit a strong reliance on informal economies and community networks to sustain livelihoods (SLURC, 2023c).

Maggay Town exemplifies the need for integrated urban development policies that recognise informal economies as critical components of resilience. SLURC's insights suggest interventions such as formalising financial systems and improving access to infrastructure to sustain and enhance the socio-economic contributions of peri-urban communities like Maggay Town, which is also a topical area for study undertaken by Lynch, Maconachie, Binns, Tengbe & Bangura (2013).

Figure 22: Busy Road intersection and transportation centre featuring business establishments along Femi Turner, leading to Maggay Town



Source: Own Photo

Figure 23: Construction material retailers and timber supply establishments along MetChem



Source: Own Photo

2. 7. Natural Capital and Livelihoods in Goderich

Goderich is shaped as much by its proximity to Freetown as to the much closer Peninsular hills and Atlantic Ocean (Figures 4a and 4b). This section emphasises the link between environmental characteristics and livelihoods, highlighting the influence of Goderich's location on rainfall patterns, water resources, and soil fertility, while also drawing attention to its vulnerability to disasters such as landslides caused by human action like sand mining along the beach. Jackson (2023) emphasises that places like Goderich, which use natural resources such as fertile soils and marine biodiversity, are integral to livelihood strategies in Sierra Leone, especially in peri-urban areas. Schnabel et al (2022) emphasise that freshwater resources and arable land in Sierra Leone's coastal regions are vital for subsistence agriculture and food production. Goderich is especially susceptible to environmental concerns such as climate variability, floods, erosion, and saltwater intrusion. Karim (2024) perceives these difficulties as substantial threats to resource-dependent economies, particularly in Sierra Leone, where environmental degradation exacerbates vulnerabilities.

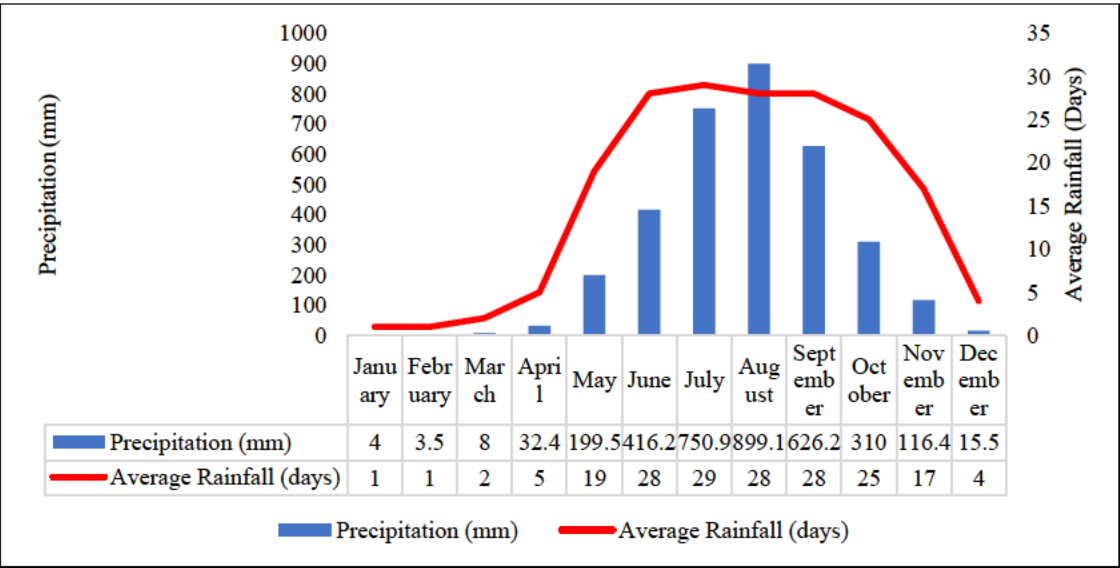
This section examines the relationship between Goderich's natural characteristics and its primary economic activities, focussing on precipitation patterns, water resources, soil fertility, and fishing dynamics. Data from the Sierra Leone Meteorological Department, combined with analysis by Schnabel et al. (2022), indicate that rainfall unpredictability substantially impacts agriculture, often disrupting interrupting planting cycles and freshwater supply. Soil fertility, crucial for smallholder agriculture, is progressively jeopardised by erosion and seawater intrusion, as indicated by Jackson (2023). Additionally, artisanal fishing—a crucial income source in Goderich—confronts sustainability issues stemming from overfishing and the effects of climate

change on marine biodiversity (SEND Sierra Leone, 2024). Proactive measures, including the integration of sustainable agricultural techniques and the development of adaptive resource management systems, have been proposed to alleviate these impacts and strengthen livelihood resilience in comparable coastal environments, as shown by Karim (2024).

2.7.1 Rainfall

Goderich experiences a unimodal rainfall pattern, with the rainy season lasting from May to November, peaking in July and August (See Figure 24). Annual precipitation averages between 3,000 and 4,000 mm; however, fluctuations in intensity, distribution, and timing are affected by climate change. Precipitation patterns are essential for agricultural practices since they dictate the timing of planting and harvesting for crops like rice and vegetables. Fluctuations in precipitation may result in issues such as flooding and soil erosion, thereby impacting agricultural productivity and soil fertility (Wadsworth, Jalloh, & Lebbie, 2019).

Figure 24: Rainfall (mm) Average in Goderich



Source: World Weather (Online)

Climate change has significantly increased extreme weather occurrences, such as severe storms and prolonged droughts, harming agricultural cycles and fisheries worldwide (IPCC, 2007). These changes are particularly noticeable in coastal locations like as Goderich, where irregular precipitation patterns exacerbate soil erosion and agricultural failures (Sulaiman, 2016). Intense precipitation during the rainy season frequently causes floods in low-lying areas, with runoff influencing water salinity and turbidity, hence reducing fish breeding habitats, as noted by de Carvalho, Amaral, and Alves, 2023. Climate problems emphasise the urgent need for adaptive methods to mitigate their negative impacts on livelihoods.

A study by FAO (2016) indicates that the rainy season is essential for cultivating water-dependent crops such as rice and cassava, which flourish with a reliable water supply. Fishing activities at the Shallow Water Beach benefit from nutrient-rich runoff that increases marine productivity. Nonetheless, the advantages of precipitation are accompanied by risks, such as transportation difficulties and limited access to fishing areas due to flooding (FAO, 2015a). Strategies for sustainable land management, such as agroforestry and soil conservation, are essential for alleviating these dual impacts, reducing soil erosion, and protecting aquatic ecosystems, as demonstrated by Sauer (2021).

From December to April, the dry season is characterised by Harmattan. Consequently, issues such as precipitation can be mitigated, water scarcity increases and salt intrusion diminishes the water levels of coastal wells or bores (UNDP, 2018; Fergusson & Gleeson, 2012). Soil moisture rises with increased dust concentrations and wind velocities caused by the Harmattan (Adhvaryu et al, 2024). Despite these limitations, the dry season continues to enable subsistence activities, including air fishing for dried fish, salting, textile production, bamboo basket crafting, and salt extraction from evaporated saltwater in coastal basins and estuaries, which normally takes place

across different communities in Goderich. These industries illustrate the economic consequences of the dry season, the significance of which is sometimes undervalued. Turay (2022) asserts that improving the cultivation of water-efficient crops and diversifying income sources may bolster resilience during this time. Understanding and applying precipitation patterns is essential for fostering sustainable living in regions such as Goderich. The integration of historical knowledge with contemporary research fosters a flexible approach, ensuring the sustainability of livelihoods amid climate fluctuations (Ford et al, 2016). This will ensure the stability of the local economy and enhance communities' preparedness for future climate problems.

2.7.2: Water Resources

Water is an essential resource in Goderich. It is vital for agriculture, industry, and various domestic applications. The principal sources of these fluids are boreholes and wells, which are plentiful in areas like Oba Finkia and are widely dispersed throughout the Goderich haul region. Water is currently supplied to suburban residences in this former colony because of deforestation and related environmental issues that intrude upon sacred land for the production of professionally processed potable WAPFoR water. This relies on hydrological resources that are readily accessible across Sierra Leone, which others seeking to engage cannot access without coordinated support.

These water resources are replenished during the rainy season. Nevertheless, the arid season presents significant challenges, especially concerning declining water levels and saltwater encroachment. Saltwater intrusion is especially severe in low-lying coastal areas, where excessive groundwater extraction exacerbates the problem (Sankoh et al, 2023; Werner, Ward, & Morgan, 2013). This invasion has degraded the quality of freshwater resources, affecting both drinking water and agricultural output.

The recent rise in rainwater harvesting in Goderich has provided an alternative potable water source during dry periods when surface water diminishes or subterranean aquifers are depleted (Gould & Nissen-Petersen, 2020). This approach, coupled with sophisticated irrigation technologies like drip and sprinkler systems, improves agricultural productivity and diminishes reliance on exhausted groundwater resources (FAO, 2015b). Furthermore, affluent residences have implemented solar-powered water pumps in areas surrounding Milton Margai and Maggay Town (including Femi Turner) to enhance access to potable water in isolated areas, thereby augmenting resilience to seasonal fluctuations, as evidenced by a World Bank (2017) study. According to Adenle (2020), these improvements reduce dependence on traditional sources while enhancing resilience to climatic change.

In the rainy season, water supply sustains both agriculture and aquaculture, which depend on consistent freshwater sources (Ahmed & Glaser, 2016). Nevertheless, substantial precipitation, especially in July and August, heightens the risk of pollution from agricultural runoff and other pollutants, hence requiring consistent repair of water infrastructure (Ariom et al., 2022). Community-driven efforts, such as borehole monitoring groups, have demonstrated efficacy in tackling these concerns. As elsewhere, these efforts enable local communities to assume responsibility for water resource management, guaranteeing sustainability and reliability (Bangura, Lynch & Binns, 2012).

Policy actions are crucial for the protection of water resources. Regulatory systems to limit groundwater extraction and deforestation, with the aim of avoiding pollution are crucial for guaranteeing long-term sustainability (United Nations, 2020). Public-private partnerships can enhance investments in water infrastructure, hence enhancing access and quality (Harris, Kooy & Jalloh, 2012). Cooperation among governmental agencies, non-governmental organisations, and

local populations is fundamental to efficient water management policy. (OECD, 2018). The water resource challenges in Goderich can be effectively mitigated through the amalgamation of optimal traditional and contemporary technologies, as delineated in the model plan proposed by Adger, Arnell & Tompkins (2005). Such actions safeguard the livelihoods of the local populace from present climate-induced consequences. They enhance individuals' capacity to adapt to fluctuations in environmental weather. Local capital must remain uncompromised. To ensure the long-term sustainability of agricultural and fisheries production, appropriate water management strategies must be employed in this sector.

2.7.3. Soil Fertility

Soil fertility in Goderich is essential for agricultural output but is limited by the largely sandy and acidic soils, especially in Oba Funkia, which are defined by low organic matter and nutrient content. Deforestation and erosion intensify soil deterioration, diminishing the land's capacity to sustain agriculture. A recent study by Sankoh et al. (2021) for the Environmental Protection Agency (EPA) indicates that unsustainable land-use practices near Maggay Town / MetChem significantly reduce soil productivity, underscoring the urgent necessity for sustainable soil management strategies in regions like Goderich. Macarthy (2012) similarly underscores the detrimental effects of environmental deterioration on urban development in Freetown, advocating for a comprehensive land management policy.

Agroforestry has been acknowledged as an excellent solution for soil fertility challenges in towns like Goderich. Agroforestry enhances soil structure, increases organic matter, and optimises nutrient cycling by integrating trees with crops. This approach additionally provides benefits, including protection against wind erosion during the Harmattan season and alternative revenue through tree crop production. Munro (2020) illustrates the efficacy of agroforestry in enhancing

agricultural output and resilience in comparable locations. Moreover, research by Björkemar (2014) highlights agroforestry's role in mitigating soil degradation in Sierra Leone's coastal regions, aligning with the need for climate-resilient agricultural practices.

Soil fertility is improved through composting, a sustainable practice that benefits the livelihoods of peri-urban villages such as Goderich. The utilisation of compost produced by extant poultry and piggery operations in the Oba Funkia and Maggay Town has the potential to substantially enhance this practice. Composting increases the organic matter in the soil, thereby enhancing its fertility and improving its moisture retention capacity in arid conditions. Local farmers have adopted composting methods, supported by training programs that promote the use of organic waste to produce high-quality compost. GOAL Sierra Leone (2013) emphasised that composting reduces reliance on synthetic fertilisers while fostering environmental sustainability by minimising waste and improving soil health.

Community initiatives are crucial for addressing soil fertility issues. Efforts to adopt organic fertilisers, coupled with educational initiatives on sustainable agricultural methods, have gained momentum in Goderich. Government entities such as the Ministry of Agriculture and other organisations like Plan International assist with these initiatives. They convince individuals to employ new technologies by providing them with the appropriate combination of financial incentives and technical assistance. The research conducted by Biot, Sessay & Stocking (1989) suggests that traditional wisdom and modern farming methods are establishing a mutually beneficial partnership that has been highly effective in increasing the fertility of the soil and the productivity of agricultural communities, including those in Sierra Leone.

By tackling the fundamental causes of soil degradation and adopting sustainable practices, Goderich can enhance its agricultural capacity while conserving its natural resources. The

integration of agroforestry, composting, and other innovative methods will enhance soil fertility and strengthen the community's resilience to environmental challenges. The Green Climate Fund (2024) contends that these initiatives are crucial for guaranteeing food security and protecting livelihoods in Sierra Leone, especially in areas with susceptible agricultural systems.

2.7.4 Climate Trends and Livelihood Vulnerabilities

In Goderich, extended climatic changes indicate a decrease in yearly precipitation and an increase in the variability of weather patterns. Climate change profoundly affects the community's water resources, agriculture, and fisheries, further intensified by the deforestation observed near Maggay Town and Milton Margai. The Sierra Leone Meteorological Department (2021) has recorded trends indicating that rising temperatures and diminished precipitation are changing agricultural cycles, water resources, and marine ecosystems. Sankoh et al. (2021) examine the impact of climate-induced stress on water supplies in coastal regions such as Goderich, emphasising the urgent need for adaptive strategies to support both rural and urban populations.

The enduring climatic conditions in Goderich are influenced by deforestation and unregulated development (refer to Figures 16 and 25). These activities heighten susceptibility to extreme weather phenomena, such as floods and landslides, and disturb natural ecosystems. Jackson (2023) references the 2017 mudslide in Freetown as a definitive example of how human activities intensify climate risks. Turay (2022) links unrestricted land use to increased soil erosion, deforestation, and a reduction in biodiversity, all of which intensify climate-related vulnerabilities. Resolving these issues requires a synthesis of reforestation, soil conservation, and land-use planning to alleviate the effects of climatic variability.

Adaptation strategies are essential for mitigating the risks linked to prolonged climatic trends. Farmers in Goderich, especially near Oba Funka, are currently assessing climate-resilient crops, such as Lowland Variety Rice, Cassava, Okra, and Moringa, that can withstand temperature fluctuations and drought conditions (Jackson, 2015). Fishermen are employing innovative strategies, including seasonal fishing calendars and enhanced storage technologies, to adapt to variations in marine productivity. Reingold (2019) underscores that these solutions get support from federal and international agencies that provide technical assistance and funding for capacity-building initiatives designed to promote community-based climate adaptation.

Alongside adaptation, mitigation strategies are crucial for tackling the fundamental causes of climate change. Climate change mitigation may be accomplished by decreasing greenhouse gas emissions through renewable energy initiatives and promoting sustainable practices in agriculture and fisheries. Jonas (2016) and Anik, Khan & Sayed (2012) underscores the need of integrating local knowledge with scientific research to develop mitigation strategies that address the specific challenges faced by coastal regions, which is also typical of a community like Goderich. Cooperative initiatives among local communities, official bodies, and non-governmental organisations are essential for the efficient implementation of these policies.

There is a possibility that Goderich would be able to devise comprehensive solutions to address the challenges that are brought about by climate change if community members are able to grasp the relationship between climatic trends and livelihood activities. These plans must combine urgent needs with long-term sustainability objectives to save natural resources and enhance the resilience of local families. Macarthy (2012) emphasises that an integrated plan including both adaptation and mitigation is essential for the long-term sustainability of vulnerable coastal communities in Sierra Leone.

2.7.5 Livelihood Calendar and Prospects

Table 4 illustrates the livelihood calendar for Goderich, which offers a comprehensive understanding of the community's (economic) livelihood strategies and their capacity to adjust to seasonal fluctuations. This concept underscores the importance of the interaction between primary and subsidiary activities in the preservation of year-round livelihoods.

Table 4: Seasonal Pattern on Livelihood Pursuit				
Season	Main Livelihood Activities	Subsidiary Activities	Primary Participants	Location
Rain (May-Nov)	Fishing and Rice cultivation	Farming (mainly vegetables), Sand mining and Wood fetching	All gender, including Youth	Deep sea, Estuaries, along riverbanks and forested locations.
Dry (Dec-Apr)	Silvo-pastoral agroforestry system – involving forage plants, livestock rearing and Wood fetching	Fish smoking / Air-drying and Salt production, Bushmeat Hunting, Stone-quarrying and Sand mining	Traders – dominated by women	Mostly in farmland and seafront for sand mining activities.
Harmattan (Dec-Feb)	Craft-work such as Bamboo-carving and groundnut farming	Fish smoking / Air-drying, Bushmeat Hunting, Stone-quarrying, Sand mining and Wood fetching.	The ages, particularly younger men and women	Along fertile land areas, seafront and forest areas.
Source: Own Assessment and adapted from FEWS Net, 2017				

Table 4 delineates the seasonal pattern of livelihood activities in Goderich, specifying the principal endeavours, ancillary revenue sources, participants, and locations. The rainy season (May–November) is characterised by fishing, utilising artisanal wooden boats typically powered by outboard engines and paddles, as well as rice cultivation, concentrated in the Shallow Water and Bush Water regions, which rely heavily on Goderich's natural water resources. The nutrient-rich effluents during this season facilitate fish migration and reproduction, resulting in increased yields. These activities are crucial for food security and income generation, particularly for those dependent on agriculture and fishing (FEWS Net, 2017). Nonetheless, occurrences such as floods

hinder agricultural production, threatening livelihood stability. Addressing this issue necessitates investments in flood-resistant infrastructure and improved logistics to sustain economic activities and support livelihoods during this critical season, particularly for those affected, as emphasised in Turay's report (2022).

In the arid season (December–April), a shift occurs towards non-agricultural livelihoods, including silvo-pastoral agroforestry systems, salt production, and the drying or smoking of fish, primarily sourced from small artisanal paddle fishing vessels, referred to as “canoe-canoe,” operated by experienced traditional fishermen, as observed by Jalloh (2009). These operations are vital revenue streams, particularly for dealers, with women exhibiting significantly increased participation in these enterprises. The storage and commerce of excess fish are enabled by salt production and fish preservation, which guarantees food accessibility and stabilises household income during times of restricted agricultural prospects. This diversification highlights the community's resourcefulness in improving economic productivity despite the challenges posed by the drought season (FEWS Net, 2017; Fanthorpe & Gabelle, 2013).

The wooded areas adjacent to Milton Margai Technical University present distinct economic prospects during the Harmattan season (December–February), encompassing artisanal crafts and bushmeat hunting, notably bamboo carving, primarily undertaken by men. Additionally, groundnut cultivation in the Bush Water area is possible during this time. These endeavours are particularly well suited to the dry and dusty conditions, rendering them essential to the seasonal livelihood cycle. Haroun-Kamara, Koroma, & Kallon (2016) and Fastercapital (Online) have noted that artisanal crafts and bush-meat hunting provide subsistence income and aid in the preservation of cultural heritage, especially for secret society hunters, while groundnut cultivation optimises yields in arid soil conditions. This season's seafood preservation remains economically beneficial

for women and adolescents, despite health risks and restrictions on outdoor activities due to powdery winds. The community's capacity to prosper despite diverse climatic challenges is demonstrated by its adaptation during the Harmattan season (Jackson, 2023).

The collection of wood is also vital to the sustenance of Goderich inhabitants, serving as both a standalone endeavour and in conjunction with other subsistence activities, such as stone quarrying and sand mining, especially among the young and adult males (Munro, n/d). Table 4 demonstrates that these activities continue nearly throughout the year (during the Rainy, Dry, and Harmattan seasons), highlighting their critical role in the seasonal livelihood calendar. This also involve the sale of wood logs transported by trucks across all communities in Goderich.

The rising rate of deforestation, especially in the last twenty years due to the peri-urban expansion of Goderich, has compelled the relocation of numerous wood-extraction activities—such as charcoal production, logging, and board sawing—leading to heightened effort and costs related to these activities (Jackson, 2015; Munro, 2009). Notwithstanding the recognised challenges, various studies, such as those by Arnold et al. (2003) and the WHO (2004), have underscored the importance of wood collection for the daily cooking needs of many households. This fuel source functions as the principal option without economic alternatives. This practice has been frequently noted among families in Goderich, especially on weekends and during school holidays, and has been historically documented by Köhlin et al. (2011). It is often regarded as a picnic. The principal objective, as emphasised in the FAO (2017) study, is for family members participating in activities in the bush or forest to return with a bundle or log of wood for domestic use or supplementary income; this may occasionally include bush-meat hunting, with traps strategically positioned in dense forest regions near Milton Margai to capture game such as deer and moose-cat.

Furthermore, engaging in wood fetching as a livelihood enhances secondary income sources, especially in fish smoking, which is crucial for preserving the fish supply in Goderich, where fish marketing is a primary means of sustenance for nearly the entire capital city, Freetown (Munro, n/d). The dual function of wood procurement—particularly for residential and commercial uses—underscores its significance in maintaining food security and economic stability, especially for women and adolescents predominantly involved in the fish-smoking sector. Cline-Cole's (1987) study on charcoal production highlights the ongoing reliance on traditional energy sources in the Freetown peninsula, particularly in Goderich. The ongoing yet flexible practice of wood fetching in Goderich's changing environment underscores its practicality as a livelihood strategy in the face of environmental degradation and varying socio-economic conditions, illustrating the intricate relationship between resource extraction and urban development.

2.7.5.1. Significance of Livelihood Alternatives

The importance of alternative and supplementary occupations in sustaining economic stability during the seasonal cycle is illustrated by the range of activities presented in Table 4. The cultivation of vegetables during the rainy season increases the income of women and youth, providing a protective measure against the challenges posed by intermittent agricultural activities and inundation. Sand mining, typically occurring in the Oba Funkia region during the rainy season, and stone quarrying, focused on the forested areas along Milton Margai during the dry and Harmattan seasons, offer essential income-generating opportunities for both genders, especially the youth (Jackson, 2016). This may be due to the persistent rainfall, which hampers the ability of outboard vessels to navigate the sea during fishing expeditions.

The local economy is largely dependent on fishing, which is subject to substantial seasonal fluctuations. The rainy / wet season is characterised by higher tides, which enhance harvests.

Conversely, the dry season necessitates shallow-water fishing and aquaculture due to diminished tides. Aquaculture offers a sustainable, enduring solution that does not deplete existing marine resources. Balana, Aghadi & Ogunniyi (2022) contend that this essential venture could benefit from investments in modern fish processing and storage facilities, as demonstrated by the Jetty at Sherbro Town. Such facilities could increase value addition and decrease post-harvest losses.

Craft production, intertwined with wood collection due to its connection with diverse tree products, is generally performed by both sexes in the sparsely forested areas surrounding Maggay Town during the Harmattan season. This practice is crucial for revenue diversification and cultural preservation. Bamboo carving activities captivate children, safeguard traditional skills, and provide economic prospects. The Goderich community demonstrates exceptional adaptability and ingenuity by synchronising its economic activities with seasonal trends. The application of various economic strategies over the year promotes sustainable living by bolstering resilience to climatic and economic challenges (FEWS Net, 2017; Turay, 2022).

2.7.5.2. Environmental and Health Hazards

Photographs depicting unplanned domestic and/or illegal commercial fishing waste disposal (Fig 14) and forest clearance (Fig 25) provide visual representations of livelihood outcomes as environmental impact and threat to wellbeing in Goderich. Take the case of the impact on the nearby aquatic environment of unplanned waste disposal by the inhabitants of informal/unplanned housing which has sprung up to cater to a growing migrant population near Antar Town. As Figure 14 shows, not only do locals use the nearby river crossing for laundry and bathing in increasing numbers, but the domestic and other waste they generate is simply dumped, alongside that from nearby fishing activity, in and along the river valley and banks, and along the oceanfront. The

resulting accumulation of empty cans, plastic bags, fish, food and faecal matter, among other waste, has become a significant health hazard and worsening threat to local well-being.

Elsewhere, around Maggay Town, population growth and settlement expansion are similarly impacting significantly, on natural resources in ways that both reflect ongoing and threaten future, natural capital use in pursuit of livelihoods. Here, hillside and mountaintop forests and woodland are being cleared to make way for human settlement and infrastructure, with serious implications for soil erosion, flooding and biodiversity loss, among other hazards (Mihai et al., 2022; Jackson, 2023), which put lives and livelihoods, including economic and commercial capital in the form of buildings and other infrastructure, at increased risk (Figure 25). Taken together with the combined effect of torrential and sand mining on coastal erosion along Oba Funkia beach and cemetery are discussed in Chapter 7, these raise questions regarding local environmental and health hazards, as well as livelihood sustainability. Understanding what drives unsustainable use levels and intensities of natural capital in pursuit of livelihoods in this way must be a necessary first step in identifying potentially effective intervention strategies, which attend to local realities and complexities. Adopting sustainable practices, including the integration of climate-resilient crop varieties, soil enhancement techniques, and agroforestry, is crucial for tackling these challenges (Björkemar, 2014).

2.7.5.3. Future Prospects: Implications for Policymakers and Academic Research

Efficient management of natural capital necessitates a holistic approach to sustainability, integrating community engagement within legal parameters. The economic stability and ecological sustainability can be enhanced by transitioning from conventional fishing techniques to aquaculture. Goderich's scenic coastline and cultural heritage are leveraged to promote

environmental stewardship and generate alternative revenue streams through eco-tourism, which is currently underutilised (Sankoh, Kamara & Kamara, 2024).

Resolving these challenges requires a comprehensive understanding of the interconnections between livelihoods and environmental resources. Utilising integrated development strategies that prioritise sustainability, Tincani (2012) asserts that Goderich can achieve a balance between socio-economic advancement and environmental conservation, so securing a sustainable future for its residents.

Figure 25: Hill-Top/Forest Clearance around Maggay Town



Source: Own Photo

2.8. Chapter Summary

The political economy, natural resources, and socio-political dynamics of Goderich affect the community's livelihoods. The population surge and post-conflict migration have resulted in considerable urbanisation in the region, heightening the demand for natural resources and diverse livelihood opportunities. The interplay of local governance, patron-client relationships, and power dynamics is essential to these transformations, often influencing access to resources and livelihood prospects. This governance framework is complicated by political patronage networks, diverse

informal and formal institutions, and structural inequalities. These situations highlight the need to comprehend the socio-political and economic landscape of Goderich to effectively address livelihood challenges.

The subsistence of Goderich relies on natural capital. Agricultural and fishing enterprises, essential to the local economy, are supported by the region's abundant resources, including freshwater, marine biodiversity, and cultivable land. Nevertheless, these resources are at risk due to environmental degradation, climate instability, and overexploitation. Erratic rainfall patterns and deforestation exacerbate soil erosion and decrease agricultural productivity. Similarly, marine ecosystems are subjected to stress due to exploitation and insufficient resource management. To tackle these challenges, it is imperative to implement sustainable solutions such as agroforestry, decomposition, and climate-resilient practices. These methods enhance productivity while maintaining environmental integrity.

The socio-economic diversity and local cultural networks enhance the livelihood systems of Goderich. Communities rely on traditional alliances, covert groups, and informal economic systems to tackle challenges and sustain their livelihoods. However, urbanisation and economic growth have generated disparities, since increasing living costs and environmental risks disproportionately affect underprivileged people. Comprehensive development initiatives, like as eco-tourism, aquaculture, and infrastructure enhancements, provide the potential to harmonise economic advancement with social equity and environmental sustainability, so assuring the long-term viability of livelihoods in Goderich.

Subsequently, Chapter 3 offers a comprehensive description of the research methodology, elaborating on the rationale for this study introduced in Chapter 1, along with the political economics and contextual insights discussed in this chapter. This will outline the precise

methodologies used to evaluate livelihood diversification in and around Goderich, providing a framework for the collection, analysis, and synthesis of results to satisfy the study's particular research enquiries.

CHAPTER 3: RESEARCH PHILOSOPHY, DESIGN AND PRACTICE

3.1. Introduction

This chapter delineates the context of the field research undertaken in particular regions adjacent to Goderich. The preliminary stage entailed meticulous planning, followed by identifying appropriate sample age cohorts, specifically individuals aged 18 and above. This research is an empirical effort employing diverse data collection techniques, such as household surveys, focus group interviews, town hall meetings, participant observation, and Townhead interviews. The activities required engagement with residents, including households, organisations, and individual participants, as well as representatives from the Western Area Council and NGOs active in and around Goderich.

The main aim of this study is to improve our understanding of how sustainable livelihood diversification can promote economic, social, and environmental sustainability in Goderich and its surrounding areas. The objective extends beyond enhancing our knowledge of the essential elements of livelihoods in Goderich; it also seeks to examine the potential of this knowledge to strengthen and sustain local livelihoods, thus promoting the community's welfare. The project's primary objective, driving its undertaking, is to conduct the first comprehensive baseline livelihood survey with a particular focus on livelihood diversification, a persistent issue among the residents of Goderich (Staddon, 2023).

3.2. Research Philosophy and Design

Research philosophy is an essential element of the research process, as it influences the study's perspective on the dynamics of subsistence in Goderich. Saunders, Lewis & Thornhill (2007)

contend that research methodologies are essential components of the research conceptual framework. Commonly, two critical research philosophies, namely positivism and interpretivism, are recognised and their merits and demerits debated during research such as the current one (Saunders et al., 2007). As Saunders et al. (2007) and others have noted, while positivism is firmly grounded in empirical observation and adopts an objective standpoint to derive inferences, interpretivism is typically characterised by subjective reasoning, relying on the interpretation of phenomena. The challenge is usually to decide whether to engage with the ontological pursuit of epistemological exploration subjectively (interpretivist) or objectively (positivist) (Debessa, 2018; Jackson, 2016a).

However, given the dichotomy separating discourses of positivist and interpretive views of research and their approaches, researchers widely adopt a compromise or pragmatist view (Morgan, 2007; Saunders et al., 2007). Such an approach is modelled on the proposition that the research aim guides researcher approaches in dealing pragmatically with the inevitable challenges associated with studying the complex and dynamic ways in which people earn a living. Given the practicality of dealing with real-life phenomena, this study considers a pragmatic philosophical standpoint necessary. The favoured approach is thus that of mixed methods, incorporating the use of both quantitative and qualitative techniques. Such methodological mixing makes it both practical and valid, allowing a focus on the suitability of the techniques in addressing specific research problems/questions, rather than on, say, debating the strengths and limitations of Positivism per se.

It is for this reason that the research process for this study considered both qualitative and quantitative approaches to address its research aim. To avoid the problem of unfounded

assumptions about livelihood capabilities, quantitative and qualitative data analytical tools were used to uncover patterns and trends in livelihood management strategies or practices. Mixed methods research is appropriate for evaluating sustainable livelihood diversification because of the complex and dynamic nature of livelihoods. By combining qualitative and quantitative methods, researchers can achieve a comprehensive understanding of the factors influencing livelihoods, including their contextual elements and underlying dynamics. This method enables a comprehensive evaluation of sustainable livelihood diversification, offering critical insights for the development of effective policies and interventions.

3.3. Fieldwork Matters

3.3.1 Rationale for the Selection of Study Areas

The research site is Goderich, comprising several sub-communities: Oba Funkia, Antar Town, Sherbro Town, Milton Margai, and Maggay Town, each delineated by its respective boundaries (Figure 4). Each sub-community has unique characteristics, particularly in terms of ethnicity, cultural activities and, most importantly, livelihood activities, that help define individual and group existence (see Section 2.6 for details). Located on the Atlantic Ocean, Goderich is well endowed with natural livelihood assets or capitals, such as access to seafront locations, which are widely recognised for fish production and associated activities. It also boasts forested hills rich in biodiversity (for example, bush-meat), whose upper slopes offer panoramic views across the Atlantic Ocean. At the same time, foothills extend in places all the way to the seafront mentioned above. Also, located only a few miles south of Freetown, peri-urban Goderich's long-standing and diverse livelihood and other links with this rapidly growing and expanding national capital city are currently intensifying, to the extent that some people now describe Funkia Market in Goderich as

one of Freetown's largest markets (Munro, n/d). This evolution has had potentially far-reaching consequences for the local economy, society and environment, as elucidated in Chapter 2.

Goderich is thus a good location for exploring livelihood activities pursued by its permanent and non-permanent residents, many of whom commute to or from the settlement in pursuit of their livelihoods. Despite the plethora of studies on livelihoods worldwide, there has been limited research focusing specifically on livelihood diversity and diversification amidst limited access to resources among peri-urban inhabitants, either in Goderich or Sierra Leone more generally (Igwe, 2013; Jackson, 2015a and b), although urban agriculture, and youth, forest and mining livelihoods in the country have received much recent attention (Bangura et al., 2023). The present study represents a pioneering effort in attempting a comprehensive baseline livelihood survey. This research incorporates a mixed-methods approach to enhance the overall outcome pertaining to the intertwined issues of population or societal well-being and the long-term sustainability of the physical or natural environment.

More generally, this thesis aims to explore broader issues around trends in access to livelihood assets and adaptive mechanisms utilised by people, including in times of stress or in the face of recurrent and new shocks. To capture all these components effectively, the research aim/objectives have been established as guiding tools to inform the research focus. The empirical research was designed to commence with qualitative investigations, notably Focus Group and Townhead interviews, interspersed with participant observation of various livelihood(-related) activities. This was followed by a Baseline Questionnaires Survey taken in the various groups of residents in Goderich. Starting with the Focus Group and Townhead Interviews allowed the researcher to establish a general sense of the 'lie of the land' and, through this, to identify individuals, groups,

localities, neighbourhoods, and activities of potential interest for further or especially detailed attention as part of the research.

My research thus focuses on the growing and increasingly diverse population of peri-urban Goderich. The settlement has a long-established reputation as a source of fishing and forest products and an important node on the coastal Peninsular transport route. These activities have given livelihood opportunities to locals (Figure 4), but Goderich has also become increasingly important as a location for activities beyond fishing. It is now well known for street trading, multi-purpose shop outlets, a location for government and parastatal institutions, sand mining, and stone-quarrying. A much-improved peninsula road network and associated increase in Goderich's relative accessibility to and from Freetown has made it an increasingly attractive settlement for relocation for commuters working in Freetown, albeit with implications for inflated local costs of physical assets like land and housing (Figures 1 and 2).

The research site is diverse, not only in terms of natural resource availability and the utilisation of livelihood assets, but also on how social and cultural capital, such as ethnic and religious identities and related processes, function to facilitate access to these resources and livelihood opportunities in a broader sense. In my sub-community of Oba Funkia, residents demonstrate a high degree of harmonious cohabitation, in addition to ethnic, religious, and cultural diversity. This is a significant aspect of the evidence. The practice of religious syncretism, among other factors, further reinforces this tranquil atmosphere, which is also fostered by integrative processes such as marriages.

3.3.2. Sampling the Study Population

The current adult population of Goderich is 46,147, with 49.7% being female (Appendix 3). The study sample was drawn from this population and consisted of 18–65-year-olds spread across all the settlement's sub-communities, and who had given their consent to be included in the research. Mwabu & Thorbecke (2004) characterised rural populations in villages or towns as those comprising fewer than 1,000 to 2,000 individuals, with the specific threshold varying by nation. In 2021, the rural population of Sierra Leone constituted 56.63% of the entire population, as reported by Trading Economics (Online). The rapid growth of Goderich from a population of fewer than 2,000 to 41,147 residents (Appendix 2) has led to its classification as a peri-urban municipality. It is essential to recognise that in this predominantly 'rural' setting, conventional livelihood pursuits like agriculture and non-recreational fishing continue to hold substantial importance.

Moreover, poverty and hardship persist throughout all sub-communities, notwithstanding recent progress in housing development and transportation infrastructure. A rigorous random selection methodology was employed during the field research phase of the study, conducted from January to December 2021, to ensure impartiality in the research process. The objective of this sampling method was to obtain a representative sample of individuals from the target population. Participants in the home survey were methodically chosen to guarantee equitable representation. The sites or thoroughfares utilised for the study were initially determined. The principal residence in each designated community or street was selected as the initial point. Subsequent residences were chosen through a random sampling method, employing tools such as a random number generator or drawing lots, to ensure unpredictability and mitigate biases in the selection process.

This methodology guaranteed the participation of households from diverse regions in the research (Johnson, 2018).

The focus groups were selected using a random sampling technique. Youths aged 18-35, market vendors, Keke and motorcycle operators, fishery unions, religious organisations and social and cultural associations were all deemed eligible for inclusion. To avoid duplication representation, a single member was randomly chosen from each recognised group. Individuals present in several groups were eliminated from the sampling process to mitigate bias and ensure varied opinions (Smith, 2021).

Due to the limited presence of government agencies and non-governmental organisations (NGOs) in the Goderich area, the heads of all the available agencies and organisations were interviewed – notable institutions with visible presence include the local district administration office and Plan International. This approach aimed at obtaining valid information relevant to the research and compensates for the absence of rank-and-file and ordinary members from these institutions. Interviews with group leaders yielded excellent insights, offering a satisfactory, but incomplete, comprehension of the subject (Brown, 2019).

A well-designed selection procedure was employed to conduct participant observations, which allowed for direct observation and data collection that was pertinent to the characteristics associated with the broad study objectives delineated in Chapter 1. This scientific method facilitated a focused analysis of regions, thereby guaranteeing that the findings were pertinent and significant. By focussing on these critical factors, the study acquired profound insights into the primary concerns of interest, thus enhancing the quality and depth of the research findings. This

method enhanced the validity of the data and offered a more thorough understanding of the phenomena studied (Jones, 2022).

3.3.3. Negotiating The 'Field'

From 2017 to 2022, the researcher's immersive involvement in Goderich served as an investigation into the evolving livelihood conditions, activities, and consequences within the community. The complexities of traversing the 'field' were exacerbated by the researcher's dual insider-outsider status, resulting from a prolonged residence in the UK prior to the investigation. This dual identity engendered a complicated conflict, requiring much effort and attention to cultivate and sustain meaningful relationships within the community as a JC (Johnny come lately). Formal fieldwork commenced in January 2021, signifying a critical juncture when the challenges of negotiating the 'field' reached their zenith. The linguistic diversity of Goderich, which includes Temne, Mende, Fula, and Sierra Leonean Krio, required skilful navigation for effective communication. The involvement of research assistants was essential at this phase, as it facilitated nuanced interactions, mitigated language barriers, and improved the researcher's assimilation into the community. The researcher's dual 'insider-outsider' role during this phase established a foundation for enhanced comprehension of community dynamics and a greater recognition of the critical contributions of research assistants, especially considering the persistent challenges presented by the COVID-19 pandemic. Research assistants served as essential intermediaries during the study, emphasising the difficulties of ethnographic research and their crucial role as collaborators in overcoming linguistic, cultural, and contextual obstacles. They were active co-producers of the knowledge presented in this thesis, in addition to other research participants.

3.3.4. Contextualising and Evaluating the Role of Research Assistants in Crisis Situations

Research assistants (RAs) played a critical role in the adaptation of study protocols to comply with rigorous safety regulations during the official fieldwork conducted during the intensified COVID-19 pandemic. The global health crisis required a systematic revision of research methodologies, emphasising the safety and welfare of researchers and participants alike. Brown & Williams (2021) observe that ethnographic research teams encountered considerable difficulties in preserving methodological integrity during the pandemic. The challenges were most pronounced in Goderich, an area characterised by considerable poverty, where logistical and budgetary constraints hindered the provision of protective equipment and adherence to safety protocols. These tactics were crucial responses to vulnerabilities exacerbated by the outbreak, including limited healthcare access and economic strains.

The value of having skilled RAs was highlighted by the language variety in Goderich, as their role in enabling good communication was crucial for data accuracy and inclusivity. The study team ensured scientific rigour and ethical awareness in this resource-limited society by effectively bridging cultural and language disparities. In addition to improving data-collection techniques, research assistants addressed intricate ethical dilemmas essential to the integrity of the research. To maintain the rights and dignity of participants, interviews were intentionally limited to consenting individuals aged 18 and older to ensure ethical adherence (Beauchamp & Childress, 2019). These efforts align with the ethical principles delineated by Hammersley and Traianou (2012), particularly in situations where socio-economic disparities intensify vulnerabilities.

Sierra Leone's experience during the Ebola outbreak (2014–2016) provided a useful framework that informed its response to the COVID-19 pandemic. Research during the Ebola epidemic

highlighted the significance of community participation and trust-building in public health interventions, lessons essential for addressing the difficulties of the COVID-19 response (Richards, 2016). In this situation, RAs evolved not only as facilitators of communication but as essential collaborators connecting researchers and communities. Their resilience and adaptation, shaped by prior experiences, guaranteed that the research was both methodologically rigorous and ethically sound in confronting the distinct challenges of the global health crisis (Abramowitz et al, 2017).

3.3.4.1. Dynamic Interaction in Ensuring Sustained Livelihoods

The examination of livelihood diversification in Goderich requires a comprehensive framework that recognises the intricate interaction of socio-economic, cultural, and environmental elements. This interaction illustrates the interconnections among community resilience, resource availability, and adaptive tactics in reaction to external stresses. Utilising Scoones' (2015) SLF, the study investigated the influence of market access and resource availability on economic activities such as fishing and informal commerce. Ellis' (2021) study underscored the inherent resilience of family networks as a protective measure against economic disturbances, highlighting the ability of institutional and communal alternatives to enhance livelihood sustainability.

The prominence of women in income-generating activities arises from the intersection of economic imperatives and shifting gender dynamics facilitated by cultural transformations. Innovative adaptation solutions are necessary to tackle environmental challenges like coastal erosion, highlighting the interconnection of several components. The research illustrates the changing nature of livelihood solutions while conforming to modern development practices since

this integrated approach utilises Middleton & Cons' (2014) recommendation to harmonise academic and local knowledge.

3.3.4.2. Inclusivity Beyond Gender: Age, Ethnicity, and Residential Status

Inclusivity was fundamental to the research, encompassing not only gender but also age, race, and residence status. Age variability highlighted generational gaps, as younger persons encountered unemployment and restricted training prospects, whilst older individuals depended on conventional knowledge and social networks. The principle of intergenerational equity, as articulated by White & Hamington (2022), framed this analysis. Ethnicity influenced resource access and social cohesion, providing critical insights into economic inclusion through the lens of Kabeer (2020). Additionally, residential status—differentiating long-term residents from migrants—added complexity to the study, reflecting Chen, Ratha, & Plaza's (2021) calls for differentiated strategies addressing migration patterns and their implications for livelihood resilience. By integrating these demographic parameters, the research adhered to global best practices, improving the representation of disadvantaged people.

3.3.4.3. The Growing Function of Research Assistants in Times of Crisis

The participation of research assistants was essential in adapting research protocols during the COVID-19 pandemic constraints. Their combined role as insiders and collaborators allowed them to synchronise academic goals with local conditions, cultivating trust and cultural awareness. Middleton & Cons (2014) underscore the essential function of RAs in managing the intricacies of fieldwork, a viewpoint corroborated by McNamara & Kearns (2021), who stress the dependability of remote data gathering in times of crisis.

Research Assistants utilised participatory approaches to address participation barriers encountered by underprivileged people, as stated by Yarrow et al. (2022). Their involvement included the adaptation of tactics for crisis scenarios using digital instruments and localised interaction methods, as demonstrated by Aslam et al. (2021) and Sinha & Atal (2022). The research was enhanced by RAs in this study, as they uncovered nuanced insights into livelihood diversification and mediated cultural sensitivities. In challenging research environments, their role exemplifies the evolution of RAs from facilitators to co-creators of knowledge, ensuring both ethical and methodological rigour.

3.4. Triangulation: Methodology

This section examines the conceptual framework that serves as the foundation for the thesis's methodologies. This study employs a triangulation research methodology, which is increasingly common among social science researchers. There are numerous triangulation methods, including data triangulation, methodological triangulation, theoretical triangulation, researcher triangulation, and analytical triangulation (Denzin, 2006; Murray, 1999). The selected approach for this thesis is methodological triangulation (Okumbor, Sithole, & Kirk, 2018; Jackson, 2018a; Murray, 1999).

This study employs a combination of qualitative and quantitative methodologies to examine the diverse ways in which people pursue their livelihoods in Goderich. The use of a carefully considered methodology can be highly advantageous in enhancing the reliability of research findings, particularly in areas related to data interpretation and analysis, which also contributes to validating the research outcomes (Bekhet & Zauszniewski, 2012). Therefore, methodological triangulation, as applied in this study, incorporates both qualitative and quantitative methods such as questionnaire surveys with households, heads of different communities, and focus groups, as

well as interviews with a range of participants resident in Goderich (See Section 3.3.2). The rationale for engaging in the random selection of members from these groups is to prioritise the views and concerns of each group and its representatives. The research methods employed in this study are summarised in Table 4, which also demonstrates the way the broadly categorised research aim of this thesis addresses significant areas of concern in livelihoods research in existing literature, relevant sections of which are identified in Chapter 1.

Table 5: Summary of Methods used in Researching a selection of themes		
Broad Aim of the Research (Reference to Chapter 1)	Methodological Application	
	Research Method	Instrument
1. To establish for the very first time a comprehensive set of baseline survey data indicating livelihood systems, practices, and dynamics in and around Goderich	Quantitative	Interviews / Household Survey and participant observation.
2. To describe, analyse and account for the nature and extent of contextualisation (main issues affecting local individuals and households in their pursuit of livelihoods), differentiation (forms of socio-economic differentiation between households) and disaggregation (intra-household diversity in roles, status, etc.) characterising livelihoods and their practitioners in Goderich	Quantitative / Qualitative	Interviews/Household Survey
3. To demonstrate the significance of different livelihood strategies for individual and group existences and highlight their implications for policy	Quantitative / Qualitative	Interviews/Household Survey and Participant Observations.
Source: Adapted from Tincani (2012)		

3.4.1. Choice of Research Methods and Information Resources

This study employs methodological triangulation, integrating many approaches (Denzin, 2006). It integrates structured surveys (home questionnaires), interviews (Townhead and Focus Groups), and participant observations to acquire insights into local livelihood frameworks, processes, and

outcomes. All indicated methodologies, both qualitative and quantitative, were utilised largely for primary data collecting, however the findings were augmented by secondary data.

3.4.1.1. Baseline Household Structured Survey

This segment of the research emphasises the use of structured questionnaires to gather pertinent data for achieving the research aims and objectives. A total of 165 household questionnaires were administered to collect information pertaining to asset availability, vulnerability contexts, and coping strategies employed by individuals, groups, and households (Smith, 2021).

For clarity, a working definition of the term 'household' in this context is useful. This research defines a home as a group of persons residing together and sharing meals, regardless of familial or marital ties (Johnson, 2020). This term includes groups of inhabitants residing in the same residence or compound, encompassing several levels of a single home or distinct residences inside the same compound. It acknowledges the diversity of family units or household arrangements occupying these spaces, and accounts for individuals of all ages and genders, including those who temporarily migrate for short-term livelihood pursuits. The household was often, but equally frequently not, coterminous with the compound.

Consequently, the administered questionnaires were exclusively directed towards consenting adults aged 18 years or older who were considered as heads or members of households who could speak on behalf of their respective households. It is important to note that the concept of the household head pertains to the individual(s) within the household who bears ultimate responsibility for the well-being of both the individuals in the household and the household as a whole. This responsibility can be assumed by the owner of the house or property, a tenant responsible for

paying rent, or the person with responsibility for meeting household or collective subsistence expenses (Williams, 2018).

To address potential challenges associated with identifying household heads, this study categorised residents into three distinct groups. The initial group consists of individuals living in Goderich who are not participating in economic activity. This category encompasses elderly individuals and commits homemakers. The second group includes those residing in Goderich who engage in local livelihood activities. Examples within this category include women engaged in selling goods at the local market and transporters, such as Keke riders and drivers, who either own their means of transport or work for others. The third group comprises those who live outside of Goderich but participate in economic activities inside or near Goderich and its surrounding dormitory communities.

Expanding on this classification, it is essential to enhance the study to recognise the dynamic and fluid lifestyle patterns in Goderich. Prominent instances in the second group encompass healthcare personnel at the local health facility in Oba Funkia, employees of the Emergency Hospital, Western Area Council officials, and market vendors (Brown, 2019). The research underscores the significance of persons from the third category who live outside Goderich yet depend on it for their economic sustenance, as well as those residing in Goderich but participate in economic activities elsewhere. This methodology corresponds with the ideas of livelihood zone analysis, emphasising the interrelation of urban and peri-urban livelihoods within extensive regional economic frameworks (Ellis, 2000; Chambers & Conway, 1992).

These distinctions are especially vital in towns such as Goderich, where urban-rural connections affect household income strategies and the socio-economic environment (Tacoli, 2003). The

research seeks to provide a thorough depiction of individuals and families by recording the intricate lifestyle patterns that characterise the geographical and economic subtleties of urban-adjacent areas. This perspective is corroborated by recent studies, which highlight the need to include both local and international livelihood activities to precisely define regional livelihood zones (Bryceson, 2002; Rakodi, 1999). The incorporation of various viewpoints guarantees that the results are resilient, comprehensible to non-expert audiences, and anchored in modern livelihood frameworks.

3.4.1.2. Townhead Interviews, Participant Observation and Focus Group Discussions

To efficiently achieve the research objectives, a qualitative technique was used that included participant observation, Townhead interviews, and three focus group discussions. The discussion groups were strategically organised as follows: the first group consisted of women (Figure 47) from diverse professional and trade backgrounds; the second group included sand miners and stone quarry workers (Figure 110); and the third group also focused on Keke and bike riders (Figure 111). Diverse approaches were utilised to investigate local livelihood practices within the community, enabling practitioners to articulate their experiences and viewpoints in their own words. The data acquired from the Townhead surveys was subjected to both quantitative and qualitative analysis, with a focus on the latter.

Participants were selected from diverse stakeholder groups within the village community through a random sampling method. The Keke riders, a women's collective mainly composed of market traders, fishmongers, and housewives with minimal or subsistence income, along with groups of unemployed youths aged 18-35 engaged primarily in sand mining and stone quarrying, were among the stakeholder groups. The research sought to elucidate livelihood practices within the

community by integrating various stakeholder groups and their viewpoints, thereby illuminating the intricacies and dynamics that influence these activities.

The researcher engaged in participant observation by accompanying several livelihood groups to observe their work, so acquiring firsthand information and experience regarding their professional life, livelihoods, and the effects of their activities on society and the environment. Overall, participation in the field research exercises (whether it be Participant Observation, the Survey process, or Interviews involving both Focus Group and Townheads) was informed by proposed research approaches, practice and action plans approved as part of the UoB Ethics Review process (Appendix 14) and operationalised in the content and deployment of tools like the Participant Information Sheet (PIS, Appendix 13), and various Consent Forms (Appendices 6-11).

The utilisation of technology instruments, such as Dictaphones for voice recording and cameras or mobile phones for visual documentation, may raise ethical dilemmas and environmental repercussions, especially in scenarios where livelihood activities are vulnerable to external factors. Flick (2018) emphasises the importance of rigorously assessing potential hazards in qualitative research, since these technologies may unintentionally disturb participants' settings or foster feelings of intrusion. To tackle these problems, I complied with the ethical rules established by the University of Birmingham's field study framework, which include explicit recommendations regarding the "dos and don'ts" of ethical research. This adherence included the use of a Participant Information Sheet (PIS) to clarify participants' rights and obligations, protecting their freedom to participate or leave at any time and enabling them to lodge issues or complaints, in line with guidelines by Bryman (2016).

Ethics compliance was further strengthened by acquiring written advance agreement for all research activities, including survey surveys, focus group interviews, townhead interviews, and participant observations, as suggested by Wiles (2013). Specialised permission forms were developed to record ethical activities and provide openness throughout the procedure. These criteria are consistent with Creswell & Poth's (2018) emphasis on the preservation of informed consent and the development of trust in qualitative research. The appendix contains duplicates of these permission documents to illustrate the stringent measures implemented to maintain ethical integrity and mitigate risks during the research.

3.5. Data Authenticity, Pre-Testing and Analysis

This section deals with the preparation of collected data to ensure that it effectively addresses the research aim. The process of obtaining ethics approval was strictly followed, and negotiations were held with community heads and participating groups to ensure that informed consent was granted in all cases. The study instruments were subjected to a pre-testing procedure to determine their clarity and appropriateness for the participants. In order to mitigate concerns regarding the non-response rate and improve the validity of the study findings, pilot testing was implemented. For each instrument, including the Survey, Questionnaire for Townheads, and Focus Group, a fundamental random sampling technique was implemented during the pilot testing effort. Participants were chosen to answer the questions according to this sample method.

Five participants were randomly chosen for the Survey Questionnaire instrument. For the Townhead questionnaire, one Townhead resident and one Councillor were selected through an unbiased simple random sampling method to obtain their responses. I interviewed two participants with a Dictaphone to obtain their viewpoints on certain problems.

The purpose of the pretesting process was to verify that the questions in the instruments (Survey and Questionnaires for Townheads and Focus Group) were meticulously designed to successfully address the research objective. Moreover, it sought to guarantee that participants felt at ease when answering the predetermined questions.

3.5.1. Selection of Models and Data Analysis Utilising SPSS / STATA

Livelihoods research encompasses many quantitative and statistical approaches and tools to analyse the results of household questionnaire surveys. This research seeks to identify the techniques utilised by individuals and households in their quest for survival, security, and prosperity, encompassing livelihood diversity and diversification. The Simpson Index of Diversity (SID) is an important instrument in this domain. Researchers have employed this index to evaluate and quantify livelihood diversification, considering variables such as income and other social attributes of persons living in rural regions (Afodu et al., 2019: 2106; Fabusoro et al, 2010; Minot et al, 2006). However, for this thesis, I have chosen to adopt the Multinomial Logistic Regression (MLR) model, which enables multiple factors to be assessed to determine the livelihood strategies utilized by households in Goderich. The MLR model is appropriate in cases where the dependent variable is polynomous, that is, when the dependent variable is categorical and has more than two levels (Dinku, 2018: 3; Jilito, Okoyo & Moges, 2018: 747; Brown et al, 2006). Therefore, MLR for the i^{th} sample household who is faced with j choices can be specified as follows:

$$U_{ij} = Z_{ij}\beta + \varepsilon_{ij} \quad \text{Eq. 1}$$

Where the sampled household is said to make preference for choice j , it is therefore assumed that U_{ij} is the maximum amongst the choices of j utilities. This then provides a new statistical model derived from the probability of preference for choice j – this is expressed here as: $\text{Prob } U_{ij} > U_{ik} \text{ (for all other outcome, } k \neq j)$

Eq. 2

Where: U_{ij} is the expressed utility of the i^{th} sample household based on livelihood strategy j . While U_{ik} is the expressed utility of the i^{th} respondent based on livelihood strategy k .

If the household maximizes its utility as defined over a range of income strands, household choice is thought to be an optimal allocation of asset endowment, which is based on the option to choose a livelihood that maximizes its utility (Brown et al., 2006). Thus, the i^{th} household's decision can make a choice of livelihood that maximizes available utility choices (Brown et al, 2006 and Jilito et al, 2018). Hence, the decision of the i^{th} household can be modelled as a possibility of maximising expected utility through choice of j^{th} livelihood strategy in cognisance of j discrete livelihood strategies.

$$\text{Therefore } \text{Max}_j = E(U_{ij}) = f_j(X_i) + \varepsilon_{ij}; j = 1 \dots \dots J \quad \text{Eq. 3}$$

In general, for an outcome variable with J categories, we will assume the j^{th} livelihood strategy and for the i^{th} household make a choice of maximising its utility to take the value 1, where the i^{th} household choose j^{th} livelihood strategy and 0 otherwise. Hence, the probability that a household with a feature of x chooses livelihood strategy j P_{ij} is therefore modelled as:

$$P_{ij} = \exp(X_i' \beta_j) \\ \sum_{j=1}^J \exp(X_i' \beta_j) J = 1 \dots \dots i \quad \text{Eq. 4}$$

This is done with the requirement that $\sum_{j=1}^J P_{ij} = 1 \text{ for any } i$

Where P_{ij} = Probability of the i^{th} sample household's choice of falling into category j ; X = Predictors of response probabilities and β_j = covariate effect specific to the j^{th} response category, with the first category as the reference point.

The removal of indeterminacy from the model is assume that $\beta_1 = 0$ (Green, 2003). The expression $\exp(X_i' \beta_j) = 1 \dots \dots$ this then makes the generalised expressed Eq. 4 as shown above to be equivalent to:

$$\Pr(y_i = j/X_i) = P_{ij} = \exp(X_i \beta_j), \text{ for } j = 1 \dots \dots J \text{ and } 1 + \sum_{j=1}^J \exp(X_i' \beta_j) \quad \text{Eq. 5}$$

$$\Pr(y_i = 1/X_i) = P_{i1} = 1 + \sum_{j=1}^J \exp(X_i' \beta_j) \quad \text{Eq. 6}$$

Where: y = a polytonomous outcome variable with categories coded from 1.....J

For an normal MLR, predicted probabilities are interpreted using marginal effect as expressed by Greene (2003). This means that every sub-vector of $\hat{a}$ is said to enter every marginal effect through probabilities and weighted averages as shown in δ_{ij} . Therefore, through differentiation of equation 4, the marginal effect of (j) individual characteristics on the probabilities can then be specified as shown in Eq. 7 below:

$$\delta_{ij} = \frac{\partial P_{ij}}{\partial x_i} = P_{ij} [\beta_j - \sum_{j=0}^j P_{ij} \beta_j] = P_{ij} [\beta_j - \beta] \quad \text{Eq. 7}$$

Refer to Jilito et al. (2018) and Brown et al. (2006) for comprehensive reference materials regarding the equation blocks specified in Equations 1-7.

3.5.1. Data Analysis Utilising NVIVO

The quantitative data analysis in this study is significantly enhanced by the implementation of an "investigator triangulation" methodology, which is a significant adjunct to the Household survey. This concept was originally defined by Denzin (1970) as the 'use of multiple observers/investigators in a single study'. The use of this method in this study possesses the potential for helping to address difficulties commonly encountered in the use of mixed methods of research. Archibald (2015: 228-229) emphasised that employing a qualitative investigative approach offers several advantages when triangulating with structured data investigation:

- Collaborative technique can generate opportunities to address intricate research problems from novel and synergistic viewpoints, as emphasised by Hesse-Biber (2010).
- Its use can promote a pluralistic approach to research while also attending persistent challenges in mixed research methods paradigms.

- Lastly, its use can alleviate exclusive reliance on individual investigators who may be challenged with developing much-needed skills required in mixed methods research, as highlighted by Hesse-Biber and Johnson (2013: 104).

The involvement of participants from diverse backgrounds, including variations in religion, ethnicity, social and cultural contexts, and levels of educational attainment—marks a substantial advancement in uncovering opportunities to improve research outcomes. The fact that questions were open-ended was a deliberate attempt to create space for respondents' preoccupations to be aired and discussed, thereby enhancing the legitimacy of findings from the research.

The interview data were systematically processed and interpreted utilising NVivo software, which offered a comprehensive framework for identifying major themes (Jackson & Jabbie, 2020; Braun & Clarke, 2006; Saldaña, 2021). To examine the strategies of participants in meeting their livelihood needs, this thematic analysis employed data from interviews, specifically focus group discussions. These strategies encompassed activities that enhanced individual well-being, facilitated family or home maintenance, or addressed broader familial requirements. Using a systematic classification method, the themes that emerged from this process were meticulously refined to ensure their alignment with and significance about the overarching study aims and objectives specified in Chapter 1. Thematic analysis, facilitated by NVivo, exemplifies ideal methods in qualitative research (Braun & Clarke, 2006; Saldaña, 2021).

The analysis made it evident that the use of a dedicated qualitative application was a complement to the existing quantitative baseline instrument. The Focus Group discussions and Townhead interview responses facilitated the generation of themes about livelihood structure and dynamics, encompassing access to assets, risks, and coping mechanisms, among other factors.

3.6. Research Ethics

The commencement of the field study depended on the University Ethics Committee's official clearance, which was obtained between April and November 2022; until then, I could not formally undertake any of the research as part of the requirement for my degree. The decision rendered the entire process legitimate, itself an important consideration, given the need for clarity surrounding my status and positionality as a researcher with external institutional affiliations (in this case, The University of Birmingham), who also doubled as a member of the study population/community by birth.

3.6.1. My Research Presence and Positionality

This section elucidates how the research process meets ethical standards while affirming my positionality as both an insider and outsider in the research setting. It also highlights the specific measures taken to train research assistants (RAs) in ethical research methods and practices as mandated by the ethics approval.

To guarantee compliance with ethical protocols and maintain the integrity of the research process, I methodically identified myself as a research student from the University of Birmingham. The procedure was facilitated by a formal letter of introduction (refer to Appendix 12) from the institution and ethical permission documents for all research activities. I delivered these documents throughout my engagement with important community stakeholders, including community heads (Headmen and Councillors) and social groups (e.g., youth, women's organisations, and local community groups). These interactions transpired via in-person meetings, third-party referrals, and participation in three community gatherings convened by local leaders in diverse places. In these

discussions, I conveyed the significance and pertinence of my research, which centred on individual and collective livelihoods—a topic of considerable community interest.

Recognising the duality of my positionality—as a ‘son-of-the-soil’ with deep social and cultural ties to the community, and as an academic researcher—was critical in framing my interactions with participants. My established local identification allowed access and rapport-building. In some groups, my designation as ‘local boy’ undertaking research under foreign sponsorship was regarded as a source of pride, emphasising the significance of livelihood processes and outcomes within the local context. On the other hand, among migrant workers engaged in activities such as sand mining, stone quarrying, and firewood collection, my presence was interpreted through the lens of pre-existing tensions between these groups and the descendants of the founding families of Goderich over environmental concerns. The complexity of my positionality is underscored by these interpretations, which also underscore the importance of effective and meticulous communication throughout the research process.

3.6.1.1. Training Assistants on Ethical Standards in Research

To adhere to the ethical standards established in my study ethics approval, I implemented a comprehensive training program for my research assistants that prioritised ethical research procedures. This program encompassed instruction on the following topics:

- Informed Consent: Research Assistants were directed to guarantee that participants comprehended the study's objective, their rights, and the voluntary nature of their participation. To replicate the process of obtaining authorisation in field contexts, practical role-playing exercises were implemented.

- Data Protection & Confidentiality: The seminar emphasised the importance of protecting sensitive information and preserving the anonymity of participants. This encompassed policies regarding the secure storage of field notes and recordings, as well as data anonymisation.
- Positionality & Cultural Sensitivity: Research assistants were instructed on the complex nature of insider/outsider connections and the impact of their positionality on their interactions with participants. Priority was given on respecting local traditions and rectifying power imbalances.
- Non-Maleficence: Research Assistants were directed to minimise potential harm to participants, including refraining from leading questions or acts that could intensify existing social tensions.
- Compliance with University Ethical Standards: The training included the ethical guidelines established by the University of Birmingham and pertinent literature on research ethics (e.g., Bryman, 2016; Creswell & Poth, 2018).

The training technique guaranteed compliance with ethical standards and improved the research team's capacity to perform fieldwork that respected local values while maintaining academic rigour.

3.6.1.2. Connecting Positionality and Ethical Practice

My positionality, situated at the intersection of insider and outsider positions, impacted the ethical conduct of my research. Although my community contacts cultivated trust, I remained vigilant to avert any potential exploitation of that trust or its misinterpretation as compulsion. By prioritising informed permission and maintaining transparency—such as providing my student ID and ethical

approval forms—I sought to balance the benefits of my insider position with the neutrality expected of an academic researcher.

The dual focus on ethical training for RAs and my transparent engagement with community stakeholders underscores the ethical soundness of the research process while addressing the complexities of positionality. This approach aligns with best practices in qualitative research, which advocate reflexivity and critical engagement with one's positionality as foundational to ethical inquiry (Lincoln & Guba, 1985; Tracy, 2010). The specified measures guarantee that the research process adheres to ethical standards while effectively incorporating my positionality, thereby cultivating a research environment that is methodologically rigorous, transparent, and courteous.

3.6.2. Collaborating with Research Assistants

During the COVID-19 pandemic, the involvement of Research Assistants (RAs) in fieldwork was a critical strategy for addressing the substantial obstacles presented by the crisis, particularly in a vulnerable community such as Goderich. The responsibilities of RAs extended beyond logistical and technical support; they were essential in cultivating trust, responding to changing dynamics, and ensuring the inclusivity and sustainability of the research process. This aligns with the conclusions of Asante et al (2021), who assert that collaborative and team-based fieldwork approaches are essential in crises, fostering resilience and the co-creation of knowledge and care. In Goderich, the RAs' close community connections were especially important, allowing them to reduce participation obstacles and bolster the research's credibility.

The appointment of the Lead Research Assistant (LRA) was a vital measure in forming the research foundation. His inherent motivation, comprehensive local knowledge, and cultural acumen exemplify the essential attributes of "frontline collaborators" in volatile contexts, as articulated by Hoffman & Tarawalley (2014). Their endeavours to coordinate Focus Groups and supervise the administration of Baseline Survey questionnaires during lockdowns emphasise the significance of recruiting Research Assistants with strong community connections who possess both technical proficiency and the ability to establish trust and rapport in difficult situations.

The abrupt passing of the LRA in June 2021 presented a formidable challenge, one that underscored the fragility of human resources in crisis research. The decision to integrate two 'casual' researchers into more prominent roles reflects a pragmatic and inclusive response. The researchers contributed complementary talents and various viewpoints, consistent with the concepts of collaborative ethnography as emphasised by Lassiter (2005). Their capacity to represent many sub-communities within Goderich guaranteed that the research retained its comprehensiveness and inclusivity, while their resilience illustrated the significance of adaptive team structures in crisis scenarios.

Furthermore, doing research during the COVID-19 epidemic required an increased awareness of existing socioeconomic and technological inequalities. Although social media recruiting offered an effective method for identifying applicants, it inadvertently marginalised others lacking internet access. This encapsulates the findings of Dodds & Hess (2021), who investigate the impact of the digital divide on participatory research during the pandemic. To address this, maintaining engagement with unsuccessful candidates mitigated some of these inequities and reinforced a commitment to equitable research practices.

The multiple roles of RAs as data collectors and givers of emotional support underscore the changing dynamics of fieldwork relationships in crisis situations. Asante et al. (2021) underscore that the co-production of knowledge necessitates the co-production of care, necessitating that researchers and research assistants negotiate the ambiguous boundaries between professional and personal responsibilities. This care was essential in Goderich for the purpose of reducing the affective impact of the pandemic on the study process and preserving participant engagement. In the same vein, McGranahan (2020) emphasises the collaborative navigation of uncertainty in crisis contexts by researchers and assistants, who share risks and responsibilities in a manner that challenges conventional research hierarchies.

3.7. Chapter Summary

This chapter investigates the methodological framework that underpins the investigation, with a particular emphasis on the practical and philosophical aspects of the research conducted in Goderich. The chapter begins with an exposition of the study's philosophy and technique, emphasising a critical realism approach that combines empirical observation with theoretical analysis to understand complex livelihood dynamics. Fieldwork in Goderich is contextualised by its socio-economic and environmental conditions, especially with the challenges posed by the COVID-19 epidemic. I implemented a mixed-methods approach, which involved the integration of qualitative and quantitative instruments to ensure the rigour of the findings. In order to provide a comprehensive understanding of subsistence activities, sampling strategies prioritised inclusivity by incorporating a variety of groups.

A crucial element of the technique is the essential involvement of research assistants, whose engagement included both logistical assistance and substantive contributions amid the constraints

imposed by the epidemic. The chapter evaluates their contributions, with a particular emphasis on the facilitation of access to respondents and the assurance of data quality. It underscores the importance of conducting comprehensive pre-testing of devices, including questionnaires and interview guides, to enhance the efficiency of data collection. The analysis was conducted using NVivo software, which allowed for the systematic organisation and evaluation of data. This approach enhanced the study's capacity to extract significant insights while simultaneously preserving data integrity.

The researcher's commitment to positionality and respect for participants is evident in the ethical considerations that are a foundational component of this chapter. In the context of delicate community dynamics, the investigation adhered to rigorous ethical standards, which included anonymity and informed consent. The chapter finishes by emphasising the importance of combining a critical realism approach with participatory methods to generate practical insights. By connecting methodological selections with the distinct difficulties and opportunities of Goderich, the research creates a basis for effective and context-specific development solutions.

The empirical foundation of the study is established in Chapters 4 to 7, which incorporate the methodical application of meticulously designed research instruments. The methodology employed in these chapters is explained in detail, demonstrating rigour by the thesis' conceptual framework through the comprehensive data collection and analysis. The integration of meticulously selected instruments demonstrates the methodological approach, supported by a coherent empirical investigation and grounded on theoretical foundations. The chosen approaches rigorously validate the study findings, offering essential insights that further the thesis's overarching goals.

CHAPTER 4: CONTEXTUALISING LIVELIHOODS: A SELECTION OF LOCAL TRANSFORMING STRUCTURES AND PROCESSES

4.1. Introduction

In acknowledgment of the limitations imposed by the small sample size of Townhead interviews (2 Councillors and 3 Headmen) at the heart of this chapter, I begin by recognising the unique and rich qualitative insights that the chapter brings to an understanding of livelihood processes, strategies and dynamics in Goderich. The chapter offers a qualitative analysis based on extensive interviews with local elected and appointed officials, community members, and data collected through direct field and participant observations. By integrating substantial excerpts from interviews and discussions, I intend to augment the depth and clarity of the findings, thereby deepening our understanding of the complex strategies utilised by residents to obtain livelihoods, as well as of the roles of local councillors and headmen in facilitating access to potentially transformative structures and processes.

The chapter examines the role of social, political, and economic institutions in regulating access to essential resources, hence influencing the welfare of people and groups in Goderich. Comprehending the relationships among various transformational structures and processes at the local level enables us to reveal the dynamic mechanisms affecting livelihoods in this and other regions, as well as across different geographical scales. This study not only adds to our understanding of the numerous elements that motivate people to improve their well-being, but it also identifies potential avenues for fostering sustainable livelihoods in the area. By presenting these insights, I hope to contribute to a better understanding of livelihood contexts and strategies

within Goderich, while also offering a (tentative) perspective on how to support and enhance the well-being of its residents, by making their livelihoods more diverse and thus more sustainable, while building on the strengths of existing strategies and activities.

4.2. Livelihood Contexts & Assets in Theory and Practice

This section delves into the complex processes that shape the essence of life in Goderich, building insights from the Sustainable Livelihoods Framework (SLF). The SLF emerges as a useful tool for understanding the relationships between the numerous types of capital—human, social, environmental, physical, and financial—that are critical to the survival of this society and its economy. This section clarifies that these capitals are not independent assets; they are closely interrelated, impacting and moulding both daily sustenance and the long-term sustainability of community livelihoods. The theoretical framework, based on current research and empirical evidence, clarifies how these assets improve resilience and sustainability in rural livelihoods, leading to a better understanding of the complex interdependencies involved.

Table 6 serves as an analytical tool, providing a full description of the livelihood assets that can be used in the Goderich setting. Drawing on insights from UNDP-ISDR (n/d) and augmented by cutting-edge research from Noh (2023), among others, the table gives an overview of the basic assets that enable the sustenance and flourishing of life in Goderich. Consequently, this makes it possible to develop a detailed understanding of the operations and interrelationships of each type of capital within the framework of the community's overall livelihood strategy, as well as to conduct a systematic analysis of the actual applications of the SLF in this rural setting. This study employs theoretical frameworks and empirical evidence to underscore the significance of various livelihood assets in enhancing the flexibility and resilience of rural communities. To promote

sustainable living and the potential for success, I underscore the importance of connecting academic knowledge to practical application.

Table 6: Livelihood Assets and Context			
LIVELIHOOD ASSETS/CAPITALS		LIVELIHOOD CONTEXT	
Human Capital:	This includes the population and their relevant skills, knowledge, and physical ability to work, and it is crucial for sustaining livelihood assets in Goderich.	Social relations:	This plays a crucial role in the livelihood context, encompassing people, ethnicity, history, religion, and kinship, and understanding these factors is essential for addressing sustained livelihoods in Goderich. It enables the identification of social dynamics and cultural influences that impact individuals and groups, facilitating targeted interventions and support.
Social Capital:	This incorporates informal networks and association/group membership, and it is considered relevant to sustaining livelihood assets in Goderich as it enables cooperation and collective action among individuals and communities.	Social and Political Organisations:	This encompasses decision-making processes, civil organisations, social rules, norms, democratic processes, leadership, and rent-seeking behaviours, are integral to the livelihood context in Goderich, and understanding and engaging with them is crucial for promoting sustained livelihoods by shaping the social fabric, governance structures, and power dynamics that influence opportunities and resources within the community.
Natural Capital:	This incorporates land, water, air, and vegetation, and it is crucial for sustaining livelihood assets in Goderich as it provides essential resources and ecosystem services necessary for economic activities and human well-being.	Governance:	The relevance of governance in the livelihood context of Goderich stems from its dependence on governance systems, power relations, rights, responsibilities, and representation, as these factors shape the conditions necessary for sustained livelihoods to thrive.
Physical Capital:	This incorporates resources such as roads, water and sanitation facilities, schools, ICT infrastructure, livestock, and more, and it is essential for sustaining livelihood assets in Goderich by providing the necessary infrastructure and resources to support economic and social activities.	Service delivery:	This encompasses the efficiency and responsiveness of both public and private entities in providing essential services such as education, healthcare, water, and sanitation, plays a vital role in sustaining livelihoods in Goderich.

Financial Capital:	This includes financial resources such as savings, credit, employment income, trade, and remittances, and it is crucial for sustaining livelihood assets in Goderich as it provides the necessary funds and economic opportunities for individuals and communities to invest, grow, and secure their livelihoods.	Resource access institutions:	This incorporates social norms, customs, and behaviours that define access to resources, and their relevance lies in shaping sustainable livelihood contexts in Goderich.
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Source: Very slightly adapted from UNDP-ISDR (n/d: 2-3)

Significantly, Table 6 transcends mere categorisation by highlighting the interplay between these assets and the contextual factors that influence livelihood outcomes, such as governance, service delivery, and resource access institutions. These assets and contexts are not only integral to the immediate pursuit of survival but are also pivotal in leveraging opportunities for wealth generation and community development, as echoed in the work of Scoones (2009).

To further deepen the exploration, this section synthesises concepts of power dynamics and patron-client relationships (see Chapter 2) with the socio-economic realities of Goderich (see Chapter 3), as illuminated by qualitative interview responses from community leaders. This juxtaposition reveals the ways in which power dynamics and socio-economic dependence can influence livelihood strategies, underscoring the resilience and adaptability of individuals and groups (Gelderblom 2018). In keeping with insights from work by Ivona (2021) and Bryda & Costa (2023), among others, the dialogue between theory and practice, encapsulated in the insights from Goderich's community leaders, alongside the narratives of livelihood practitioners, serves to enrich our understanding of how power structures and social relations mould the socio-economic landscape, and the responses these elicit from individuals and groups.

In synthesising the insights gained from the interviews conducted with Townheads, alongside both the organisational and analytical utility of the SLF and a discussion on power dynamics, this section aims to establish the foundation for conducting qualitative interviews more broadly with additional stakeholders. It lays out an understanding of the livelihood contexts and resources which obtain in Goderich, while weaving a story that is firmly anchored in both theoretical concepts and real-world experience and evidence. This approach effectively establishes a basis for further investigation into the dynamics of vulnerability and resilience of livelihoods within our case study settlement and similar localities elsewhere.

4.3. Local Governance as Transforming Structure and Process

Using the Sustainable Livelihood Framework (SLF) as an organising principle, I purposefully selected a modest sample size for this section of my research in order to unearth aspects of institutional mediation of livelihood strategies. This methodological decision, entrenched in qualitative research traditions, prioritises data richness and nuance over breadth (Bryman, 2016; Geertz, 1973). The narratives of the five participants (Headmen and Councillors), representing diverse sectors within Goderich, offer rich, detailed insights into their experiences, highlighting what they believe are the challenges and adaptive strategies individuals and groups face and employ within Goderich's socioeconomic landscape (DFID, n/d). This qualitative approach facilitates an exploration of the complex interplay between perceptions of individual livelihood assets and the broader socio-economic and environmental factors that influence livelihood strategies (Lambini and Nguyen, 2014). Table 6 and Figure 26 contextualise these insights, providing a structured backdrop against which institutional, group and individual and stories are set.

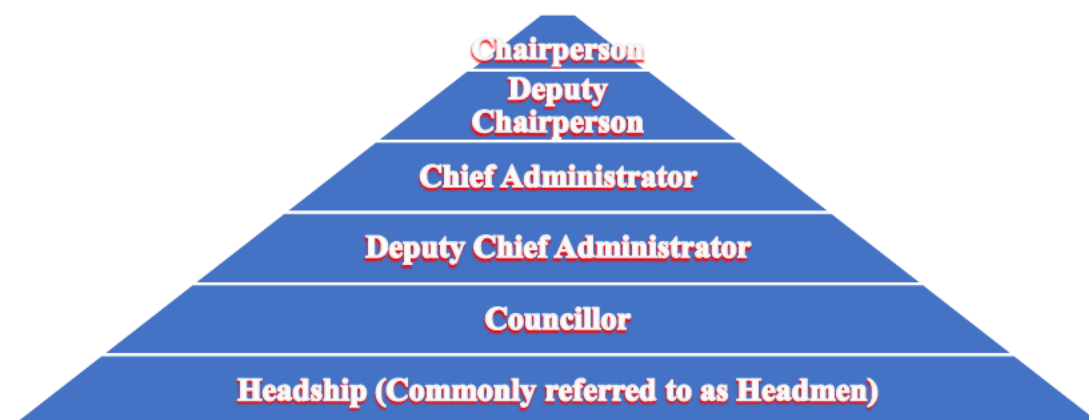
The small sample has the advantage of providing qualitative depth, thus uncovering layered perceptions and realities of livelihood governance and strategies (Whaley, 2023). Detailed Townhead and Councillor narratives shed light as much on the various elements of livelihood contexts, as on resilience, innovation, and reliance on, and deployment of individual and community support systems, which are identified in Table 5. This qualitative depth is not just a counterbalance to the small sample size but an asset that enriches our understanding of rural livelihoods and informs local administration policymaking and livelihood intervention efforts, as we see later in the chapter (DFID, n/d).

Specifically, the methods employed offer an opportunity to explore the role of governance/leadership systems in mediating access to livelihood opportunities (see Table 6). Such systems are characterised by roles, responsibilities, rights, and relationships, which are intended to sustain decent and secure livelihoods for people (Nunan, 2023). The DFID (n/d) sustainable livelihoods guidance sheet notes that transformative structures, defined by the presence of effective governance systems, are characterized by a two-way influence, whereby access to relevant assets for people is mediated by responsibilities and rules that enable the sustainable utilization of assets for the common good and in the interest of both present and future generations. Much of this chapter seeks to tease out community leader perceptions of these livelihood contexts and practices, and the logics that drive their own mediating role in wider structures and processes of local and regional livelihood pursuits. In addition, the final part seeks to bring these perceptions in conversation with a few narratives from livelihood practitioners and groups which encourage reflection on the latter's experiences of, and responses to the mediating role of local governance in the everyday pursuit of livelihoods.

This chapter and the following sections utilise narrative analysis to examine the influence of local governance in livelihood negotiations. I prioritise responses from the Townhead questionnaire, aiming to illuminate both tangible and intangible contextual factors that affect community access to resources and opportunities (DFID, n/d; Whaley, 2023; Nunan, 2023; Scoones, 1998). By focusing on community structures, processes, and experiences, I aim to deepen the understanding of social and economic dynamics, thereby potentially informing policies that promote inclusive and equitable development, including sustainable livelihoods.

Figure 26 summarises the governance structure that mediates livelihood opportunities in Goderich, as described in Section 2.5 (Chapter 2). The Western Area Rural District Administration (WARDA) operates under the legislative direction of the Local Government Ministry in Freetown and plays a central role in overseeing local governance and administrative processes (Local Government Act, 2004). The administrative hierarchy in Figure 26 mirrors the delegation of responsibilities in a mayor-council framework; however, it is a chairperson who oversees the council's administration, ensuring effective management at the local level (DFID, n/d; Whaley, 2023; Scoones, 1998).

Figure 26: Organogram of Western Area Rural District Administration (WARDA)



Source: Ministry of Local Government and Rural Development (MLGRD), 2021

4.3.1. Governance Narratives of Livelihood Structures and Processes

The participation of councillors and headmen in daily community administration and governance embodies a constitutional directive instituted by parliament, specifically their function in developing frameworks and procedures that enable access to natural resources and associated livelihood assets (Whaley, 2023; Scoones, 1998) These local administration and governance roles seek to enable judicious utilisation of livelihood assets to enhance the status of community livelihoods. These officials and their roles are thus an integral part of local and regional livelihood transforming structures and processes identified earlier, notably in Chapters 1 and 2. In what follows, I try to emphasise the dynamic interplay between governance structures and processes, on the one hand, and community livelihood strategies, resilience and innovation, on the other. I use leadership perceptions of, first, local individual and group access to and control over livelihood assets and capitals; and second, the nature and justification for, and seeming effectiveness of, their roles in local livelihood interventions.

4.3.2. 'Leadership' Demographics and Perceptions of Local Population Change and Livelihood Prospects

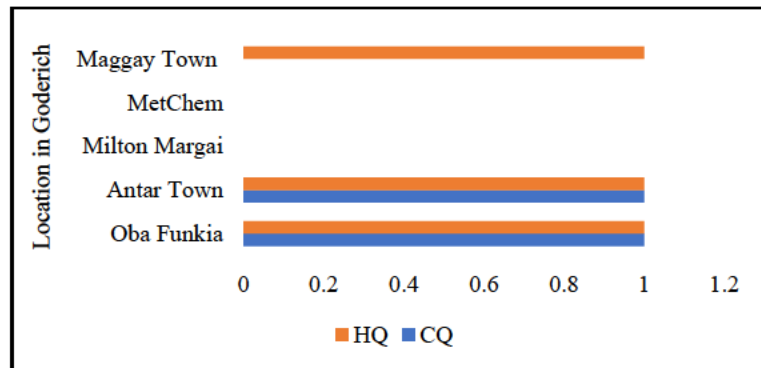
Using insights derived from questionnaire responses from both Headmen and Councillors, this section explores the dynamics of local leadership in facilitating asset acquisition for constructing and maintenance of livelihoods. To ease the identification of enabling structures, policies, and the diverse social composition and traits of community leaders, statistical analytic software, such as STATA and SPSS were employed. According to Creswell & Creswell (2017), this technique aligns with contemporary social science research, which emphasises mixed methodologies to facilitate a comprehensive exploration of the dynamics of community leadership. The Townhead

questionnaire (Appendix 4) served as a crucial instrument for collecting empirical data to support the research presented in this section.

The analysis of leadership representation using SPSS and STATA software for analysing complex datasets provides a deeper awareness of the variables at play while boosting precision and reliability in data analysis. Such tools are indispensable in exploring socio-economic phenomena—in this case, livelihood diversity and diversification in Goderich—to draw inferences about the role of leadership in community development and the sustainability of livelihoods (Rabe-Hesketh & Skrondal, 2012).

4.3.2.1 Inclusive Leadership: Representation Across Geographic, Ethnic, Linguistic, Religious, and Demographic Dimensions

Figure 27: Location of Community Origin of Leaders in Goderich



The geographic and sub-community roots of leadership highlight the representative nature of local leadership. Figure 27 illustrates that nearly all of Goderich's communities are represented, emphasising this widespread inclusion. The fact that the Oba Funkia community has a Headman and a Councillor who come from different religious and cultural backgrounds is evidence of the group's diversity and representativeness.

The diverse origins of leaders from across the various localities denote a recognition of the importance of inclusive and accessible leadership in promoting community engagement and participation. This observation aligns with Chaskin's (2003) findings, which emphasise the role of

spatially distributed leadership in enhancing community mobilisation and resource allocation. Such spatial representation is critical for addressing the heterogeneous needs of communities while ensuring equitable governance.

4.3.2.1.1. Community Origins and Leadership Representation

The investigation of leadership representation across the various communities of Goderich reveals both proportional and disproportionate community engagement. Communities such as Antar Town, Sherbro Town, and certain areas of Maggay Town are notably well represented. Nonetheless, some communities, including MetChem, have articulated significant apprehensions about political engagement and equitable representation. Despite the Milton Margai community's use of their institution's insular structure to justify its limited formal engagement with wider community leadership, there is still a significant lack of representation in MetChem. This raises concerns about governance accessibility and the inclusion of all subcommunities inside the leadership framework.

Chapter 2 presents a comparative examination of population proportions, highlighting the disparity between the two areas. Due to these disparities, specific measures are necessary to guarantee that all geographical areas and sub-communities are sufficiently represented. This must be executed in alignment with the principles of equitable governance and inclusive leadership.

4.3.2.1.2. Ethnic Representation and Linguistic Diversity

Krio is the primary lingua franca in Goderich; however, its widespread use does not inherently suggest the ethnic backgrounds of the leaders. Krio functions as a communication medium rather than an indicator of ethnicity, emphasising the importance of publicly acknowledging ethnic diversity. Even though leadership is made up of Temne, Mende, Limba, Loko and Krio inhabitants,

minority participation varies. According to Alesina & La Ferrara (2005), inclusive leadership enhances social cohesion and facilitates the reconciliation of societal divisions. Their findings indicate that local diversity aligns broadly with this objective.

Figure 28 depicts the indigenous languages spoken by Goderich's leaders, demonstrating the linguistic diversity that distinguishes Goderich's multicultural mix. Even though Goderich continues to struggle with disparities in minority participation, the incorporation of leaders who come from a wide variety of linguistic and ethnic backgrounds is proof of commitment to inclusiveness.

Figure 28: Language Spoken

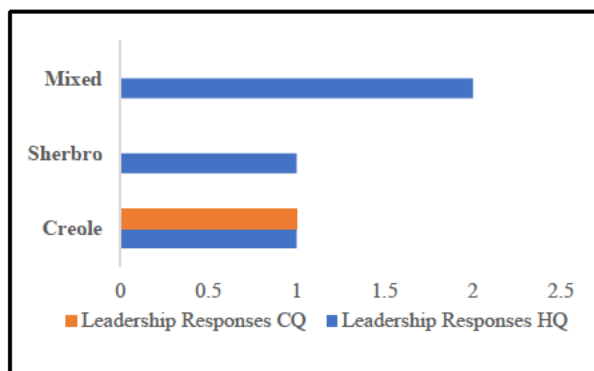
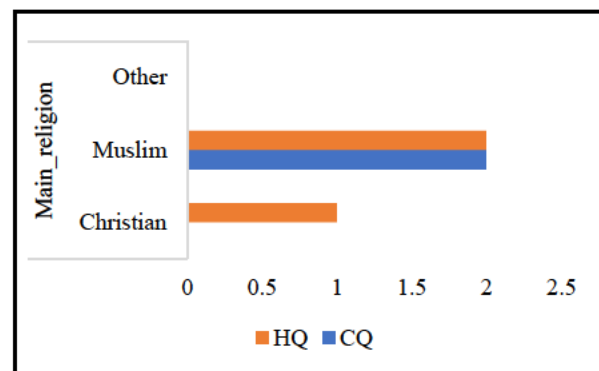


Figure 29: Religion of Village Leaders



4.3.2.1.3. Religious Affiliations

Figure 29 depicts Goderich's leadership's religious composition, reflecting its diverse multi-faith identity. The presence of leaders from many faith backgrounds promotes social cohesiveness in the town. As a result, Goderich residents are more likely to tolerate and appreciate one another. The variety of languages spoken and the diverse religious affiliations in Goderich exemplify the significance of diversity, as reflected in the responses from the Headmen (HQ) and Councillors (CQ) shown in Figures 28 and 29. This example illustrates the importance of variety in institutional management, which includes both religious institutions and leadership administration in Goderich.

Putnam (2007) asserts that inclusive leadership promotes mutual respect and fosters community relationships. This position is reinforced by the claim that inclusion improves community cohesion and provides effective representation of varied religious concerns. Putnam's theory is supported by the assertion that this inclusivity strengthens communal relationships.

4.3.2.1.4. Gender and Age Representation

An investigation on the relationship between gender and age in leadership positions uncovers disparities that call for immediate action to be considered. The under-representation of women in leadership positions, particularly the male-dominated positions of Town Head and Councillors, exemplifies the structural impediments that continue to restrict women's participation. According to the Catalyst Report (2020), women's under-representation is exacerbated by historical, cultural, and institutional hurdles. Consequently, initiatives like leadership training and programs designed to assist women in closing the gap have been implemented to tackle this issue, albeit with limited success thus far.

It is common for older people to benefit from leadership systems, which is an example of traditional hierarchies that prioritise seniority above youth engagement. This tendency arises from the fact that older individuals generally possess greater life experience and monetary and other resources enabling them to canvas or challenge for leadership positions. According to the research findings of Thompson and Vecchio (2009), this underscores the need for activities that engage both younger and older generations, fostering the integration of fresh ideas and diversification of leadership.

4.3.2.1.5. Patronage Dynamics and Political Party Affiliations

Political parties facilitated the election of officials in Goderich, indicating that these officials were affiliated with Sierra Leone's historically significant parties, namely the Sierra Leone People's Party (SLPP) and the All People's Congress (APC). This political environment corresponds with earlier mentions of patronage dynamics (Chapter 2), which demonstrated that national patron-client networks affect local governance, as previously indicated in the studies of Zack-Williams (1999) and Richards (1996).

The presence of former national political leaders from different political parties in Goderich highlights the town's political significance. The amalgamation of national politics with local leadership structures was illustrated during discussions with the town leaders, who referenced Former President Ernest Bai Koroma (APC) and the late Justice Solomon Berewa, former Vice President (SLPP). The conversational responses obtained from the village leaders are synthesised here:

“We are profoundly grateful to God for the continuous presence of political figures in Goderich, which has thus far facilitated decisions regarding the construction of a modern highway network, the elevation of the Teachers’ College to university status, and the establishment of additional amenities such as the Emergency Hospital”.

Future study must comprehend these political processes and their effects on Goderich residents' lives and social cohesiveness, as well as their implications for the pursuit of sustainable local livelihoods.

4.3.2.2. Population Change and its Perceived Causes According to Village Leaders

There is unanimity among village leaders that Goderich's population has grown (Table 7), a consensus which also sees the drivers of this change in the development of an accessible road network, expanding housing projects and improvements in essential public facilities like markets and water supplies, especially along the main highway routes. This assertion is strongly corroborated by discussions with the village leaders (three Headmen and two Councillors) at the outset of my engagement regarding the pace of physical and infrastructural developments in Goderich, which appears to have influenced broader livelihood opportunities and challenges related to environmental and social issues. Although Table 7 does not provide a full list of the elements that contribute to population expansion, it does provide insights based on the consolidated responses to my questions into the factors that are driving this increase. These responses are consistent with the condensed collective responses from the village administrative heads as highlighted thus:

"Goderich has grown in both population and association with prominent political figures, particularly since the restoration of normalcy following the devastating civil war that ended in the early 2000s".

As observed in analogous publications by Bebbington and Batterbury (2001) and Tacoli (1998), the close association of key political figures with localities like Femi Turner and Bush Water has significantly raised the profile of Goderich as a whole. This is boosting its claim to be an important node in an expanding regional highway network which is increasingly connecting rural communities and towns along the Freetown Peninsula, including York, Hamilton, and Number 2 villages, to each other.

The results of work by McGranahan, Baulk & Anderson (2007), who highlight the importance of basic services and infrastructure in the dynamics of both urban and rural populations, align with these understandings of political connectedness and infrastructure advancements. The evident correlation between population growth and infrastructure development underscores the impact that enhanced accessibility and livability exert on attracting new people. Understanding the spatial distribution of populations and its implications for local development planning and livelihood interventions necessitates insight into this relationship. It also aligns with the findings of Henderson (2002), who argues that the availability of infrastructure and services is crucial in shaping urban expansion and migration patterns, thereby influencing the overall socio-economic fabric of a settlement and its region.

Table 7: Perceived Population Change

Population Change	Leadership Response		Total
	CQ	HQ	
Increase	2	3	5
Decrease	0	0	0
Total	2	3	5

4.3.2.3 Village Leader Viewpoints on Local Livelihood Opportunities (Notably from a Migrant Perspective)

Local leaders consider migration as an important variable in population change and a reflection of Goderich's attraction as a migrant destination. Table 8 presents this attractiveness for livelihood purposes, notably from the perspective of migrants, even if only as imagined by the leaders themselves. The response, 'Easy access for livelihood opportunities', emerged as the most

Table 8: Perceived Livelihood Attractions			
Livelihood Attractions	Leadership Response		Total
	CQ	HQ	
Easy access for livelihood opportunities	1	1	2
Quiet	0	1	1
Comfortable	0	1	1
Seaside Attraction/Luxury	1	0	1
Total	2	3	5

frequently selected option by both Councillors (CQs) and Headmen (HQs), indicating a consensus on the benefits on offer to Goderich residents and others in pursuit of livelihood opportunities.

This underscores the important role of mobility in local economies and livelihoods, as a reminder of

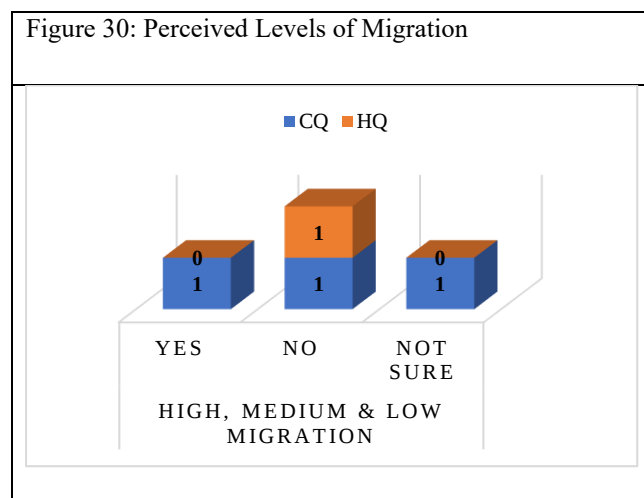
Stark and Bloom's (1985) observation that migration can be a potent force for economic growth and progress in rural areas. The slightly broader range of responses provided by HQs suggests a deeper engagement with community needs and dynamics, reflecting a nuanced view of the relevance of mobility for local livelihoods.

The perceptions of 'quiet' and 'comfortable' living conditions highlight the enhancements in quality of life associated with relocating to Goderich and establishing a permanent residence there. According to Glaeser, Kolko & Saiz's (2001) research, migration is often related with the pursuit of greater living standards and environmental quality. These findings support the research conclusions. One of the CQ respondents used the term 'Seaside Attraction / Luxury', which

implies that Goderich's geographical and natural attributes make it an appealing leisure destination with improved quality of life, particularly for certain people and groups.

4.3.2.4. Migration Trends and Implications as Viewed by Village Leaders

Figure 30 encapsulates the viewpoints of village leaders about migratory trends. When enquired whether they believed the present levels of migration were excessively high, twice as many respondents answered "No." This indicates a prevailing satisfaction with current migration levels,



implying that leaders perceive a balanced ecosystem for both natives and migrants in the present context. A perception like this is indicative of successful community integration and the maintenance of social harmony in the face of shifting demographic trends and patterns. This perception is in line

with the theoretical framework proposed by Portes & Rumbaut (2006), who emphasise the significance of social integration in communities that are receiving migrants. According to Castles, de Haas & Miller (2014), the minority view that migration numbers are excessive may reflect concerns about over-population and resource constraints. This is a recurring issue in migration research. Not only in more desirable areas like Oba Funkia, but also in less desirable and significantly more congested locations like Bush Water and Sherbro Town, this raises questions about how Goderich has effectively balanced the integration of commuters and newcomers with the preservation of local quality of life. This is a question that needs to be answered. Sherbro Town is a dormitory for the underprivileged villages that surround Shallow Water Beach. The observations made from conversations with people in the region of Sherbro Town suggest that it

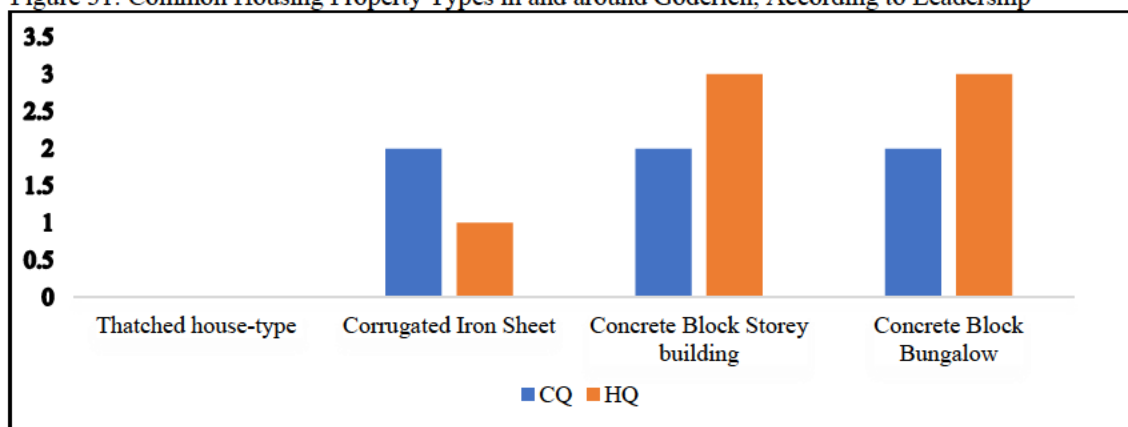
is an overcrowded place that is primarily occupied by migrant residents who are looking for opportunities in fishing.

4.3.2.6. Perceptions of Residential Property Types in Goderich

Figure 31 depicts leader evaluations of housing in Goderich, finding ‘Concrete Block Storey’ and ‘Concrete Block Bungalow’ as the most common types. This implies a perceived shift towards more durable and modern housing options, most likely driven by the requirements of a growing local and migrant population. The reported lack of ‘Thatched house-type’ properties demonstrates a departure from traditional building types, which is consistent with a global trend towards the use of modern construction materials and methods in residential settings as a result of (peri-)urban expansion (United Nations, 2018).

Conversely, the popularity of structures erected with ‘Corrugated Iron Sheet’ demonstrates that a part of the population continues to use cost-effective but less lasting building materials. The variety of architectural designs represents Goderich's socioeconomic diversity, as well as the citizens' various aspirations and desires. Arimah (2010) investigated urban housing diversity and its implications for social fairness, emphasising how the range of building forms provides insights into community adaptation techniques that balance traditional lives with modern living standards.

Figure 31: Common Housing Property Types in and around Goderich, According to Leadership



4.4. Governance and Livelihood Mediation

4.4.1. The Role of Leadership in Shaping Livelihood Activities

The guideline notes from the Department for International Development (DFID) and the study of Whaley (2023) and Lambini & Nguyen (2014) underscore the significance of local leadership in influencing community livelihood initiatives. This influence includes the limitation of access to and control over particular livelihood assets or capital, in addition to broader livelihood prospects. Local leadership, as expressed in elected and appointed officials such as Townheads and District Councillors, plays an important part in communal life. These positions, coupled with the roles played by communal institutions and membership organisations, have a considerable impact on livelihood processes and outcomes at different geographical scales.

Indeed, as one of the Councillors aptly stated:

"Our leadership directly shapes the livelihood paths available to our people. It is about understanding and leveraging the community's assets effectively."

This sentiment underscores the perceived strategic role of leaders in managing community assets to ensure sustainable livelihoods. By leveraging the interpretative power of cross-tabulation derived from Multinomial Logistic Regression (MLR) (Duressa, 2021; Dauda, 2019; see also Chapter 3), I seek to elucidate the perceived relationship between leadership dynamics and livelihood structures and outcomes, as explored in Section 4.4.2.

4.4.2. The Influence of Cultural Leaders and Young People in Leadership Selection

Table 9 shows cross-tabulation data on town leaders' perceptions of cultural leaders and young opinion formers or 'influencers.' The table displays the participation of diverse groups in the

selection of community leaders, which has been shown to considerably boost community well-being. A Headman remarked:

"Cultural leaders bring a wealth of tradition and wisdom to our leadership selection process, ensuring that our choices reflect our community's values,"

This reflects research indicating the impact of cultural leaders when leadership selection occurs through political nomination instead of 'open' or 'popular' methods. Cultural leaders were identified as opinion shapers, both independently and in partnership with youth during political nominations, demonstrating their significant impact on the town's governance dynamics.

The active involvement of youth in the selection of leadership, especially in internal processes, is emphasised. A young community leader declared:

"The voice of our youth is pivotal in shaping the future direction of our town".

The table confirms this viewpoint, revealing that young people were viewed as the key influences in all cases of internal selection, underscoring their critical position in the decision-making process and their potential influence on the community's future.

Table 9: Leadership and Opinion-Influencers in Goderich				
What are the options available to select leaders in Goderich?	Who are the main opinion formers in the town?			Total
	Cultural Leaders/Groups	Young People	Combined Cultural Leaders/Groups and Young People	
Nominated by political parties	1 33.33 100.00 20.00	0 0.00 0.00 0.00	2 66.67 100.00 40.00	3 100.00 60.00 60.00
Selection from within the community	0 0.00 0.00 0.00	2 100.00 100.00 40.00	0 0.00 0.00 0.00	2 100.00 40.00 40.00
Total	1 20.00 100.00 20.00	2 40.00 100.00 40.00	2 40.00 100.00 40.00	5 100.00 100.00 100.00

Table 9 also elucidates the comprehension of leadership regarding the mechanisms of leadership selection, emphasising methods such as nomination by political parties and selection from within the community in Goderich. It also highlights the importance of cultural leaders and youth in the selecting process. The reported engagement of these organisations in the selection process highlights their importance as primary influencers, with political party nominations favouring the combined groups, which represent 40% of the total leadership pool. These findings underscore the necessity of incorporating stakeholders in leadership decisions to ensure alignment with community values and objectives, ultimately fostering a cohesive and well-being-oriented community ethos.

4.4.3. The Existence and Role of Social and Cultural Groups/Capital

Table 10 confirms that most of the leadership, notably Headmen, firmly believe in the existence and operation of local ‘social and cultural groups and/or capital’. Obrist, Pfeiffer & Henley (2010) contend that social capital is characterised by elements such as organisational engagement, social experiences and practices encompassing both formal and informal schooling. According to Bourdieu (2001), cultural capital may be broken down into three categories: embodied, objectified, and institutionalised. This particular form of cultural capital has a substantial impact on human agency and is essential for the development of sustainable livelihoods in rural communities.

Figure 32 contains additional details, both of the range of forms these groups take locally, as well as of the reported prevalence of ‘Credit Union and Youth Group’ in the community. This finding resonates with observations by Bourdieu (2001), as well as the more recent work of Pineda (2023), which emphasise the crucial role played by such groups as forms of social/cultural capital, as well as in facilitating access to additional livelihood capitals and opportunities. Not surprisingly, one Headman remarked that:

"Social and cultural organisations are the backbone of our community, providing vital support networks for our people".

This underscores the essential role these groups are believed to fulfil in promoting social cohesiveness and improving livelihood chances. These organisations function as essential venues for individuals to obtain help, share knowledge, and cultivate relationships that enhance social stability and economic resilience.

Furthermore, both Headmen and Councillors affirm that:

"Our youth are at the forefront of these initiatives, driving positive change and innovation within our social and cultural fabric".

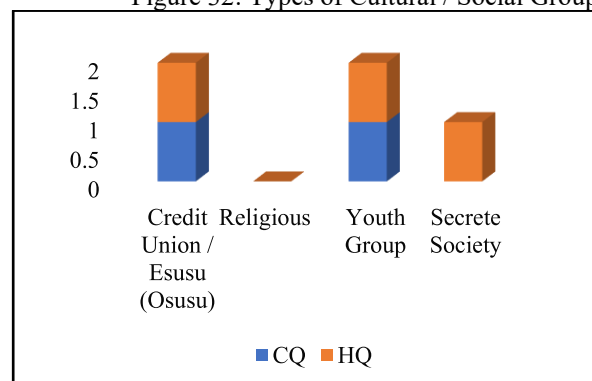
This latter statement emphasises the proactive involvement of youth in influencing their communities, utilising social networks to create and instigate sometimes revolutionary change. These groups are perceived as providing a platform for belonging and identity while also serving as incubators for skills development and livelihood improvement.

Engagement in such organisations enables members to access valuable networks and resources, profoundly influencing their socio-economic well-being. This viewpoint corresponds with Bebbington's (1999) 'Capitals and Capabilities' concept, which underscores how access to social, human, and financial capital empowers individuals to improve their livelihoods. By cultivating robust social connections and enhancing access to skills and opportunities, these groups are vital in community-driven development, underscoring the assertion that social capital is an essential asset for livelihood sustainability.

Table 10: Presence of Social and Cultural Groups

	CQ	HQ	Total
Yes	1	2	3
No	0	1	1
Not Sure	0	1	1
Total	1	4	5

Figure 32: Types of Cultural / Social Groups



Thus, in the view of one of the Townheads:

"Savings groups are not just financial lifelines; they are the embodiment of mutual aid and solidarity within our community".

Such initiatives underscore the proactive stance taken by community members towards economic self-sufficiency, fostering social bonds and collective resilience. During conversation with Townheads, the establishment of esusu/osusu or informal savings groups and associations emerged as a compelling illustration of social capital and networking in practice. These initiatives are organised and/or run by community members with the intention of addressing poverty and financial hardship. Within these groups, individual members contribute predetermined amounts of cash savings at regular intervals, which are then collected and subsequently distributed among the participants based on a predetermined cycle or rotation (Ola-David & Osabuohein, 2018).

The presence of such associations illustrates the proactive measures adopted by community members to cultivate mutual assistance and mitigate economic difficulties. Moreover, these informal savings organisations enhance social relationships and collaboration among participants,

so cultivating trust and strengthening community cohesion. It is of the utmost importance to acknowledge and support these activities because they enable individuals to improve their financial condition while also contributing to the overall prosperity of the community. The compiled replies from the Townhead questionnaire, which are displayed in Figure 32, brought to light the significance of esusu/osusu or credit unions on the livelihoods of the people living in Goderich. The response indicated that these savings groups are essential to community life, offering financial support for income-generating activities and mitigating the cost-of-living burden during crucial periods when financial assistance is necessary, such as funding children's education or meeting essential family obligations like funeral expenses during bereavement. It also shows that esusu/osusu significantly contributes to the well-being and resilience of Goderich community members, functioning as essential mechanisms for economic stability and social support.

Furthermore, the unanimous 'Yes' response to the question regarding the existence of development-related activity in and around Goderich in Figure 33 is testament to the firm belief among community leaders that outcomes of initiatives and interventions already underway provide strong evidence in support of their long-standing view that progressive governance can effectively mediate access to and control over improved and increasingly sustainable livelihood capitals and opportunities.

Table 11 indicates that vigilante security is the most commonly cited example of such activity in the responses provided, with eco-tourism, and sand mining being additional examples. The second of these, sand mining, is noteworthy for highlighting the challenges to, and seeming limits of, local resource governance in the face of a seemingly unsustainable livelihood pursuit. What local leaders and the media have described as 'rampant' local sand mining has emerged as a livelihood strategy

aiming to capitalize on the opportunity offered by a high and increasing demand for sand fuelled by a local (Goderich and neighbouring settlements) and regional (Freetown) construction boom.

Figure 33: Engagement in Development Activities

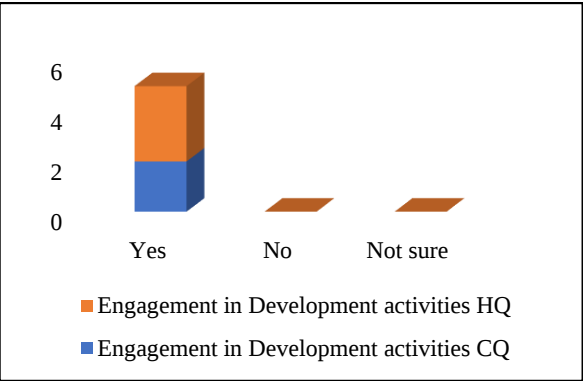


Table 11: Example of Development-Related or Other Activities

	CQ	HQ	Total
Vigilante Security	1	1	2
Eco-tourism	0	1	1
Self-help community cleaning	0	0	0
Sand mining	1	1	2
Total	2	3	5

In depicting the after effects of a landslide, Figure 34 documents negative environmental outcomes resulting from ‘uncontrolled’ sand mining, which featured prominently during Townhead interviews/discussions, thereby raising questions about the sustainability of this livelihood strategy. In response, concerned Goderich diasporans have provided funding for the provision of so-called ‘vigilante security’ by local youth groups, while Townheads who, as Table 10 shows, consider this a desirable development-related activity, have successfully ‘mobilised’ local and regional Police, Ministry of Lands and Environment, and Office for National Security (ONS) personnel as enforcement agents with responsibility for safeguarding communal natural capital from destructive or unsustainable use

Figure 34: Coastal Erosion and Overhang Collapse near Oba Funkia Cemetery (August 2021)



Source: Sierra Network, August 21, 2021. (https://www.youtube.com/watch?v=M_CdKZPcv3Q)

4.4.4. Reflections on Governance, Mediation, and Community Expectations

An ongoing examination of their own role in mediating access to and control over these and other assets appears to have been informed or encouraged by the recognition of the significance of natural, social, and cultural capital for livelihoods in Goderich by the leadership of the community. This examination is part of broader processes that aim to improve the livelihood status of the community as a whole. Through their mediation of attempts to foster a sense of community cohesion, provide opportunities for skills development and facilitate the exchange of resources and information, Townheads and councillors see themselves as integral to the functioning of local/regional structures and processes for empowering individuals and groups in ways which provide the basis for (sometimes coordinated) action in pursuit of improved livelihood security.

The sand mining case serves as a pertinent reminder of, firstly, the potential challenges and limitations of livelihood interventions favoured by community leaders, and secondly, that social

and cultural capital can be utilised inclusively as well as exclusively in its operation or function. The leaders express a need for improved resources, augmented regulatory authority, and expanded community involvement to boost their influence on sustainable livelihood initiatives. According to a Ward Councillor:

"Our vision for a thriving community is hampered by limited resources and regulatory constraints. Expanding our capabilities and fostering inclusive participation are essential steps forward."

This remark corresponds with extensive discussions on the governance of natural resources, wherein efficient regulatory frameworks and community-oriented participatory methods are thought to be essential for attaining sustainability (Ostrom, 1990; Bebbington, 1999). Studies have shown that the interaction between social capital and regulatory frameworks greatly affects the efficacy of livelihood interventions, especially in resource-dependent communities (Pretty & Ward, 2001). Thus, the Ward Councillor emphasises the necessity of institutional backing and community involvement in formulating sustainable development strategies.

4.5. Community Representative Perspectives on Livelihoods in Practice

4.5.1. Livelihood Strategies and Practices

Figure 35 is a composite bar chart illustrating the diverse range of main and subsidiary livelihood strategies and practices in Goderich. These include everything from traditional fishing and sandmining to petty trading and transportation, as well as banking and legal work. These livelihood strategies and practices have been identified by townheads and councillors. The most widely reported activities represent a mix of natural resource-based and non-natural resource-based activities, and the leadership was keen to highlight what it saw as a combination of traditional

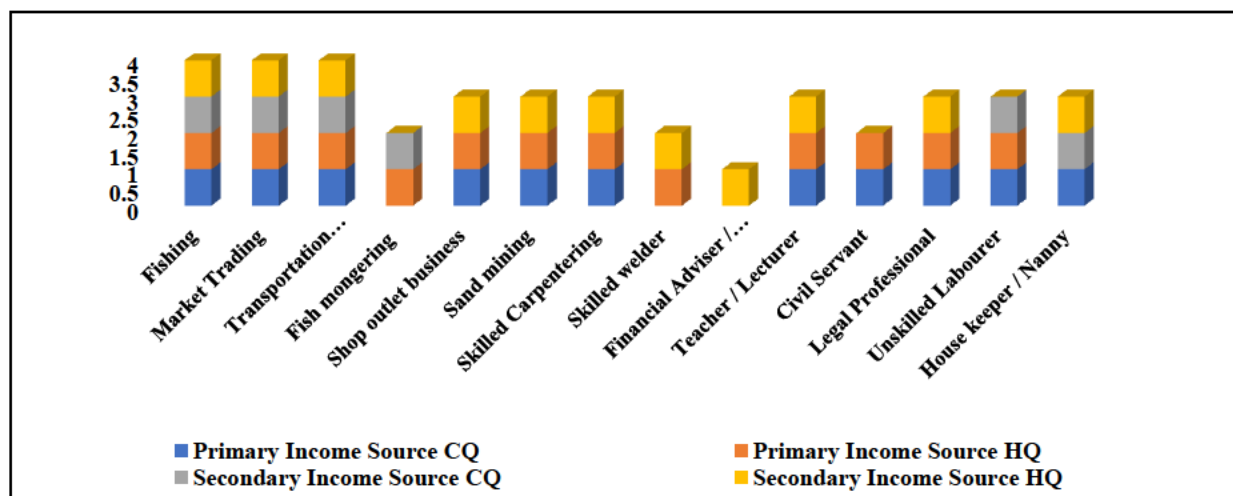
strategies and emergent practices in a manner indicative of a community at the crossroads between tradition and modernity.

It is the latter which is believed to explain the minimal yet increasingly significant role of local financial services, for instance, despite the enduring popularity of informal savings mechanisms like esusu/osusu. And which also led one town leader to highlight that:

"Fishing connects us to our past and guides us into the future, feeding our families while maintaining our cultural heritage".

In the process he emphasises not only the perceived economic importance of fishing, but also its cultural significance, while echoing sentiments found in the work of McGoodwin (2001), for example, who discusses the intricate relationship between fishing communities and their environments. Similarly, petty trading and transportation were thought to highlight the entrepreneurial spirit of the Goderich community, reflecting broader trends observable elsewhere in the pursuit of livelihood diversification as a strategy for risk mitigation and economic resilience (Ellis, 2000; Gautam & Andersen, 2016).

Figure 35: Range of Primary and Secondary Livelihood Activities Practised by People in Goderich According to Community Leaders



Although farming does not feature prominently in leadership responses, it remains a crucial aspect of subsistence survival for a small segment of the population in rural communities like Goderich, as emphasised in studies by Jackson (2015) and Ellis (2000). The perspectives of both the Headmen (Headquarters or HQ) and Councillors (Community Quotient or CQ) are encapsulated in the following statement derived from my discussions with them:

“We believe that agriculture, though a vital source of nutrients for human survival, is not widely regarded as a rapid means of income generation for most individuals, with the exception of specific groups such as women from the Limba tribal community”.

The coastal location of Goderich increases its appropriateness for activities like fishing and, more recently, sand extraction. On the other hand, as both Jackson (2023) and Brima (2023) have recently pointed out, the ongoing deforestation in the Milton Margai and Maggay Town areas has caused a significant decline in firewood- and other forest-related activity. Because of the widespread deforestation that has been caused by the need for human settlement, there has been a considerable decline in the supply of wood, which has had a negative impact on livelihoods, particularly for those who are dependent on it for their survival.

Thus Councillors (CQ) especially underscored a shift towards urban-centric livelihoods, asserting:

“The increasing inclination towards street trading, transport systems, and professional labour signifies a quest for superior financial yields relative to agriculture. This transition has been facilitated by improved road infrastructure and the influential presence of political elites in the region”.

While referencing the late Vice-President Solomon Berewa and former President Ernest Bai Koroma as residents of the Femi Turner and Bush Water localities, the statement calls attention to a perceived substantial transformation in local livelihood practices. This transition, which represents a change away from traditional means of subsistence such as fishing and timber sales and towards economic activities that are more diverse, is highlighted in Chapter 2 (Section 2.6.3). The change has been made possible by the increased availability of professional labour options as well as the expansion of street trading outlets along major thoroughfares in the vicinity of Femi Turner, MetChem, Milton Margai Road, and Antar Town. The emergence of professional employment opportunities related to health care in Goderich, particularly the Emergency Hospital along the main Peninsula Highway and a private hospital on MetChem High Street, may correlate with the socioeconomic progress in Goderich, thus rendering activities such as farming unacknowledged in the listings of primary and secondary livelihoods in the Townhead responses presented in Figure 35.

4.5.2. Spatial Dimensions of Livelihood Activity

Figures 36 and 37 illustrate the perceived geographical locations of livelihood practices, revealing a concentration in residential areas in Goderich. As one of the town leaders expressed it:

“This localisation strategy reduces costs and strengthens our community fabric, making every home a cornerstone of our economic well-being”.

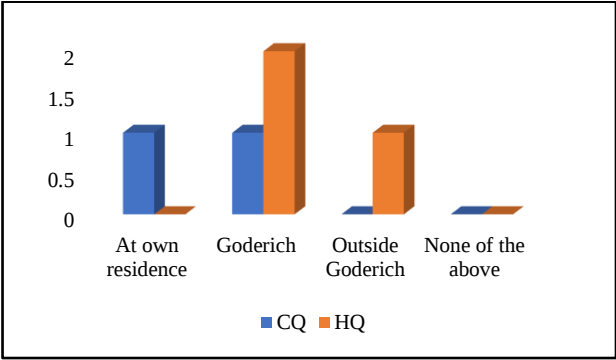
This also aligns with findings from Bebbington (1999), who emphasises the importance of place-based strategies in livelihood sustainability. Such localisation reflects broader socio-economic strategies aimed at optimising resource use, reducing vulnerability, and enhancing community resilience.

That residents predominantly engage in livelihood activities within Goderich underscores the critical role of local ecosystems and networks in supporting these pursuits. This spatial analysis of livelihood activities offers invaluable insights for policymakers and development practitioners, suggesting that interventions aimed at supporting sustainable livelihoods must consider the local context and leverage the inherent strengths of community-based practices.

Figure 36: Location of Primary Livelihood Activity



Figure 37: Location of Secondary Livelihood Activity



4.5.3. Livelihood Concentration and Community Development

The leadership view that livelihood activities are strategically concentrated within specific areas like MetChem, as highlighted in Figure 38, helps to identify the economic focal points or livelihood ‘hot spots’ within Goderich. A town leader remarked that:

"The strategic location of businesses along the Peninsular highway in MetChem has transformed it into an economic hub, attracting trade and fostering growth".

This observation reflects the critical role of spatial planning and infrastructure development in shaping economic landscapes, resonating with the work of Porter (1998), who discusses the competitive advantages conferred by geographical concentration of economic activities.

This spatial-economic analysis not only sheds light on the strategic importance of places like MetChem and, to a lesser extent, Antar Town and Oba Funkia, for Goderich's economic life but also emphasizes the need for targeted strategies that capitalise on livelihood agglomeration in these hubs. By understanding the reasons behind the concentration of activities in specific locations, interventions can be more effectively designed to support their growth, enhance their accessibility, and promote greater sustainability of the livelihood practices and strategies in question.

Detailed insights from Goderich's town leaders reveal a unified vision for enhancing the community's socio-ecological landscape and realising its livelihood potential (Table 12). They advocate an approach privileging livelihood security and sustainability while building initiatives already underway, which encompass, among other things, positive place-promotion; construction of modern markets and employing paid staff for their upkeep/management; improving the road network; and fostering community cohesion. In words which resonate with work by Vignola et al (2022), and Gómez & Ricketts (2013), who discuss the critical role of market infrastructure in enhancing economic opportunities for rural communities, one town leader emphasises:

"Modern markets and improved infrastructure are not just physical structures; they are the bedrock of our community's economic and social vitality".

This overall strategy, favoured by both CQs and HQs, underscores their commitment to creating an enabling environment that supports diverse livelihood activities and strengthens the social fabric of Goderich. By focusing on infrastructure development and community cohesion, the town's leadership demonstrates an acute awareness of the interconnectedness of physical, economic, and social capitals in achieving sustainable livelihood outcomes.

Figure 38: Concentration of Livelihood Activities in Goderich

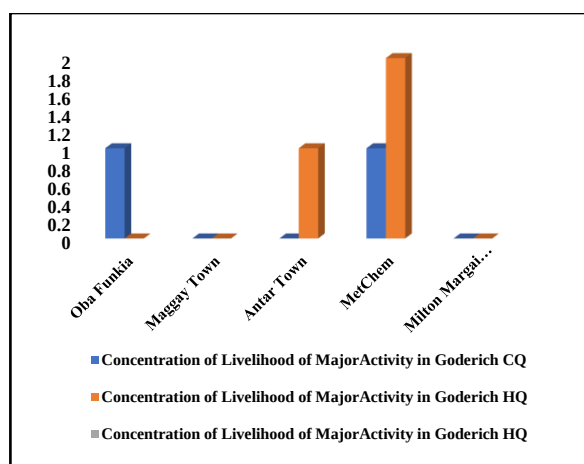


Table 12: Actions Taken to Promote Livelihood Activities in Goderich

	Steps taken to promote Livelihood activities in Goderich (Tick as much as is applicable)	
	CQ	HQ
Positive Promotion	/	/
Construction of modern markets	/	/
Employ paid staff to manage markets	/	/
Improved Road network	/	/
Foster community cohesion	/	/

4.5.4. Mitigating Community Reputational Damage

Figures 39 and 40 summarise town leader perspectives on the justification and recommended means for countering the reputational damage inflicted on their settlement as a direct result of, first, heightened social tensions accompanying the intensification of mostly unauthorized and largely uncontrolled sand mining; and, second, prolonged, intense and largely unflattering or critical media/social media coverage of the environmentally destructive consequences of the practice (as portrayed, for instance, in Figure 34). All five leaders favour a proactive stance in mitigating the challenges, reflecting a collective determination to burnish the community's overall image. As one of the leaders put it, in a sentiment that echoes the findings of Ngcobo & Reddy (2024) on the crucial role of leadership in addressing and reshaping community reputation:

"We are united in turning the tide against the negative perceptions that shadow our town, ensuring Goderich shines in its true light".

That community leaders were unanimous in believing in the need for an urgent response to the very real threat posed by reputational damage to the town's prospects for community development

and well-being should not overshadow their prior attempts, on which they were all equally agreed, to be pro-active in burnishing the appeal of their town/community. Figure 40, which shows their preferred strategies for reputation management and community revitalization, suggests an understanding of the complex dynamics between environmental sustainability, economic development, and social perception.

Figure 39: Response on Leadership Action in Countering Reputational Damage

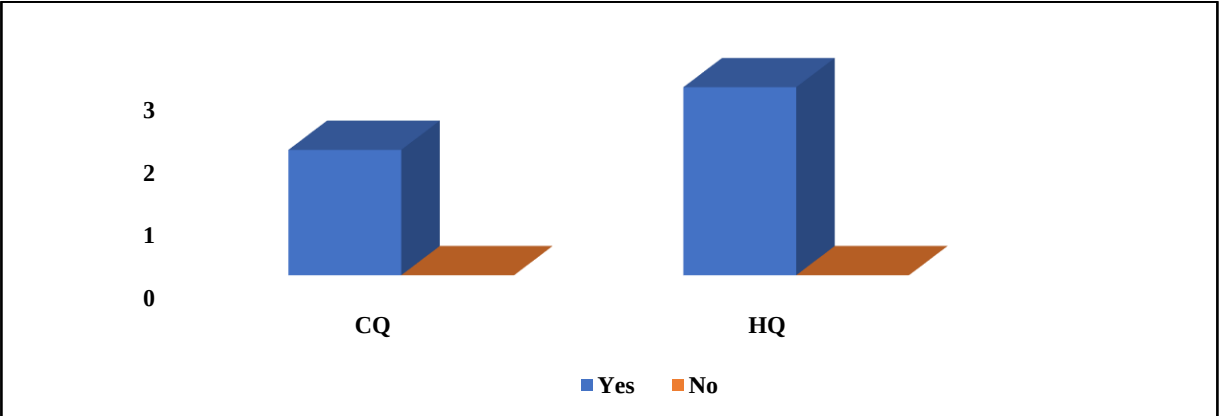
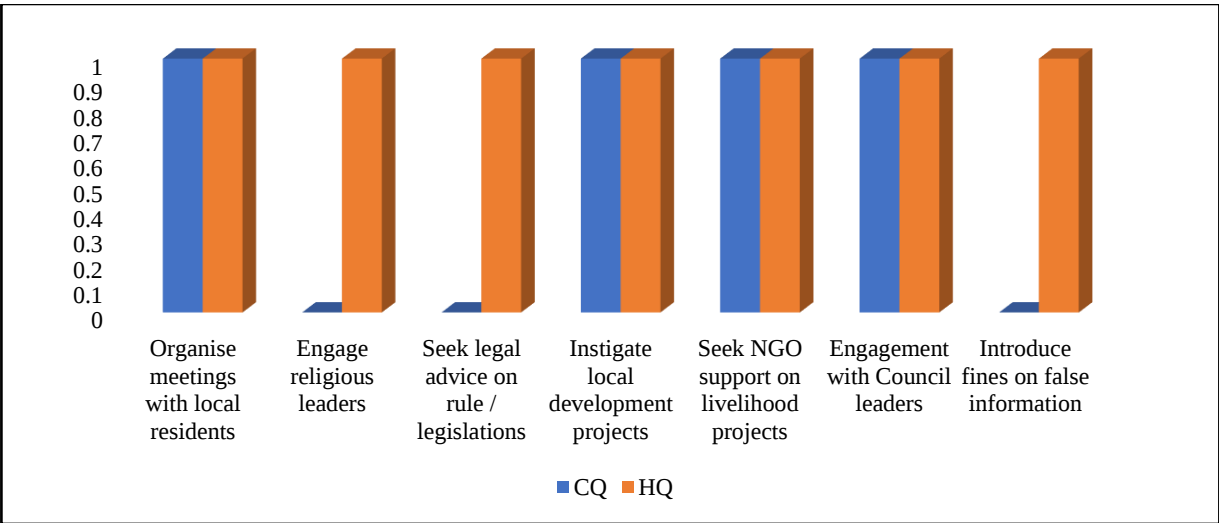


Figure 40: Specific Actions to Counter Reputational Damage



Building on the broad/general aspirations set out in Table 12, Fig 40 details suggested actions which have already been, or are currently being, or might be attempted to address the factors that

contribute to portrayals of either individual localities in Goderich, or the whole settlement, in a negative light. However, actions involving ‘engagement with religious leaders’, ‘seeking legal advice’, and ‘introducing fines’ are not supported by Councillors (CQ), who are concerned about what they see as a real risk that these measures will give undue prominence to intractable issues like sand mining, bringing unwelcome attention which might have the effect of discouraging potential migrants or relocatees from specific communities like Oba Funkia, or indeed the settlement of Goderich as a whole.

4.6. Emerging Thematic Pillars from Townhead/Occupational Interviews and Participant Observation

In retrospect, three thematic pillars deriving from Townhead and occupational interviews and participant observation - Innovation Amidst Adversity, The Pillar of Community Support, and Navigating Inter-generational dialogues – can be seen to shed light on key aspects of Goderich's community dynamics in relation to livelihoods. Innovation Amidst Adversity showcases the community's resilience and ability to survive and even thrive through innovation and coping, despite facing challenges such as economic fluctuations and/or environmental change. The Pillar of Community Support underscores the importance of solidarity, social cohesion, and mutual assistance among community members in navigating livelihood challenges and fostering resilience. Navigating External Influences emphasizes the strategic adaptation and collective action needed to address external pressures, whether they are local economic trends and policy changes, or global events.

This thematic framework approach draws from research by Zebrowski & Sage (2017) on community resilience, which emphasises the role of collective action, adaptive capacity, and social capital in building resilience to various stressors. The gendered accounts within these themes

further highlight the collaborative efforts of men and women in Goderich, showcasing the strength of community cohesion and inclusivity in fostering sustainable prosperity and well-being for all members. Overall, these thematic pillars provide a useful window into Goderich's community dynamics and the strategies employed to address livelihood challenges and opportunities within its unique context.

4.6.1. Innovation Amidst Adversity: Local Fisherfolk and Livelihood Transition

Incorporating insights gleaned mostly from occupational interviews and participant observation, the narrative depicting the transition of fishing tradition and practice in Goderich emerges as a tapestry interwoven with diverse voices. This narrative not only chronicles the historical adherence to existing or long-established fishing practices but also captures the subtleties of contemporary shifts within fishing activity and community. It offers an understanding of how Goderich's fishermen are navigating the complexities of tradition and innovation, forging a path that acknowledges their heritage while embracing changing realities.

4.6.1.1. Local Fishermen Reflect on Evolution

The adaptation of fishing practices in response to environmental and legislative changes is a complex process that illustrates the deep interaction between communities, their legacy, and the necessity for sustainability. In November 2022, an interview was conducted with five local fishermen (V, W, X, Y, and Z), aged between 18 and 60 years, each reporting a minimum of ten years of fishing experience, primarily in outboard vessel fishing at Shallow Water Beach. The discussion focused on the evolution of fishing practices over time and revolved around the question: *'How has fishing adapted in light of environmental and regulatory changes?'* Messrs. X and Y noted that fishing is not only a means of subsistence but an integral aspect of their individual

identity and group tradition. They recognised that the fishing landscape is being transformed due to evolving environmental circumstances and regulatory frameworks.

Key themes that emerged from the interview included notions of coping and adaptation as means of immediate survival and long-term sustainability. The fishermen highlighted the possibility of diversifying into aquaculture and tourism, not just to avoid the demands of regulatory fishery compliance, but also to ensure long-term viability of family/household and community. This recalls research findings by scholars such as Ari et al (2024), who studied similar transitions in coastal communities and emphasised the importance of adaptive strategies in sustaining traditional livelihoods. According to the fishermen:

"We adapt to the fluctuating circumstances, modifying our approach as conditions evolve. Regardless of circumstances, our fundamental essence remains resilient and intertwined with the sea".

This observation summarises fisherfolk attitude to resilience and adaptation as they confront environmental and regulatory problems. Fishing groups and communities are not only seeking to preserve their cultural heritage but are also trying to embrace new opportunities in the quest for more secure livelihoods. This sentiment is echoed in studies like Johnson & Nguyen (2018), which explore how cultural values can drive sustainable practices in fisheries management. In essence, the fishermen's reflections offer glimpses into the dynamic interplay between tradition, adaptation, and sustainability in the context of evolving fishing practices.

Participant Observation and Reflection

The scene is a transitioning waterfront, where traditional fishing nets coexist with modern aquaculture gear, serves as a microcosm reflecting broader shifts in coastal communities

worldwide. This visual juxtaposition encapsulates the dynamics of adaptation and continuity within fishing practices. As I observe the scene and their implied dynamics, with reference to Foster et al's (2023) study on coastal transitions, the coexistence of old and new techniques signifies not just a change in methods but a complex interplay of economic, social, and environmental factors. My observation of eager young apprentices learning existing and new fishing techniques further highlights the intergenerational transfer of knowledge and skills crucial for the resilience of fishing communities.

The intertwining of tradition and innovation on the waterfront mirrors findings from studies like Aoki & Hayami (2001), and Datta & Roy (2022), which emphasise the importance of adaptive capacity in navigating transitions in coastal economies. The eager faces of young apprentices symbolise not only a continuation of fishing traditions but also a readiness to embrace more sustainable practices in response to evolving socio-environmental challenges. This narrative speaks to broader research on intergenerational learning and sustainable livelihoods, for example as explored by Buffel et al (2014), who highlight the role of mentorship in fostering adaptive resilience among coastal communities. In essence, my observation unveils a narrative of resilience, continuity, and adaptation, echoing themes prevalent in scholarly discourse on coastal sustainability and traditional livelihoods.

4.6.1.2. The Pillar of Community Support: Market Vendor Journeys of Mutual Collaboration

The market vendors in question comprised eight randomly selected individuals from prominent marketplaces in Antar Town, England Ville at the northern edge of Antar Town, and MetChem, all but three of whom were women. All participants were aged between 21 and 44 years and resided in and around Oba Funkia, England Ville, MetChem, Antar Town, and Femi Turner. Their responses to the question '*What impact have recent infrastructure improvements had on the market*

community?’ reveal a narrative of cooperation, community empowerment, and economic resiliency. The vendors who operate out of market stalls, strategically located shops, and practise mobile trading recognised the advantages of the improved road connection from their various business locations to the main Peninsula Road, signifying not only physical connectivity but also a metaphorical strengthening of community ties. This issue of connectedness and collaboration aligns with analogous study conducted by Venkataraman et al. (2016) regarding the influence of infrastructure in promoting economic networks and social cohesiveness within market communities. Vendor observations remark on an ongoing transition from solely prioritising greater customer traffic and patronage (ie competition) to emphasising collective strength and harmony (ie cooperation).

Additionally, two of the eight traders in their early thirties (one male, Muslim and from Bush Water; and the other, female, Christian and resident of Oba Funkia), separately highlighted the benefits of the sharing of spaces and ideas, thereby underscoring the existence of a collaborative ecosystem in and around marketplaces. This also calls attention to how professional collaboration can also take the form of cooperation across genders, with women emerging as active collaborators in the pursuit of economic endeavours in and outside Goderich markets. Research conducted by Galego et al. (2022) on collaborative economies in market environments highlights the significance of shared spaces and knowledge transfer in fostering innovation and market resilience. The vendors' analogy of expanding their network to seize chances beyond just sales highlights the transformative potential of collaboration and collective action. This perspective is consistent with research on community-based economic development by Datta & Roy (2022), who promote a collective spirit as fundamental for sustained market expansion. The partnership among Goderich market traders exemplifies overarching trends in market dynamics more broadly, wherein

infrastructural enhancements stimulate a transition towards community-focused resilience and collective prosperity.

Participant Observation in and Reflection on Marketplaces as Centres of Livelihood Negotiation

At the core of what was previously designated as ‘Caweh Junction’ (now recognised as the England Ville market), and which serves as a conduit to the main Peninsula Road Junction, there now exists a robust and vibrant marketplace. This flourishes with the energy of vendors—both male and female, young and old—predominantly locals from all communities in Goderich, though some travel from Freetown and adjacent settlements such as Hamilton and Sussex. The marketplace exemplifies the collective resilience and industriousness of its wider society, with women significantly influencing livelihood patterns and initiatives.

What was once a sparse collection of isolated wooden stalls along a busy thoroughfare has been transformed into a well-established and thriving marketplace. This transformation is not merely an infrastructural evolution but a testament to collective progress, offering diverse opportunities for trade and fostering mutual collaboration among vendors. It reflects the community’s ability to adapt and thrive, promoting the sustainability of livelihoods through shared endeavours.

This transition affects the local and regional economy and offers significant insights into the gendered aspects of market participation, where women are widely recognised as active participants in decisions related to the effective operation of the England Ville market. Galego et al. (2022) underscore the vital contribution of women in fostering collaboration and social capital inside market collectives. They highlight the significance of women's contributions, which enhance the endurance and vibrancy of these marketplaces, illuminating the interplay between gender, social cohesion, and economic sustainability in influencing community development

dynamics and, by extension, livelihood sustainability. Adult women (aged 21-50 years) participate actively in market activities in Goderich, particularly along the marketplaces (Antar Town, MetChem, etc.). These activities range from the sale of produce to the formation of cooperative ventures, such as esusu/osusu activities, to foster a shared sense of financial inclusiveness and self-reliance. Venkataraman et al. (2016) underscore the diverse contributions of women in market contexts, including decision-making, resource management, and community development.

The interconnectedness and mutual reliance characterising effective market ecosystems feature prominently in observations of sellers in prominent marketplaces like MetChem, Antar Town, and England Ville, who also engage in reciprocal support. Women have a crucial role in the formation of network organisations with shared purposes, as earlier noted, through cooperative initiatives such as esusu/osusu and collective organisational structures established to advocate for common concerns related to enhanced services in marketplaces, among others. This narrative aligns with scholarly theories on gendered economies and market resilience, advocating for the acknowledgement and empowerment of women and their role as vital contributors to sustainable economic success in market communities.

4.6.1.3. Navigating Inter-generational dialogues: Elders and Youth Navigate Fishing Tradition and Innovation

Returning to fisherfolk but concentrating this time on intergenerational interaction and knowledge transfer, responses were sought to the question: ‘In the face of adaptation, how is the essence of fishermen’s traditions conveyed to the younger generation?’

An older fisherman responded that:

"Our traditions are the compass that guide us; they teach respect for the sea, patience, and community. These waters are our classroom, and while the tools may change, the lessons remain. We are not just teaching fishing; we are imparting a way of life. This knowledge is our legacy, our connection to the past, and our bridge to the future. As we've always said - the sea doesn't change, only the way we sail it".

While a youthful/young fisherman noted how:

"Growing up in Goderich, I have learned from both elders and peers about the importance of our fishing traditions. While embracing innovation, we also value the wisdom passed down through generations. It is not just about catching fish; it is about understanding our environment, respecting its rhythms, and sustaining our community. We see ourselves as stewards of tradition and agents of change, finding new ways to apply old knowledge in a rapidly evolving world. The sea is our heritage, and we strive to honour it while adapting to modern challenges".

The interplay between elders and youth in navigating traditions and innovation which is vital for the resilience and continuity of Goderich's fishing community is evident in these responses. Similarly, research by Johnson and Martinez (2021) on intergenerational learning underscores the significance of such interactions in preserving cultural heritage and fostering adaptive capacity. The voices of both elders and youth in the interview reflect a perspective emphasizing mutual interdependence in knowledge transmission, with elders offering wisdom rooted in history and experience and youth contributing fresh ideas and new perspectives. This collaborative approach is in keeping with theoretical frameworks on cultural resilience and innovation, highlighting the importance of intergenerational dialogue and cooperation in navigating change while honoring traditions.

Participant Observation in and Reflection on Intergenerational Interaction

On the shoreline, a group of youngsters listens intently to an elder, a scene of transmission from one generation to the next. It is an emblem of continuity, of traditions that adapt and endure, ensuring that the heart of Goderich's fishing community beats strong, undiminished by the changing tides. This observation highlights the importance of intergenerational knowledge transfer in sustaining cultural heritage and fostering resilience. Research by Young et al. (2019) on the role of intergenerational learning in community resilience emphasises the value of such interactions in preserving traditional practices and adapting to changing environments. The engagement between youth and their elders reflects a shared commitment to carrying forward the legacy of fishermen's traditions, albeit not in an unchanging way.

Through these insights, the narrative of fishermen's traditions is not just preserved but invigorated, echoing Townhead perspectives (see Section 4.5.1). It is a testament to a professional community that, faced with inevitable change, chooses to adapt, and hopefully grow, ensuring that the essence of their traditions not only survives but thrives, woven into the fabric of their constantly evolving livelihoods. The inclusion of youthful voices in this observation is crucial, as it signifies their active participation in the renewal of cultural and livelihood practices. Studies by Johnson et al. (2020) on youth engagement in cultural heritage highlight the agency and creativity that young individuals can bring to tradition, contributing to its adaptation and relevance in contemporary contexts. This collaborative approach to navigating traditions and innovation reflects an inclusive strategy for community development and cultural resilience.

4.7. Chapter Summary

Chapter 4 delves further into the contextual features of livelihoods in Goderich, with emphasis on the interaction between local governing institutions and community livelihood dynamics. It studied how governance frameworks and leadership practices mediate livelihood possibilities and constraints, emphasising the significance of cultural and social capital in determining community outcomes. Through an examination of leadership demographics and perceptions of population changes, the chapter provided insights into the socio-economic transformations influencing the town's livelihood strategies. Additionally, the influence of cultural leaders and youth in leadership selection was dissected, shedding light on how traditional and emerging leadership practices coalesce to impact governance and resource mediation.

The thematic pillars emerging from interpretation of interview responses and researcher reflections as part of participant observation illustrated the community's innovative responses to adversity, particularly among local fisherfolk, but also among (mainly women) market traders. Their adaptive strategies underscored a dynamic transition in livelihood activities, aligning with broader socio-economic shifts within the region. This analysis demonstrated how individuals and groups mitigate reputational and other challenges and leverage social and cultural networks to enhance livelihood outcomes. The spatial dimensions of these activities, together with the focus of development efforts, underscored the potential of targeted interventions to fulfil the community's multiple and diverse needs.

Building on these findings, Chapter 5 concentrates on investigating the conceptual and practical interrelationships between natural and social capital, providing a more in-depth assessment of how these aspects affect the lifestyles of Goderich residents. The chapter tries to combine theoretical

foundations with practical realities, therefore enhancing the discussion of sustainable livelihoods in this peri-urban study area.

CHAPTER 5: LIVELIHOODS AS CONCEPT AND IN CONTEXT - ‘POPULAR’ PERSPECTIVES ON NATURAL AND SOCIAL CAPITAL

5.1. Introduction

This chapter uses the diverse forms and types of livelihood activity identified in Chapters 2 and 4 as the basis for exploring ‘popular’ perspectives on the role of natural and social capital in livelihood practices and management, as well as the challenges associated with accessing these assets in Goderich. Drawing on the detailed responses to household questionnaires and, as in Chapter 4, findings of Focus Group Discussions/Interviews and information from Participant Observation, it continues with the task of forging a nuanced view of how diverse forms of capital can be leveraged in the service of livelihoods, by whom, and with what outcomes. It strives to articulate a narrative analysis which foregrounds ordinary people’s lived experiences and aspirations, and the complex challenges they encounter in accessing and protecting essential assets, thereby revealing the complexities woven into the everyday pursuit and protection of livelihoods, and the latter’s central place in daily existence in Goderich.

Building on insights from Nunan (2023), and Scoones (2015), among others, the chapter explores how social and natural capitals are not merely resources to be exploited, but are also fundamental components which, as Bebbington (1999) has noted, can enable Goderich inhabitants to act to influence or change the circumstances under which they pursue livelihoods. Put differently, the chapter highlights the aspirations and challenges underpinning the quest for a sustainable existence via an examination of community voices and experiences. It aims to contribute to a detailed and inclusive understanding of livelihood accessibility, primarily by providing a complement to the leadership perspectives identified and discussed in Chapter 4. The overall objective is to identify

potentially fruitful directions for interventions aiming to enhance the well-being and sustainability of local lives and livelihoods in a way which is contextually responsive. In doing so it echoes both the pioneering efforts of the Sierra Leone Urban Research Centre (SLURC, 2018), and Yin's (2014) endorsement of the use of multiple evidence streams to enhance the validity of case study research.

5.2. Natural and Physical Assets in Constructing and/or Sustaining Livelihoods

5.2.1. Land as Natural Asset in Livelihood Strategies/Management

Based on the responses from 150 household questionnaires (See Appendix 5 for a sample), Figures 41 through 46 summarise the various uses and locations of land as a critical asset in and around Goderich. The analysis highlights its role in supporting livelihood activities that are predominantly, though not exclusively, based on natural resources (see Table 4 in Chapter 2 and Figure 38 in Chapter 4 for summaries of local livelihood activities). Such diverse and strategic utilisation resonates with the broader processes of diversity and diversification, as highlighted in the works of Ellis (2000) and Barrett, Reardon & Webb (2001), among others. Ellis (2000) is particularly interested in the significance of varied income streams for ensuring livelihood security in the face of economic and other uncertainties, while Barrett, Reardon & Webb (2001) articulate the importance of diversified income sources, notably non-farm income, in rural livelihood strategies. At the same time, work by Scoones (1998) offers a lens through which to view the strategic employment of land assets in ways which highlight ingenuity and resilience in crafting sustainable livelihoods. Taken together, these authors offer valuable insights on how to approach an understanding of the role of land in adaptive livelihood strategies deployed by individuals and groups in settlements like Goderich.

The overall geographical distribution of economic activities detailed in Figures 41-46 mirror patterns already reported in Chapters 3 and 4, broadly corroborating earlier Townhead and Councillor assessments of the broad contours of livelihood locational activity. Of particular note is that Goderich's constituent towns function as multi-activity livelihood zones, each with neighbourhood specialisations. However, in every one of them land plays a variety of indispensable roles, serving as both livelihood capital and a vital asset in its own right. In addition, these neighbourhood livelihood zones provide a tangible context for applying further spatial analysis – such as that favoured by Turner II et al. (1995) in their examination of the human-environment interactions that shape land use patterns – which can offer valuable insights for analysing livelihood landscapes in Goderich and beyond. Such an analysis may not only contribute to the empirical exploration of land use dynamics but also generate findings which can be integrated into the broader academic discourse on livelihood diversification and sustainability. In doing so, it would offer the added advantage of aligning with theoretical and conceptual paradigms to help frame our understanding of the role of spatial relations in poverty reduction with reference to enhanced diversification as a means of improving livelihood sustainability (Kassegn & Abdinasir, 2023).

Figure 41: Land-use Location for Agricultural / Rice Farming / Vegetables in Goderich

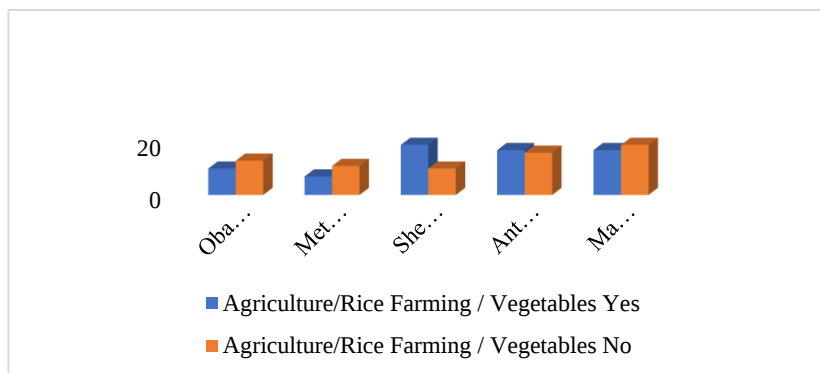


Figure 42: Land Use Locations in Goderich for General Merchandise

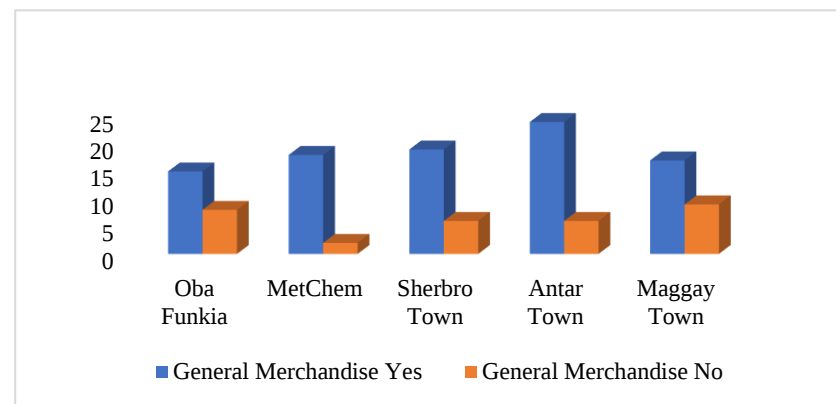


Figure 43: Land Use Locations in Goderich for Retail Trading / Business Shop



Figure 44: Land Use Locations in Goderich for Car Repairs

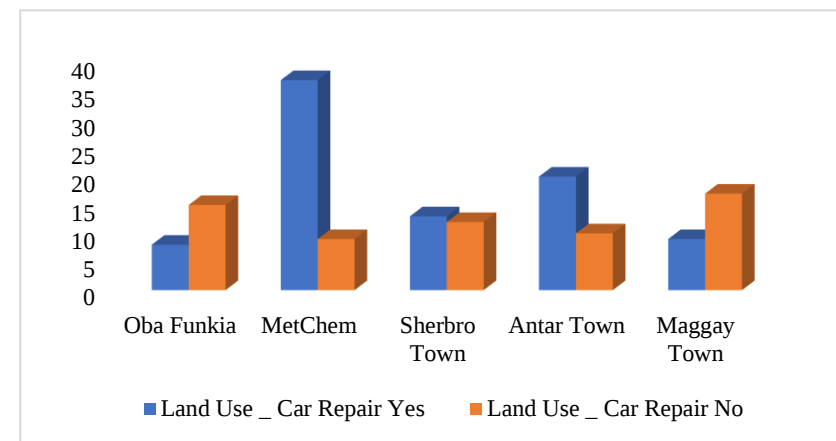


Figure 45: Land Use Locations in Goderich for Outboard Motor and Fishing Vessel Repair

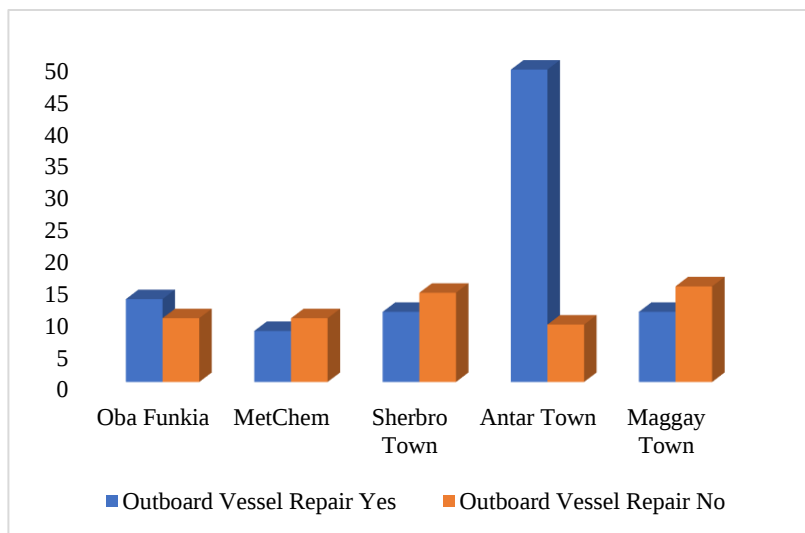
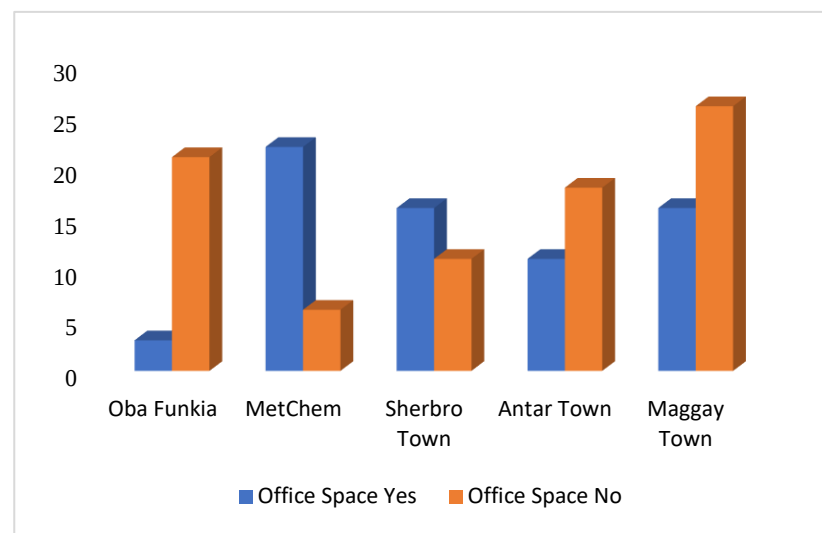


Figure 46: Land Use Locations in Goderich for Office Space



But social and cultural capital and relations interact with each other, as well as with other assets like physical capital, in influencing and being influenced by space, as Table 13 would seem to suggest. The cross-tabulation analysis it provides calls attention to the complementarity or seeming correlation between market accessibility and existence or availability of goods storage or produce preservation facilities. Based on responses from household questionnaires, this analytical approach recalls Agarwal's (2001) emphasis on understanding asset usage within livelihood strategies. Thus, of the 150 respondents, 107 (71.33%) affirmed the existence of a market for selling agricultural produce or other goods, highlighting a prevailing perception of easily accessible markets (cf Ellis, 2000). Furthermore, within the subset of respondents acknowledging the existence of readily available markets, 73.33% also reported easy access to suitable storage or preservation options. This finding echoes Deeyah & Akujuru's (2020) argument regarding the importance of storage facilities in supporting agricultural livelihoods, indicating a significant correlation between market access and storage infrastructure utilization.

Conversely, the 26 responses (24.30%) indicating a lack of market availability often also corresponded with those reporting inadequacies in storage facilities. This correlation underscores the interconnectedness of market dynamics and storage provision, reflecting Scoones's (2009) assertion that infrastructural deficits can impede economic activities in rural areas. Of note also is the subgroup of respondents who expressed uncertainty about market availability ("Not sure") yet benefited from access to storage or preservation facilities. This hints at nuanced perceptions of market accessibility and underlines the need for careful qualitative investigations, as suggested by Scoones (2009), to unravel the intricacies of local livelihood and/or socio-economic landscapes. Moreover, participants indicating '*Not applicable*' to the question of market availability consistently exhibited the same response for storage facilities. This suggests a distinct livelihood

orientation among this subgroup, warranting a deeper exploration of livelihood diversity practices and diversification strategies, as advocated by both Agarwal (2001) and Ellis (2000).

In summary, the narrative deriving from Table 13 is useful for understanding asset utilisation in livelihood contexts with the analytical insights it provides offering a coherent depiction of how assets, specifically market access and storage infrastructure, can underpin livelihood strategies. Furthermore, examining the nexus between market access and storage provision in this way echoes the call by Scoones (2009) for targeted interventions to bolster economic activities and foster sustainable livelihoods in places like Goderich. Grounded in empirical data and scholarly frameworks as in this case, analyses of this kind can contribute to the existing knowledge base, while highlighting the imperative for policy and other interventions aiming to sustain livelihood enhancement to be tailored to prevailing circumstances and existing needs (Agarwal, 2001; Deeyah & Akujuru, 2020; Ellis, 2000; Scoones, 2009).

Table 13: Availability of Markets with Storage Facilities

Availability of market for selling Agricultural produce or other goods. .	Availability of storage or preservation facility				Total
	Yes	No	Not sure	Not applicable	
Yes	77	23	1	4	105
	73.33	21.90	0.95	3.81	100.00
	71.96	62.16	100.00	80.00	70.00
No	26	11	0	1	38
	68.42	28.95	0.00	2.63	100.00
	24.30	29.73	0.00	20.00	25.33
Not applicable	4	3	0	0	7
	57.14	42.86	0.00	0.00	100.00
	3.74	8.11	0.00	0.00	4.67
Total	107	37	1	5	150
	71.33	24.67	0.67	3.33	100.00
	100.00	100.00	100.00	100.00	100.00

5.2.2. Natural Capital in Farming and Non-Timber Forest Product Activities

Along with Figure 41, Table 14 serves as a useful reminder of, first, the importance of agriculture as individual and community livelihood strategy (Kitole, Tibamanya & Sesabo, 2023); and second, the value of enhancing the utility and productivity of natural capital through the strategic application of non-natural capital inputs, in this case fertilizer during farming. The table summarises the incidence and intensity of fertilizer use among respondents practising rice, vegetable and fruit farming; it also establishes the integral role of fertilizer use in local agricultural activity, which is undertaken for both subsistence and ‘commercial’, market or income-oriented ends. To take the examples of vegetable and fruit farming, only about a fifth of farmland devoted to vegetable production turns out produce destined for the market, with the rest being earmarked for subsistence cultivation; while, of land under cultivation for fruit growing, nearly 57% is for subsistence-oriented production, with the rest being given over to farming primarily for income generation.

Moreover, Table 14 also highlights the significance of social capital, as evidenced by the widespread reliance on recommendations from neighbours in determining fertilizer application rates and intensities, even while demonstrating that human capital remains a vital asset, given that actual fertilizer use is still partly the product of consumer demand, but partly too (and twice as likely) the outcome of farmer experimentation (cf Pineda, 2023). Much of the foregoing demonstrates the variety characterizing agricultural decision-making, in addition to highlighting the adaptability required of farmers in responding to market and other dynamics, including climate change, weather variability and land resources degradation (Kitole, Tibamanya, & Sesabo, 2023). In summary, Table 14 does not only reflect agricultural strategies but also speaks to broader themes of community knowledge sharing, individual learning, and market responsiveness -

social/cultural/physical capital, in other words - in sustaining day-to-day existence within Goderich's agricultural, and wider livelihood, landscape (Pineda., 2023; Kitole, Tibamanya, & Sesabo, 2023).

Table 14: Incidence of Fertiliser Use versus Rate of Fertilizer Application

Do you use Fertilizer for agricultural production.	If yes, how do you determine the quantity for use?						Total
	Self-study	Neighbour	Customer	Soil Nutrition	Suggested	Not applicable	
Yes	38	13	6	3	1	4	65
No	12	6	1	0	0	60	79
Not applicable	3	0	0	0	0	3	6
Total	53	19	7	3	1	67	150

Table 15: Natural Capital for Non-Timber Forest Product (NTFP) Activity						
Do you undertake any NTFP activities?	Fruit (%)	Nuts (%)	Vegetables (%)	Fish & Game (%)	Medicinal Plants (%)	Bamboo/Rattan (%)
Yes – Subsistence	74.12	58.82	77.65	67.06	56.47	67.06
Yes – Income	25.88	41.18	22.35	32.94	43.53	32.94
Yes – Total	100.00	100.00	100.00	100.00	100.00	100.00
No – Subsistence	56.92	43.08	78.46	40.00	29.23	53.85
No – Income	43.08	56.92	21.54	60.00	70.77	46.15
No – Total	100.00	100.00	100.00	100.00	100.00	100.00
Total – Subsistence	66.67	52.00	78.00	55.33	44.67	61.33
Total – Income	33.33	48.00	22.00	44.67	55.33	38.67
Total – Overall	100.00	100.00	100.00	100.00	100.00	100.00

Table 15 provides further insights into the role of land and other forms of natural capital, encompassing a range of livelihood strategies commonly classified as Non-Timber Forest Product (NTFP) activities. These activities typically involve the collection (rather than cultivation or farming) of products from forests, woodland, farmland and domestic compounds, among other locations, followed by their preparation or processing. NTFP activity, like farming, nonetheless requires access to, and control over natural capitals (eg fish, game, medicinal plants and bamboo/rattan), with these being devoted, again for farming as for NTFP activity, to a mix of subsistence and/or income-oriented ends. On average, and across the six different NTFPs featured, the distribution of these ends or goals works out at roughly two-thirds to one-third in favour of subsistence, albeit with wide variations within and between NTFP types, and with original percent distributions showing matching ranges of 49.

Equally important is that information on livelihood goals and aspirations in the table is not limited to individuals and households engaged in the NTFPs covered during interview. For instance, even if respondents were not directly involved in the NTFPs under review at the time of interview, they still rely on access to the forest, swamp, estuary, sea and other sources of these products for *additional* goods and/or *other* services which are essential for meeting subsistence and cash income goals in equal measure.

The foregoing not only reinforces an overall impression of the overwhelming importance of natural capital in general, as well as the specific NTFP activities in question for rural livelihoods but also highlights how rarely individuals and households in Goderich treat the goals of meeting subsistence needs and earning monetary income as mutually exclusive. In many ways, and following Adger (2000), this underscores the multifaceted nature of land as a critical asset supporting diverse livelihood strategies and practices, while also calling attention to questions of

resilience and adaptability of rural livelihoods. And while the details may differ, the broad patterns, processes and conclusions unearthed in Goderich resonate with research by, among others, Agarwal (1997), Ellis (2000), Berkes et al (2005), Deeyah & Akujuru (2020) and Scoones (2009; 2018) which, together, offer useful insights into asset usage and livelihood strategies in a variety of rural contexts.

A focus of this kind speaks to the critical importance of natural resources, not only in supporting the day-to-day survival of local communities but also in providing avenues for increased livelihood security and sustainability. The data presented thus far illustrates how reliance on land and associated resources transcends mere material benefits, embedding itself in the social fabric through the reinforcement of community bonds, the transmission of traditional ecological knowledge, and increased access to, and fairer distribution of livelihood resources. The interactions between natural and social capital implied here argue strongly for a synergistic relationship where sustainable management of natural assets can lead to strengthened social cohesion and improved access to livelihood opportunities (Pretty & Smith, 2004; Folke, 2006). They also highlight the positive implications of natural capital conservation for social and cultural capital and argue for integrated conservation and development strategies that harness the potential of natural resources to foster community well-being and resilience (DeFries & Rosenzweig, 2010; Tschardt et al., 2012). These should act as a constant reminder of the importance of sustainable livelihood practices that not only conserve biodiversity but also support local livelihoods and traditional knowledge systems (Shackleton & Pandey, 2014; Voeks & Leony, 2004).

Overall, the data reinforces the case for livelihood management practices that ensure the integrity and longevity of natural capital, among other such assets, while catering to community

requirements and needs (Ingram et al, 2007). Such practices are vital for maintaining ecological balance and supporting rural economies and thus warrant attention from policymakers and conservationists committed to policy interventions capable of fostering community resilience and sustainable livelihoods in rural settings like Goderich (Scoones, 1998; Belcher, Ruiz-Perez & Achdiawan, 2005).

5.3. Social Capital in/and Livelihood Pursuits

Using in-depth narratives produced from Focus Group Interviews, quantitative data distilled from Household Questionnaire responses and supplementary information collected during participant observation, this section examines the role of social capital in economic and social resilience by examining how social networks, trust, and communal norms either promote or hinder livelihood chances. It emphasises the actual experiences of participants while contextualising their narratives within wider theoretical and policy discussions around sustainable livelihoods and community development.

5.3.1. Perspectives from Women's Focus Group Interview

The importance of community networks in fostering sustainability and enhancing resilience during economic crises is highlighted by the lived experiences of participants, as recorded during focus group discussions. Figure 47 shows the members of a women's focus group consisting of eight participants from Oba Funkia, Antar Town, Sherbro Town, and MetChem. Aged 25 to 55 and from a variety of ethnic (Krio, Limba, Mende and Temne) and religious (mostly Christian and Muslim) backgrounds, all but the two youngest women (who were still in part-time education) reported at least an offspring each, while only one member of the group was married. All the women, including the two who were in part-time education, pursued one or more livelihoods, including

market and home-based trading, fish selling, office work and stone extraction/quarry work and, without exception, considered themselves ‘self-sustaining’.

Figure 47: Women’s Focus Group in Goderich



Source: Own Photo

This diverse self-selecting FG membership is characterized by variations in life circumstances, educational achievement/engagement and care-giving responsibilities, while offering valuable perspectives on intra-group livelihood and, by extension, wider societal dynamics. The rest of this section thus presents their varied perspectives on the lived experiences, frequently in the women’s individual and collective voices, which are interspersed with researcher commentary to help situate the voices within and/or in relation to relevant academic and policy-related discourses. The narrative proceeds in sequential order following the opening eight discussion themes/questions (TQs) in the Focus Group Questionnaire (FGQ) in Appendix 3.

But to start, a reminder of the essential function of social capital in livelihood strategies, wherein reciprocity and mutual aid act as vital safeguards against economic and other disruptions (Putnam, 2000). Or, as one of the women traders remarked somewhat aptly:

"We support each other even in difficult times - if one of us cannot sell her goods for the day, another may purchase them or offer assistance".

This capacity to use social networks for financial and material assistance corresponds with Bourdieu's (1986) notion of social capital as a resource that enhances access to opportunities and resources, especially within informal economies. The analysis of social capital dynamics in livelihood endeavours highlights the resilience inherent in community support systems, corroborating Granovetter's (1983) discoveries on embeddedness and the importance of strong and weak relationships in economic transactions. This relational approach aligns with Ellis' (2000) concept on livelihood diversification, emphasising dependence on various social and economic methods to manage risks and maintain household well-being.

Indeed, managing risks and maintaining individual and group well-being emerged quite early as central to the livelihood pursuits of the women. During initial attempts to establish what respondents considered their main means of subsistence or livelihood (TQ2), one of the middle-aged women responded, for example, that:

"I sell fish at the market, whereas my sister generates additional income by selling fruits from our residence."

The response emphasises the correlation between social capital and economic resilience as seen in individual and group dependence on communal resources and networks to diversify income streams, therefore reducing financial risks associated with market volatility. The participant draws attention in this way to the interrelatedness of subsistence activities, wherein family members partake in synergistic economic endeavours to optimise household income and guarantee financial stability. This illustrates a wider socio-economic reality where informal economies flourish via

mutual support relationships, highlighting the importance of cooperative techniques and resource efficiency for sustainable lives. These insights correspond with the focus in Scoones' (1998) Sustainable Livelihoods Framework (SLF) on the significance of assets, institutions, and strategies in determining livelihood outcomes, and Ellis' (2000) assertion regarding livelihood diversification as a strategy for mitigating vulnerability and enhancing economic resilience. These viewpoints together reinforce the necessity for policy interventions to improve community-based economic networks and the capacity of, for instance, non-predatory microfinance programs to support informal but vital female-dominated activity.

Not surprisingly, these considerations spill over into broader questions of the nature and extent of participant interactions with other individuals, groups and/or institutions within the larger Goderich community, notably while in pursuit of livelihoods in their day-to-day existence (TQ3). And here, Participant B's somewhat cryptic response is noteworthy:

"I go to the quarry when it is still early in the morning".

That the unsociable hours and implied drudgery associated with quarry work is acknowledged in such a matter-of-fact way is itself revealing, notably of the generally challenging context within which life and livelihood are pursued by all the women. Yet, while this reality was no less stark for its ready familiarity to the FG participants and other women in Goderich and elsewhere, there was an additional and less-readily grasped element to Participant B's observation which emerged during discussions. For, to improve their professional competence, and thus enhance their earning capacity, women quarry workers frequently collaborate, sharing essential knowledge and techniques during their long and exhausting hours on the job. According to social capital theories, such as Putnam's (2000) concepts of bonding and bridging social capital, the development of an economy such as that in Goderich is often based, even if only partly, on such informal networks

and the efforts of individuals like the women working in solidarity in challenging structures of inequality and exploitative social relations.

But as not all FG participants were seemingly tight-knit quarry workers, and against a background in which social capital is as capable of excluding as it is of including individuals and groups, TQ4 raised questions about everyday livelihood-related conflicts and their causes and outcomes. In response, Participants A to D, all market traders, readily acknowledged that conflict with both buyers and other sellers (including apprentices, employees, business partners and suppliers) was an integral part of their everyday existence and an ever-present occupational hazard. Moreover, for the first three of these respondents, the risk of such conflict was heightened by market location, size and activity, but also by how much time individuals spent at their pitches trading and thus interacting with others. And while it emerged during discussion that conflict was overwhelmingly one-off, short-lived or easily resolved, protracted or recurrent conflict was also not unknown, and would sometimes pit traders against market or neighbourhood authorities, and town council or district administration officials. Notably, according to Respondents C and D, when dealing with the disruptive livelihood consequences of trade-related conflict:

"We generally address conflicts concerning market areas through collective discussions".

Participants clearly favour narratives emphasising the role of social and cultural capital in contributing to desirable livelihood outcomes, in this case conflict mediation and resolution, a trait shared with interactions around the other TQs. This was certainly the case for TQ5 and its interest in barriers constraining individuals and groups from constructing and maintaining sustainable lives and livelihoods locally. Here, there was consensus among participants of the crucial overarching role of a persistent cost-of-living crisis, a sentiment expressed by one of the respondents in terms which left little room for doubt or contradiction:

“The principal challenge is the rising cost of goods.”

This came as no surprise, given the women’s evident grasp of the systemic nature of a crisis in which inflationary pressures and market instability were severely limiting their capacity to “manage” everyday life by undermining their attempts to construct adequately diversified and progressively more sustainable livelihoods. No less surprising, perhaps, was that the consolidated feedback from the women regarding appropriate or preferred responses to the crisis indicated a strong preference for collaborative problem-solving approaches and strategies aiming to improve the circumstances of particularly “ordinary people” (including marginalised and less-than privileged individuals and groups). For the women, a suitable approach should aspire to enhance access to financial resources, specifically via the supply of small loans or micro credit, given that targeted financial support will help cover essential subsistence expenses, thereby allowing individuals and communities to maintain less insecure livelihoods.

However, the women note that in practice, it would be advisable for such an intervention to build on long-established local traditions and practices of mutual aid, assistance and interdependence -- or forms of social and cultural capital -- which already seek to address conditions of financial and material deprivation, albeit with limited success. In Goderich as elsewhere, an already familiar format sees these systems and practices routinely encompassing resource aggregation within and between households and wider community networks, while soliciting additional support from non-governmental organisations (NGOs). Little wonder then that it is just such an approach, one designed to combine community-based resource-sharing with institutional financial assistance, which finds very strong support from the women respondents.

It is easy to see why for these women, as for other Goderich inhabitants, social capital remains crucial in alleviating socio-economic and other difficulties and promoting community-based

sustainability initiatives. For by combining grassroots initiatives with context specific policy interventions, it is possible to establish a livelihood context conducive to the pursuit of sustainable outcomes by creating a fairer and more robust system for mitigating obstacles in the way of meaningful livelihood diversification. In addition, and the women are probably unlikely to be surprised by this, there is support in the literature for the view that an intervention strategy with such a clear focus can potentially alleviate short-term financial and other pressures while promoting enduring economic resilience (Belcher, Ruiz-Perez & Achdiawan, 2005; Ingram, et al, 2007; Scoones, 1998).

In many ways a logical extension of its immediate predecessor, TQ6's aim was broadly to gauge awareness/knowledge of, and interest/participation in existing/current and possible future opportunities for coping with and adapting to livelihood crises. It was particularly interested in local aspirations for accessing external livelihood support, including government- and/or NGO-led interventions. As the women had already voiced strong support for partnership arrangements to supplement local initiatives already planned or underway under TQ5, it is little wonder that they are unanimous in reaffirming their support for, and demonstrating their awareness of the progressive transformative potential of such collaboration at the start of TQ6:

"We learnt of a microfinance initiative in a different town—if such an occurrence transpired here, it may alter everything for us".

This joint statement, simple yet profound, captures the aspirations of the group for transformative opportunities. It highlights the perceived essential function of targeted external assistance in empowering at-risk populations and promoting economic resilience. In addition, the women

consistently reiterated the high value they placed on resource-sharing and social cohesion as valuable livelihood capitals, notably in a context of crisis.

One participant recounted an instance of such invaluable communal support:

"The other women helped me by supervising my cubicle while my husband was hospitalised, allowing me to visit him".

Such narratives reveal the workings of complex networks of mutual assistance supporting daily existence. Yet these gestures of solidarity are not incidental; they constitute adaptive mechanisms that allow individuals to manage the risks of life and livelihoods. Similarly, the resilience the mechanisms underpin is especially remarkable, given the scarcity of formal safety nets or institutional assistance and explains the women's burning desire to preempt the worsening of such deprivation. The women would thus be relieved although not surprised to learn that their desire to supplement their well-established but frequently stretched systems and resources for mutual assistance with strategic help from external support networks is both well-founded and consistent with the tenets of SLF (Chambers and Conway, 1992).

These tenets promote the incorporation of external interventions—such as finance access, training, and market connections—to improve the adaptive ability of individuals and communities. By confronting structural obstacles and facilitating avenues for economic engagement, such interventions can be shown to possess the capacity to instigate transformative change. For the women as for SLF thinking the interaction between internal agency and external facilitation is essential for developing sustainable and inclusive livelihood systems. Little wonder then that the women's consolidated comments illustrate a consistent twin narrative across both TQ5 and TQ6:

one of grassroots resilience and unity/cohesion, and another of unexploited potential that may be leveraged by effectively structured external support systems.

In discussions around the final three themes covered in this section, the FG women participants were encouraged to identify and reflect on the suitability or appropriateness of local livelihood interventions, both internal and external (TQ7); indicate the nature and extent of their involvement in, and outcomes of, the interventions in question (TQ8); and assess whether their access to livelihood opportunities as individuals and/or groups/collectives has improved in the last 5 to 10 years (TQ9).

Predictably, responses to TQ7 indicate active engagement in initiatives such as informal savings organisations (e.g., Esusu/Osusu) and craft guilds/labour unions, interventions which not only offer financial assistance/security and psychological support during crises, but which also reinforce community bonds, particularly amongst women. Significantly, too, these are examples of activities which are extensively documented in the literature as essential for bolstering resilience, especially in rural economies where social capital and mutual aid networks play a crucial role in sustaining livelihoods (Putnam, 2000; Woolcock & Narayan, 2000). No wonder one participant remarked:

"Our Osusu group has been a vital support. We alternate between gathering and using resources for urgent necessities, particularly during times of scarcity and difficult times".

The women were equally confident and unanimous in their discussion of TQ8 with their assertion that:

"Targeted interventions, including capacity-building, workshops and access to microfinance for women-led enterprises, are essential for fostering economic resilience".

This is a perspective that aligns with the SLF, which advocates for the diversification of income sources to curb vulnerability (Scoones, 1998). By effectively integrating strategic approaches of the kind favoured by the women, livelihoods can be made increasingly sustainable, reducing economic precarity and enhancing long-term resilience within affected communities.

Finally, and in responding to TQ9, the women attributed any recent improvement in their access to livelihoods to returns primarily to *their* investment in social and cultural capital aiming to foster individual and group resilience and social cohesion. As one participant explained:

"The Osusu Women's organisation aids us in securing fair access to loans and mediating disputes when we face repayment difficulties, thus protecting our livelihoods."

The assertion aligns with Ostrom's (1990) principles of collective governance, which emphasise the importance of trust and reciprocity in the management of communal resources. The women's emphasis on effective collective, group or community intervention as a "*benefit*" or favourable livelihood outcome speaks to the value they place in cultivating a sense of community and interdependence as an integral part of the combined processes of promoting economic stability and improving economic resilience. Initiatives like informal credit unions and craft guilds mentioned repeatedly by the women function as essential mechanisms in alleviating the effects of insufficient government and other interventions and external shocks (Adger, 2003).

As response to problems stemming from limited access to essential livelihood possibilities, social networking can alleviate structural disadvantages. These networks enhance resilience and improve the well-being and effectiveness of survival strategies of community members, although such desirable outcomes are sometimes achieved at the expense of those excluded from membership of such networks for whatever reason (Cline-Cole, 2005).

5.3.2. Reflections on Social and Cultural Capital and Livelihoods based on Household Questionnaire Survey

Tables 16 and 17 use Multinomial Logistic Regression (MLR) model output in presenting detailed analyses of respondents' engagement in specific social, cultural, and professional organisations.¹ The iterations 0-11 in Table 20 represent log-likelihood estimations generated by STATA, with 150

Table 16: Iteration of mlogit Outcome

. mlogit IYWTOO i.AYAMOASCPO HYBICEILTY, base(2)	
Iteration 0:	log likelihood = -302.30389
Iteration 1:	log likelihood = -302.30241
Iteration 2:	log likelihood = -291.07737
Iteration 3:	log likelihood = -289.10868
Iteration 4:	log likelihood = -288.41891
Iteration 5:	log likelihood = -288.28834
Iteration 6:	log likelihood = -288.25809
Iteration 7:	log likelihood = -288.25239
Iteration 8:	log likelihood = -288.25111
Iteration 9:	log likelihood = -288.25081
Iteration 10:	log likelihood = -288.25074
Iteration 11:	log likelihood = -288.25073

out of 165 household questionnaires returned, equivalent to a 91% response rate. This high response rate explains the level of convergence of the fitted model, where the fitted log-likelihood of the model is 288.55, used to compare with other models to determine if the outcome fits better. Overall, the model is statistically significant when taken at a 10% level (0.065), with a chi-square value of 28.11.

In scrutinising the influence of social capital on livelihood sustenance within Goderich, the examination of multinomial logistic regression outcomes in Table 17 elucidates a sophisticated correlation between organisational membership and collective action engagement. The statistical framework, indicated by a Log likelihood of 1288.25073, a Pseudo R² of 0.0465, and a sample

¹ Multinomial Logistic Regression (MLR), as specified in Chapter 3, Section 3.5.1, is a statistical technique utilised to analyse the relationship between multiple categorical independent variables and a categorical dependent variable with three or more categories. In the context of this study, which utilises a household survey conducted in Goderich as the research location, MLR is employed to examine how various factors, including assets such as land and financial resources, influence individuals' utilisation of diverse opportunities to diversify their livelihood statuses. By applying MLR, the aim is to identify significant predictors of different livelihood opportunities and assess their impact. A relevant study that also employed the MLR model to explore similar aspects is the research conducted by Jilito et al. (2018), which focused on assessing individuals' strategies in utilising a diverse range of resources and assets, with particular emphasis on social capital, which the MLR output in my study has unearthed.

size of 150, evidences the nuanced effect social capital exerts, contingent upon the organisational context. Notably, engagement in non-governmental organisations (NGOs) and collective efforts through entities such as AYAMOASCPO and HYBICEILTY demonstrates divergent coefficients, highlighting varied impacts on livelihood ventures. The contrasting coefficients—positive for NGO membership (.1949425) and negative for non-engagement in collective endeavours (-.6260726) illustrate the intricate dynamics of social capital's influence.

Moreover, this analysis incorporates various organisations, including government bodies, social clubs, and religious committees, showcasing unique interactions within the social capital framework. The discernible statistical significance across different categories, such as the notable positive effect of government organization involvement (1.79897) with a p-value of 0.018, mirrors the complex interplay between organisational participation and collective action in livelihood enhancement. This variance underlines the critical need for contextually grounded analyses in assessing social capital's contribution to developmental outcomes.

The findings in Table 17 accentuate the imperative for precise social capital interventions, positing that the efficacy of such measures in livelihood support is closely tied to the calibre and nature of community and organisational engagement (de Haan, 2023; Pineda, 2023; Putnam, 2000; Bourdieu, 1986). The significance of the contribution of this thesis here lies in its augmentation of the discourse on social capital and development, providing empirical substantiation of the complex manner through which disparate forms of community involvement and organizational affiliation influence livelihood strategies. It advocates for a nuanced comprehension of social capital's developmental role, urging the formulation of policies and interventions that acknowledge the heterogeneous effects of various social participatory forms on livelihood advancement.

Table 17: Involvement in Social / Cultural Organisations

Multinomial Logistic Regression Data Log likelihood = 1288.25073			Prob. >chi2 -0.0605 Pseudo R ² 0.0465		Number of Obs. = 150 LR chi2 (18) -28.11	
Type of Organisation	Coefficient	Std. err.	Z	P> z	[95% coeff.	Interval]
NGO						
AYAMOASCPO (indicating Membership of Organisation)	.1949425	.7584523	0.26	0.797	-1.291597	1.651482
No	-.6260726	.7577904	-0.83	0.409	-2.111315	.8591693
HYBICEILTY (indicating Engagement in Collective Effort)	1.220739	.8030538	1.37	0.172	--.5226141	2.971093
Cons						
HUNTINNG OJEH LODGE	(base outcome)					
GGOVERNMENT_ORGANIZATION						
AYAMOASCPO						
NO	1.79897	.7631835	2.36	0.018	.3031575	3.294782
HYBICEILTY	-.1783291	.8552338	-0.21	0.835	-1.854557	1.497898
Cons (Constant)	-.4891949	1.043728	-0.47	0.639	-2.534863	1.556473
SOCIAL_CLUB						
AYAMOASCPO						
NO	1.135248	.9250019	1.23	0.220	-.679486	2.949983
HYBICEILTY	.2164459	.9679333	0.22	0.823	-1.680669	2.11356
Cons	-1.398315	1.218235	-1.15	0.251	-3.786011	.989381
SCHOOL_COMMITTEE						
AYAMOASCPO						
NO	-.0714382	1.227427	-0.06	0.954	-2.477151	2.334275
HYBICEILTY	-.4188773	1.193414	-0.35	0.726	-2.757925	1.92017
Cons	-.5282686	1.396261	-0.39	0.700	-3.274891	2.198353
MOSQUE_CHURCH_COMMITTEE						
AYAMOASCPO						
NO	.3554962	.9918555	0.36	0.720	1.588505	2.299497
HYBICEILTY	.54605	.8626045	0.63	0.527	-1.1448	2.2369
Cons	-1.441117	1.100	-1.30	0.194	-3.614718	.7324832
TRADE_OR_CRAFT_GUILD_TRADE_UNION						
AYAMOASCPO						
NO	.5335012	1.285852	0.41	0.678	-1.986722	3.053725
HYBICEILTY	1.231102	1.065664	1.16	0.248	-.857616	3.319765
Cons	-3.25471	1.517656	-2.14	0.032	-6.220261	-.2801579
OTHERS						
AYAMOASCPO						
NO	1.2490525	1.376368	0.91	0.364	-1.448107	3.947158
HYBICEILTY	.9020869	1.348638	0.67	0.504	-1.741195	3.545369
Cons	-3.504427	1.887145	-1.86	0.063	-7.203163	-194.3097
NOT_APPLICABLE						
AYAMOASCPO						
NO	16.82003	1023.053	0.02	0.087	-1990.091	2023.731
HYBICEILTY	2.094527	1.422893	1.47	0.141	-.694292	4.883347
Cons	-19.70177	1023.055	0.02	0.085	-2026.707	1987.123

Table 18 elucidates the dynamics of social capital in conflict resolution within a community context, categorising responses regarding participant experience with major disagreements with neighbors, relatives, or colleagues, and the mechanisms through which these conflicts were resolved. Notably, 67 respondents reported having had such disagreements, while 83 did not. The methods of conflict resolution were divided into 'Own initiative', 'Internal' (within community or family), 'External' (outside intervention), 'Through negotiation', and 'Not applicable'.

The predominant resolution strategy, 'Own initiative', employed by 60 participants, highlights the significance of individual agency and interpersonal networks in resolving disputes. This is followed by 'Internal' mechanisms (46 instances) and 'Through negotiation' (28 instances), highlighting the community's reliance on established social relations and collective norms for conflict management. The least utilised was 'External' intervention (3 instances), indicating a preference for resolving disputes within the community framework.

The Pearson chi-square test result of 11.8240 with a probability of -0.019 suggests a statistically significant association between the occurrence of disagreements and the selection of conflict resolution strategies, highlighting the role of social capital in these processes. Social capital is understood here following Putnam's (2000) explanation of networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit. The reliance on 'Own initiative' and '*Internal*' solutions reflects a high level of social trust and the strength of social networks within Goderich, essential components of social capital that facilitate effective conflict resolution.

This analysis reveals the intricate relationship between social capital and livelihood outcomes, as effective conflict resolution contributes to social stability and community cohesion, thereby

enhancing residents' quality of life. The findings exemplify the tangible benefits of strong social capital, where communities with robust interpersonal networks and a collective ethos are better equipped to manage and resolve conflicts, underpinning the vital role of social capital in fostering resilient and supportive community environments.

Table 18: Disagreement with neighbours and means of remedying problems

Have you had any major disagreement with your neighbours / relatives / colleagues?	How did you solve this / these conflicts?					Total
	Own initiative	Internal	External	Through negotiate	Not applicable	
Yes	34	21	6	1	5	67
No	26	25	7	2	23	83
Total	60	46	13	3	28	150
Pearson chi2(4) = 11.8240 Pr. -0.019						

Figure 48 details the perceptions of safety among residents, underscoring the integral role of social capital in fostering a secure environment conducive to enhanced livelihood outcomes. With more than two-thirds of the community feeling 'very safe' and just over a fifth more feeling 'somewhat

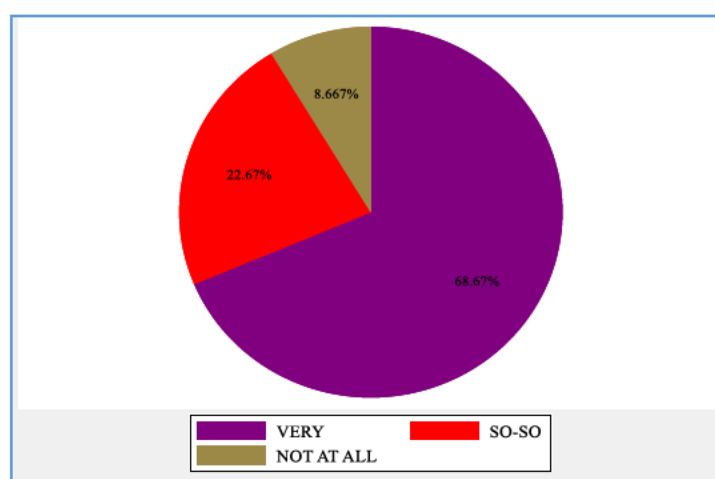


Figure 48: Safety in Neighbourhood / Community

safe', the data reflects a high level of communal security, pivotal for daily life and economic engagement. This scenario is emblematic of the theoretical frameworks posited by the World Bank (2001) and Putnam (2000), who argue that social capital—encompassing trust, social networks,

and cooperative norms—facilitates societal cooperation and significantly contributes to reducing crime and enhancing community well-being. Therefore, the correlation between perceived safety and social capital in Goderich not only highlights the community's resilience and cohesion but also accentuates the critical importance of nurturing social ties and trust for sustainable community development and improved livelihood prospects.

Table 19 summarises livelihood activities and the support structures behind them, offering glimpses into the avenues through which residents learn about and engage in various livelihood practices. There is a prevalence of informal information and learning networks, with a significant majority of individuals citing neighbors (26.67%) and friends (11.33%) as primary sources of information on livelihood activities,

Table 19: Current Livelihood Activities and Support Received				
How do you first learn about the livelihood activities you are engaged in?	Did you receive any training for the activities?			
	Yes	No	Not Applicable	Total
Neighbours	24 60.00 30.38	16 40.00 23.19	0 0.00 0.00	40 100.00 26.67
Friends	16 59.26 20.25	11 40.74 15.94	0 0.00 0.00	27 100.00 11.33
NGO	12 54.55 15.19	10 45.45 14.49	0 0.00 0.00	22 100.00 14.67
Department (Government)	11 64.71 13.92	6 35.29 8.70	0 0.00 0.00	17 100.00 11.33
Self-Study	9 50.00 11.39	9 50.00 13.04	0 0.00 0.00	18 100.00 12.00
Various Agents	1 16.67 1.27	5 83.33 7.25	0 0.00 0.00	6 100.00 0.67
Others	0 0.00 0.00	1 100.00 1.45	0 0.00 0.00	1 100.00 0.67
Not Applicable	0 0.00 0.00	0 0.00 0.00	2 100.00 100.00	2 100.00 1.33
Total	79 52.67 100.00	69 46.00 100.00	2 1.33 100.00	1.50 100.00 100.00

reflecting the critical role of social capital in economic participation. Interestingly, formal channels such as NGOs (14.67%) and government departments (11.33%) also play substantial roles, though to a lesser extent compared to personal networks. The data further reveals a noticeable division in training received, with more than half affirming they had received training, underscoring the importance of both formal and informal educational mechanisms in skill development for livelihood activities. This distribution mirrors insights from Granovetter's (1983) theory on the

strength of weak ties, which posits that informal networks provide crucial information and opportunities not available through formal channels. Additionally, the role of NGOs and government departments highlights the significance of institutional support in enhancing human capital, as emphasized by Becker's (1962) Human Capital Theory, which suggests that investments in education and training are vital for economic development. Therefore, the findings from Table 23 not only illuminate the multifaceted nature of learning and support for livelihood activities in Goderich but also underscore the symbiotic relationship between social and human capital in fostering economic resilience and community development.

Table 20 examines the intricacies of intra-household communication and reciprocity concerning livelihood matters, revealing that a significant majority of respondents engage in mutual discussions about

Table 20: Discussion of Livelihood Matters with Spouses and Reciprocity			
Do you discuss livelihood matters with your Husband / Wife / Children/Others	Do the other people in your household discuss their livelihood with you?		
	Yes	No	Total
Yes	86	36	122
No	26	2	28
Total	112	38	150

livelihood with their spouses, children, or others within the household. This exchange of information and mutual support is reflective of the foundational role that familial and household networks play in the socio-economic resilience and adaptive strategies of communities, as emphasised by Woolcock & Narayan (2000). The dialogues on livelihood within households underscore the application of Becker's (1981) theory on the family as a unit of economic decision-making, illustrating how intra-family communication serves as a mechanism for pooling resources, sharing risks, and optimizing household economic strategies. Table 24 suggests that these discussions are not only important for individual and household economic planning and development but also serve as a critical element of the social fabric that fosters communal resilience and adaptive capacity. Thus, the findings underscore the significance of communication

and reciprocity in livelihood matters within households as essential components of both social and human capital, contributing to the group wellbeing and livelihood sustainability.

5.4. Financial Capital in / and Livelihood Pursuits

Financial capital represents a cornerstone of sustainable livelihoods, facilitating the quest by individuals and communities for viable and enduring living standards. The Sustainable Livelihood Framework identifies financial capital as the assortment of economic resources, manifesting in both tangible and intangible forms, that individuals can mobilize for various livelihood endeavors. It underscores the capacity to undertake livelihood activities, capitalize on productive assets, and navigate unpredictability and adversities. This notion finds resonance in the context of Goderich, a community emblematic of the challenges entwined in sustaining livelihoods, where economic diversification through agriculture, fishing, and small-scale enterprises constitutes the fulcrum of survival and enhancement of quality of life.

Economy and society in Goderich underscore the role of financial capital—evidenced through cash inflows from entrepreneurial ventures and kin support from familial and social networks—in bolstering individuals' resilience against the vicissitudes of market dynamics and environmental adversities. Conversely, the paucity of financial capital precipitates a vicious cycle of poverty, impeding investment in growth-oriented ventures and adaptability to market or environmental shocks, thereby jeopardizing the long-term sustainability of livelihoods. As we have already seen with the women's group, Focus Group interviews reveal a palpable quest for strategies to mitigate vulnerability and an acute awareness of the scarcity of external support in ameliorating precarious livelihood conditions. These discussions also call for targeted intervention strategies to curb

environmental degradation and foster community resilience, thereby delineating a pathway towards sustainable livelihood enhancement (Jackson, 2015).

5.4.1. Household Survey Assessment of Financial Capital Access

Table 21 delineates the landscape of saving behaviours among respondents, revealing a stark dichotomy where approximately one-third of the population is ensnared in a predicament where

Table 21: Frequency of Household Savings Pattern							
Do you or your member of the household have any savings?	If Yes, how often do you save?						
	Daily	Weekly	Monthly	Yearly	No specific	Not applicable	Total
Yes	29	45	26	2	6	2	110
No	16	11	9	1	3	0	40
Total	45	56	35	3	9	2	150

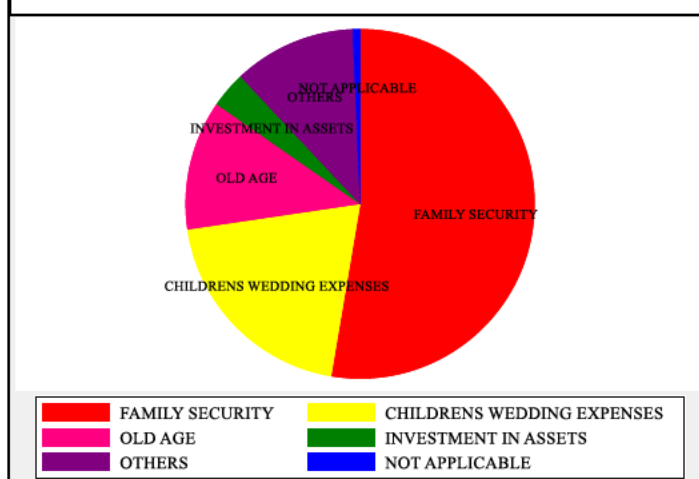
savings accumulation remains elusive, juxtaposed against a thrice-larger cohort that regularly contributes to their savings reserves. In the context of Goderich, where the state welfare apparatus offers scant support, and a predominant portion of the populace is tethered to self-employment—with the spectre of future pension inaccessibility looming—savings emerge as a quintessential bulwark ensuring the survival and financial resilience of individuals, households, and collectives. The act of saving, especially on a weekly basis, is not merely a financial strategy but testament to the recognition of the need for fortifying financial resilience and ensuring a buffer against unforeseen adversities, a sentiment echoed elsewhere by Longhurst & Slater (2022).

Insight into savings dynamics within households is potentially useful for crafting policies and interventions that champion the cause of sustainable livelihoods. The ethos of saving, as encapsulated in Table 21 and resonating with the Sustainable Livelihood Framework, heralds a narrative where savings are not just an aspect of financial capital but a cornerstone for fostering household resilience against shocks and ensuring long-term well-being. Scholars such as Nunan

(2023) and Scoones (1998) have amplified the discourse on savings, embedding it within the broader narrative of sustainable livelihoods and underscoring its indispensability in securing financial stability. In the wake of global upheavals, exemplified by the COVID-19 pandemic, the imperative for understanding and nurturing saving practices becomes of paramount importance. Such insights are instrumental in sculpting targeted strategies capable of enhancing the robustness of household economies in places like Goderich, thereby safeguarding against future uncertainties and buttressing the foundations of sustainable livelihoods.

The empirical evidence in Figure 49 confirms the existence of an entrenched savings culture fuelled by a desire to insulate families from the reverberations of recent global tumults, notably the COVID-19 pandemic and the inflationary pressures triggered by the ongoing Russia-Ukraine conflict. Specifically, savers aim primarily to

Figure 49: Household's main reason for saving



secure the educational and future prospects of their progeny and managing significant familial milestones, with a notable emphasis on preparing for the vicissitudes of old age in a landscape bereft of stable pension-guaranteeing employment. This not only highlights the adaptability and foresight of the community in navigating the murky waters of contemporary economic challenges, but can also serve as a cornerstone for policy formulation. It beckons a strategic recalibration of development interventions aimed at reinforcing household financial resilience, by offering a possible template for fostering a robust savings culture within vulnerable communities. This

narrative is deeply rooted in the broader discourse on savings within economic sociology and development studies, offering a reflection on the community resilience and strategic financial planning in the face of global and local economic uncertainties (Nunan, 2023; Scoones, 1998).

Table 22 charts the preferences and behaviours surrounding savings and asset accumulation among households, revealing a pronounced reliance on commercial banks as depositaries, with nearly half of respondents (48%) opting

Table 22: Analysis of where savings are done and forms of savings in addition to other assets						
Where do you save money?	How much does your household's savings in cash and other assets add up to?					
	NLe0.00 – 50.00	NLe100.00	NLe1,000.00	NLe10,000	Not applicable	Total
Commercial Bank	25	13	16	18	0	72
	34.72	18.06	22.22	25.00	0.00	100.00
	54.35	35.14	44.44	62.07	0.00	48.00
Post Office	11	14	5	2	0	32
	34.38	43.75	15.63	6.25	0.00	100.00
	23.91	37.84	13.89	6.90	0.00	21.33
Credit Union	4	4	5	6	1	20
	20.00	20.00	25	30.00	5.00	100.00
	8.70	10.81	13.89	20.69	50.00	17.33
At home	6	6	10	3	1	26
	23.08	23.08	38.46	11.54	3.85	100.00
	13.04	16.22	27.78	10.34	50.00	17.33
Total	46	37	36	29	2	150
	30.67	24.67	24.00	19.33	1.33	100.00
	100.00	100.00	100.00	100.00	100.00	100.00

for this financial institution. This preference underscores a deep-seated trust in the institutional robustness and perceived security provided by such banks, a finding that resonates with the broader financial behavior literature that emphasizes the critical role of trust and security in banking choices (Scoones & Stirling, 2020). The stratification of savings amounts, ranging from minimal to substantial, further highlights the varied financial capabilities and strategic intents of the respondents. Interestingly, the preference for commercial banks intensifies with an increase in the amount saved, suggesting a nuanced relationship between the scale of financial assets and the choice of saving conduits. This observation aligns with the propositions of Scoones (1998), who argued that the diversification of savings mechanisms is a critical component of sustainable livelihood strategies, reflecting socio-economic stratification and financial planning approaches within communities.

Conversely, the engagement with alternative savings avenues such as post offices, credit unions, and home-based savings illuminates the diverse financial ecosystem that households navigate. This diversity, captured in 21.33% and 17.33% of respondents, respectively, turning to post offices and credit unions, reflects a spectrum of trust levels, accessibility considerations, and perhaps a quest for financial inclusivity beyond the realms of conventional banking (Nunan, 2023). The practice of home-based savings, although represented by a small fraction, offers additional insight into the financial autonomy and resilience strategies adopted by certain community segments, likely to be made up as many people excluded from the formal institutions as of those opting out of their services by choice. These findings are potentially useful for policymakers and financial institutions aiming to enhance financial inclusion and literacy, suggesting that a one-size-fits-all approach is insufficient in addressing the complex financial landscapes of communities. To this end, the strategic diversification and personalized nature of financial services indicated in Table 22 would need to be factored into attempts at crafting financial policies and practices for Goderich inhabitants that are not only inclusive but also responsive to the unique needs and preferences of individuals and households, to potentially foster a more resilient and financially empowered community.

Table 23 analyses the impact of business investment on long-term livelihoods and employment possibilities in Goderich. 54% of respondents work in business or other businesses, with 75.31% making financial profits and 23.46% seeking non-monetary benefits. According to the data, 54% of respondents work in business or other ventures. The data indicates that 54% of respondents are involved in business or other enterprises. These findings highlight the capacity of investment activities to substantially augment income streams and elevate overall livelihoods. In contrast, the

3.33% of respondents who indicated no investing activity predominantly encountered no returns, highlighting the lost chances for economic advancement.

Table 23: Analysis of business investment culture and yield				
DO you or any of your family members invest in any business or other venture?	Did your investment yield any return?			
	Cash	In Kind	Not Applicable	Total
Yes	61	19	1	81
	75.31	23.46	1 23	100.00
	93.85	100.00	1 52	54.00
No	4	0	60	64
	6.25	0.00	93.75	100.00
	6.15	0.00	90.91	3.33
Not Applicable	0	0	5	5
	0.00	0.00	100.00	100.00
	0.00	0.00	7 58	3.33
Total	65	19	66	150
	43.33	12.67	44.00	100.00
	100.00	100.00	100.00	100.00

These findings are consistent with prior literature, stressing the critical role of strategic investments in achieving positive outcomes. Pineda (2023) highlights the importance of even little investments in enhancing community resilience and increasing economic sovereignty. Gelderblom (2018) emphasises the relevance of local company investments in creating long-term economic growth

and reducing income disparities in disadvantaged communities. Collectively, these perspectives justify strategic investment's effectiveness in fostering fair and sustainable development. These viewpoints in Goderich show that encouraging corporate and entrepreneurial initiatives could boost economic growth and social resilience, allowing residents to better support their families and improve their living conditions. The combination of these facts and scholarly notions emphasises the crucial need for specific strategic investment initiatives that match with the distinctive socioeconomic characteristics of locations like Goderich.

Turning to the dynamics of borrowing, Table 24 offers a cross-tabulation of the incidence and regularity of borrowing practices among households over the previous year. The analysis reveals a striking pattern: a substantial 73.33% of respondents reported having borrowed money, with 72.90% of these borrowers indicating that they need to borrow money regularly.

Table 24: Cross Tabulation Analysis on Lending and Frequency			
Have you or any member of your household borrowed money during the last year?	If yes, do you borrow money regularly?		
	Yes	No	Total
Yes	78 72.90 72.90	32 29.09 74.42	110 100.00 73.33
No	29 72.90 27.10	11 27.50 25.58	40 100.00 26.67
Total	107 72.50 100.00	43 28.67 100.00	150 100.00 100.00

This underscores a pervasive reliance on external or non-household financial resources, a phenomenon that is reflective of the broader socio-economic challenges and liquidity constraints faced within the community. The regularity of borrowing suggests a systemic dependency on credit as a financial coping mechanism, a phenomenon that is deeply entrenched within the economic fabric of the community. This finding is emblematic of the precarious financial landscapes navigated by households, necessitating a deeper exploration of the underlying socio-economic factors and systemic inadequacies that necessitate such high levels of regular borrowing (Scoones & Stirling, 2020; Scoones, 1998).

The juxtaposition of the borrowing frequencies between those who have borrowed in the last year and those who have not further illuminates the dichotomous financial behaviors within the community. With 72.90% of non-borrowers reflecting an identical propensity to borrow regularly, this mirrors the broader patterns of financial behavior and underscores the ubiquity of borrowing as a normative financial strategy across different segments of the population. The data presented in Table 28, therefore, not only highlights the critical role of borrowing in household financial management but also raises pertinent questions about the sustainability of such practices and the potential vulnerabilities they expose households to. The high incidence of borrowing, particularly

regular borrowing, may signal underlying economic fragilities and a lack of accessible, sustainable financial alternatives for meeting daily needs and coping with shocks. This analysis, steeped in the principles of financial sociology and economic anthropology, calls for a concerted effort to understand and address the root causes of this reliance on borrowing, suggesting a crucial area for policy intervention and the development of financial services that cater to the varied needs of the community, thereby fostering financial resilience and sustainability (Nunan, 2023; Gelderblom, 2018).

5.4.2. Source(s) of Borrowing

The data in Tables 25-32 unveils a varied landscape of borrowing behaviors among the inhabitants of Goderich, highlighting the role of various financial sources in underpinning the economic foundations of the community. This analysis identifies a spectrum of borrowing sources, ranging from formal institutions such as government and private banks, to entities like NGOs, cooperatives, and money lenders, alongside the invaluable support derived from familial ties and community organizations. The reliance on such a diverse array of borrowing avenues reflects a strategic response to the multifarious challenges encountered in securing stable and diversified livelihoods, particularly amidst the backdrop of constrained access to essential assets. The qualitative insights gleaned from focus group interviews further underscore the instrumental role of these borrowing mechanisms in fortifying household resilience against economic vulnerabilities, thus facilitating a buffer against the precariousness engendered by asset scarcity. This reliance on a broad financial ecosystem not only exemplifies the community's adaptability but also signals a critical area for policy intervention aimed at enhancing financial inclusivity and sustainability (Scoones, 1998; Scoones & Stirling, 2020).

Furthermore, community engagement with both formal and informal borrowing sources is emblematic of a nuanced strategy aimed at navigating the complex terrain of financial capital acquisition. Formal financial channels, including government and private banks, emerge as vital conduits for mainstream financial transactions, empowering individuals with the requisite means to bolster their economic pursuits. Concurrently, the vital roles played by NGOs and cooperatives in bridging the access gap to formal lending institutions underscore the significance of alternative financial frameworks in democratizing access to capital. Moreover, the reliance on money lenders, despite the potential for higher interest rates and increased financial risks, reflects a pragmatic if often highly risky approach towards securing immediate financial needs. The integration of social networks, through borrowing from relatives and community organizations, illuminates the social underpinnings of financial strategies, where mutual aid and communal solidarity become instrumental in enhancing economic resilience. This intricate web of formal, informal, and social borrowing sources not only affirms the critical role of diverse financial mechanisms in securing livelihoods, but also advocates for a holistic approach towards financial inclusion. By acknowledging and leveraging the multiplicity of borrowing sources, policies aimed at fostering sustainable livelihoods can be more effectively tailored to meet the intricate needs and preferences of the Goderich community, thereby promoting a more inclusive and resilient economic landscape (Nunan, 2023; Gelderblom, 2018).

Table 25: Source of Borrowing: Government Bank		
	Frequency	Percent
Yes	101	67.33
No	49	32.67
Total	150	100.00

Table 26: Source of Borrowing: Private Bank		
	Frequency	Percent
Yes	110	73.33
No	40	26.67
Total	150	100.00

Table 27: Source of Borrowing: NGO		
	Frequency	Percent
Yes	100	66.67
No	50	33.33
Total	150	100.00

Table 28: Source of Borrowing: Cooperative Society		
	Frequency	Percent
Yes	96	64.00
No	54	36.00
Total	150	100.00

Table 29: Source of Borrowing: Money Lender		
	Frequency	Percent
Yes	99	66.00
No	51	34.00
Total	150	100.00

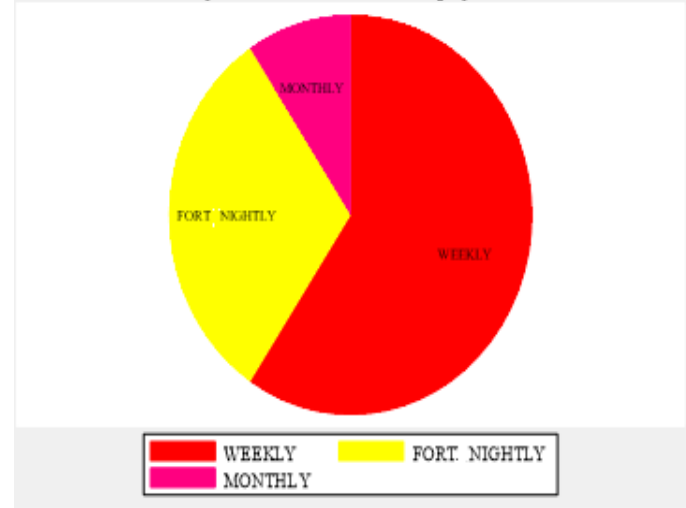
Table 30: Source of Borrowing: Friends / Relatives		
	Frequency	Percent
Yes	109	72.33
No	41	27.33
Total	150	100.00

Table 31: Table 35: Source of Borrowing: Local Trade / Craftsmen		
	Frequency	Percent
Yes	105	70.00
No	45	30.00
Total	150	100.00

Table 32: Source of Borrowing: Local Wholesaler / Businessperson		
	Frequency	Percent
Yes	107	71.33
No	43	28.67
Total	150	100.00

Figure 50 examines borrowing payment terms, highlighting their welfare implications, especially for low-income individuals. Results reveal that due to informal income sources in Goderich—like fishing, sand mining, and market-stall trading—borrowers prefer weekly repayment schedules. This preference correlates with the weekly payment

Figure 50: Pie Chart Showing Loan Repayment Instalment Plan
Payment Term of Loan Repayment



systems observed in Osusu/Cooperative ventures, as documented in qualitative focus group interviews (Kitole, Tibamanya, & Sesabo, 2023).

The choice of weekly repayments reflects the irregular and unpredictable income streams of many Goderich residents who nonetheless earn an income however small every week. Aligning loan repayments with these patterns increases the likelihood of meeting financial obligations (Scoones & Stirling, 2020). Similarly, the adoption of fortnightly payments aligns with the income frequency from other activities, allowing borrowers to manage their financial responsibilities effectively and meet immediate needs (Levine, 2021).

These payment strategies enhance the welfare of low-income individuals by allowing them to manage cash flow irregularities, reduce default risks, and maintain credit access—thereby mitigating potential negative impacts on their well-being. Moreover, the preference for weekly and fortnightly payments underscores a financial discipline among borrowers, who, despite income

irregularities, are committed to improving their financial status and utilizing credit to invest in their livelihoods and elevate themselves from poverty (Sabri et al., 2022).

Table 33 presents the purposes for which residents take out loans, specifically focusing on acquiring land and purchasing equipment to support their livelihoods. This data is crucial for understanding economic behaviour within informal economies and reflects broader trends in resource allocation and investment priorities among low-income individuals.

Table 33: Purpose for Taking Out a Loan			
Buying or hiring land	Buying equipment to support livelihood		
	Yes	No	Total
	73	27	100
	73.00	27.00	100.00
	76.04	50.00	66.67
	23	27	50
	46.00	54.00	100.00
	23.96	50.00	33.33
Total	96	54	150
	64.00	36.00	100.00
	100.00	100.00	100.00

Of the 150 instances surveyed, 96 loans were aimed at buying or hiring land, which accounts for two-thirds of all loans taken. This figure confirms the importance of land as a foundational asset for establishing and expanding economic activities, particularly in rural settings where agriculture and related industries are predominant (Kitole, Tibamanya, & Sesabo, 2023). Land acquisition is often seen as a strategic investment for long-term economic stability and growth (Kamal, 2014).

In contrast, 36% of loans were earmarked for buying equipment necessary for livelihood support, such as tools for fishing, sand mining, or market trading. This indicates a strategic investment in assets that directly contribute to income generation and livelihood security, reflecting a tactical approach to enhance sustainability through improved productivity (Spyromitros & Panagiotidis, 2022).

The distribution of purposes for loan uptake suggests a financial landscape where individuals prioritize both immediate income generation and long-term asset accumulation. The strategic focus

on land and equipment is indicative of a broader economic behavior pattern, where access to financial services is crucial for economic development and poverty alleviation (Brinkley & Visser, 2022).

Table 34 categorises the motivations for taking out loans, specifically focusing on buying livestock/poultry and constructing or renting houses. This data reveals strategic financial decisions that are reflective of both immediate and long-term economic planning in the community. Out of 150 instances of loans contracted more than two-thirds were for the purchase of livestock or poultry. This substantial proportion highlights the importance of livestock as an integral part of livelihoods in rural economies, where such assets not only provide a direct source of income through the sale of products like milk, eggs, and meat but also contribute to asset-based saving strategies (Mendelsohn, 2008; Scoones & Stirling, 2020).

Table 34: Purpose for taking out Loan - Buying Livestock and Housing Construction			
Buying or Livestock / Poultry	For constructing a house or renting		
	Yes	No	Total
Yes	74	29	103
	71.84	28.16	100.00
	71.84	61.70	68.67
No	29	18	47
	61.70	38.30	100.00
	28.16	538.30	31.33
Total	103	47	150
	68.67	31.33	100.00
	100.00	100.00	100.00

Livestock serves as a buffer against economic shocks, making this form of investment a critical aspect of financial security for low-income often female-headed households (Mueller & Tighe, 2022). On the other hand, just under a third were directed towards housing construction or rental purposes. This reflects the emphasis on housing as a fundamental need and a stable investment. The pursuit of constructing or improving housing indicates a commitment to enhancing living standards and securing a physical asset that appreciates over time, providing both shelter and economic benefits (Levine, 2021).

The intersection of the purposes for taking out loans suggests a balanced approach to managing immediate needs with future-oriented financial strategies. This pattern aligns with broader

economic behaviors observed elsewhere where financial decisions are deeply influenced by both socioeconomic status and the imperative for building resilient households and communities (Brinkley & Visser, 2022).

5.5. Physical Capital and its importance in livelihood Sustenance

Like other assets, physical capital plays a crucial role in sustaining diverse local livelihoods and encompasses a variety of tangible assets such as land, irrigation systems, farming tools, fishing boats, and storage facilities, which are indispensable for productive activities. These resources enable individuals to enhance productivity, increase outputs, and improve profitability. For instance, farmers benefit from better yields by using efficient machinery, fertiliser and improved seed varieties, while fishermen achieve higher catches with advanced fishing gear (Clay, 2023).

However, the absence / inadequacy of physical capital presents significant challenges in Goderich, hindering productivity and limiting income generation. Without necessary tools and infrastructure, farmers face reduced crop cultivation and increased food insecurity, while fisherfolk with outdated equipment experience lower catch rates. The lack of physical capital also heightens vulnerability to external shocks, such as market fluctuations and environmental changes, thereby impacting livelihood stability (Pineda, 2023; Scoones, 1999).

Addressing the gaps in physical capital is essential for promoting sustainable local livelihoods. Investments in necessary infrastructure, access to efficient tools, and provision of financial support can significantly enhance the resilience and sustainability of livelihood pursuits. Such efforts not only likely to improve economic outcomes but also foster overall community well-being by enabling better access to education, healthcare, and social networks, thus aligning with the broader

goals identified in the Sustainable Livelihood Framework (SLF) (Scoones, 1999). As always, however, interventions will need to build on existing strengths while avoiding known pitfalls and be rooted in local realities.

5.5.1. Access to (Mostly) Public Goods as Physical Assets

Figures 51-57 document access to public goods functioning as physical capital assets supporting local life and livelihoods. The assessment of community physical facilities and public assets in the area sheds light on the availability of essential resources that contribute to community well-being, given that the assets in question are deemed crucial for everyday existence of the population in Goderich as a whole.

The data in the figures make clear the substantial role that essential physical assets play in mitigating the challenges of pursuing livelihoods locally, and in enhancing community well-being. These assets, which include critical amenities such as health services, electricity, postal services, waste disposal, education, and banking, are fundamental to the daily functioning and economic stability of the community. The availability of these resources, as emphasised in a study by the World Health Organisation (WHO, 2013), is essential for maintaining individual and collective health, productivity, and socio-economic growth.

Health services ensure essential medical care and promote overall well-being, while a reliable electricity supply enhances both residential and business productivity. Postal services are crucial for maintaining communication and the flow of goods and information. Effective waste disposal systems are vital for ensuring a clean and healthy environment, and access to quality education empowers individuals with the skills needed for economic advancement and personal development. Furthermore, banking services play a critical role in fostering financial inclusion and

economic development. These assets align with Amartya Sen's Capability Approach, which highlights the importance of having the freedom to choose from various assets that enhance an individual's well-being and opportunities (Sen, 1999).

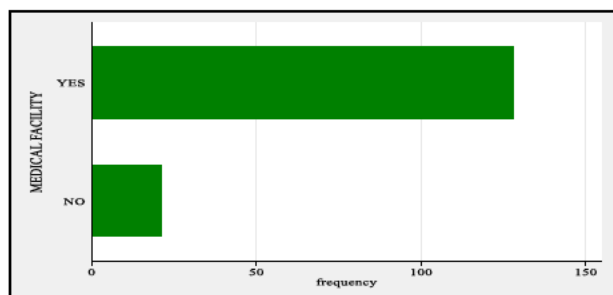


Figure 51: Access to Physical Asset - Medical Facility

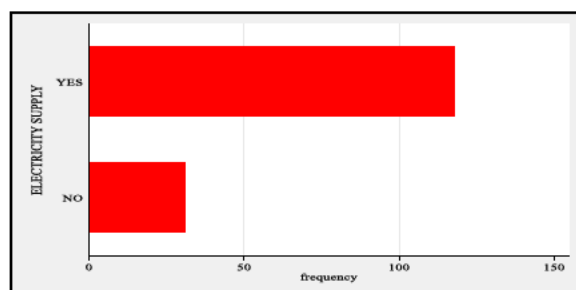


Figure 52: Access to Physical Asset - Electricity Supply

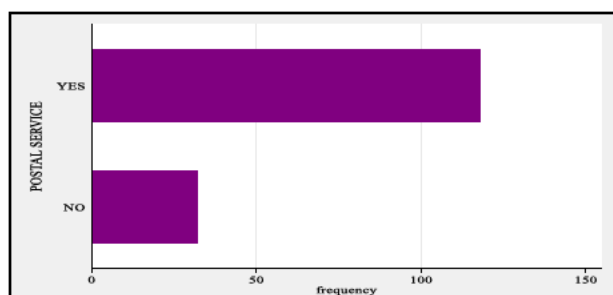


Figure 54: Access to Physical Asset - Postal Services

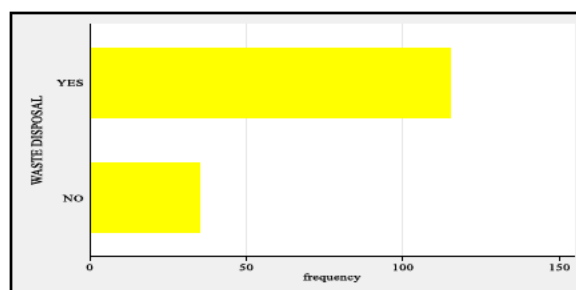


Figure 56: Access to Physical Asset - Waste Disposal

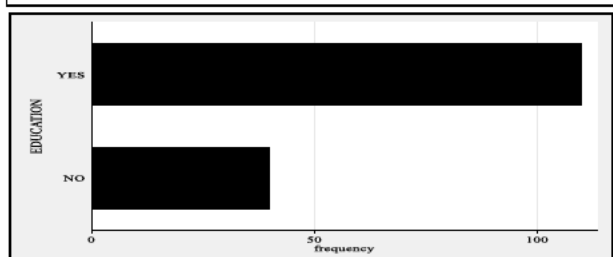


Figure 53: Access to Physical Asset - Education

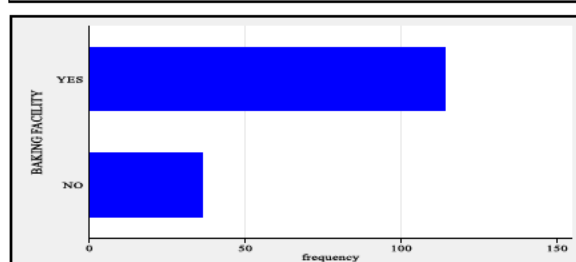


Figure 55: Access to Physical Asset - Banking Facility

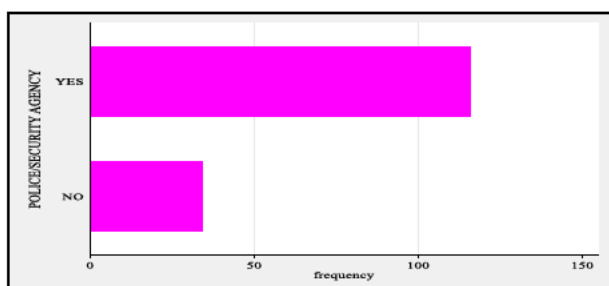


Figure 57: Access to Physical Asset - Police/Security Agency

Although physical assets such as medical facilities and power are generally accessible in Goderich, significant gaps in access persist. These discrepancies are primarily affected by socioeconomic position, geographic location, and other intersecting variables. For instance, while certain urban regions experience a relatively constant electrical supply and access to healthcare, numerous individuals in marginalised communities like Bush Water and Oba Funkia encounter substantial difficulties. One of the most pressing concerns in recent times has been the escalating cost of electricity, which has emerged as a significant deterrent to progress. More importantly, the sharp increase in electricity tariffs has disproportionately affected senior citizens / the over 60s, highly unemployed, and frequently struggling to afford power top-ups. This issue is further exacerbated for individuals who did not contribute to the National Social Security system during their working years, leaving them in precarious financial situations without access to a pension—an essential factor identified by scholars such as Scoones (1998) and Bebbington (1999) in their works on the Sustainable Livelihoods Framework (SLF) and Livelihood Capabilities, respectively. Conversations with participants during household interviews provided critical insights into these lived experiences.

A woman residing in Sherbro Town narrated her struggles:

“Due to financial issues, I can't go to the doctor or keep up the energy needed to put my medication in the fridge because I have arthritis and high blood pressure. I rely on my daughter, who likewise struggles to manage her funds.”

Similarly, a female resident of Oba Funkia articulated comparable challenges:

“I have been deprived of electricity for several weeks. I receive financial support from my children regularly, but this aid is not sufficient to meet my requirements for both energy and nourishment. As my health continues to deteriorate, the darkness makes it impossible for me to sleep at night.”

Additionally, a male participant from the Bush Water community reinforced these accounts by stating:

“I was previously employed as a fisherman, but I do not have enough savings, and I currently lack a pension. The cost of energy is ridiculous, and the clinic closest to me does not have the requisite equipment to manage my diabetes. I am compelled to depend on herbal therapies, which prove ineffective.”

These narratives underscore the intersection of poverty, ageing, and insufficient access to social safety nets which collectively intensify health and quality-of-life challenges for elderly individuals in Goderich, and more broadly across Sierra Leone. Such real-world testimonies, when considered within the broader socio-economic framework, resonate with the work of Sen (1999), who highlights the urgent need for effective policy interventions. Specifically, measures such as subsidised electricity tariffs for the elderly, enhanced healthcare infrastructure, and expanded social security provisions must be implemented to mitigate these critical gaps.

Placing these personal experiences within a wider socio-economic context strengthens the argument for targeted interventions. Inequalities in access to essential services illustrate systemic barriers that require comprehensive policy responses. Addressing these inequalities is crucial to ensuring improved and equitable access to essential services such as electricity and healthcare, thereby enhancing the quality of life for all residents. Ultimately, the responses from the household questionnaire and personal testimonies indicate inadequate and unreliable access to these physical capital assets. Addressing these unmet needs will be essential in fostering inclusive benefits across all community sectors and reducing disparities in access to vital services.

Turning to sources of potable water, Table 35 indicates that a significant majority (78%) of respondents rely on tube-wells, with the remainder using water from boreholes and streams, indicating a very heavy Goderich-wide dependence on groundwater, with its relatively stable or reliable supply .

Table 35: Main Source of Drinking Water		
	Frequency	Percent
Tube-Well	117	78.00
Borehole / Stream Water	33	22.00
Total	150	100.00

However, the use of borehole and stream water by nearly a quarter of the population points to potential vulnerabilities related to water quality and availability, which could affect public health and the sustainability of local livelihoods (Mueller & Tighe, 2022). This suggests a need for targeted interventions to ensure safe and equitable water access across the community, which is essential for maintaining health standards, supporting agricultural and other economic activities, and ultimately enhancing the resilience and sustainability of livelihoods. Strengthening water infrastructure and management practices can significantly contribute to the community's ability to cope with potential water-related challenges and help to secure a sustainable future (Conway, 2019).

As with water, cooking fuel is a subsistence and commercial product which is key to the functioning of a range of livelihood activities.

Table 36 identifies the sources of cooking fuel and types of stoves used by residents in

Table 36: Sources of Cooking Fuel and Types				
Cooking Fuel	If Wood/Charcoal, what kind of stove do you use?			
	Three-Stones	Traditional Stoves	Modern Constructed	Total
Fuel Wood	94	15	0	109
	86.24	13.76	0.00	100.00
	76.42	57.69	0.00	72.67
Charcoal	29	11	1	41
	70.73	26.83	2.44	100.00
	23.58	42.31	100.00	27.33
Total	123	26	1	150
	82.00	17.33	0.67	100.00
	100.00	100.00	100.00	100.00

Goderich, indicating that the majority rely on fuelwood, used predominantly in three-stone fireplaces, while the remaining households use charcoal, mostly in traditional coalpot, rather than ‘improved’ charcoal stoves. This heavy reliance on biomass highlights not only the traditional cooking practices prevalent in the community but also potential environmental and health challenges associated with these methods. The use of three-stone stoves is associated with higher levels of indoor air pollution and greater deforestation rates, posing significant risks to respiratory health and environmental sustainability (Kitole, Tibamanya, & Sesabo, 2023). Moreover, the near absence of modern or ‘improved’ stoves suggests a lack of progress in adopting cleaner and more efficient cooking technologies, which could otherwise mitigate health risks and enhance the quality of life. Addressing these issues by promoting access to modern cooking technologies and sustainable fuel alternatives is crucial for improving health outcomes, preserving local ecosystems, and supporting sustainable development and livelihoods in the long run (Conway, 2019).

In a distribution reminiscent of the dependence on sources of potable water (Table 40), Table 37 the types of toilet facilities in use in Goderich are overwhelmingly modern or flush toilets located inside houses and indicate the existence of a relatively high level of local sanitation infrastructure. For the nearly a quarter of households depending on it latrines or traditional toilets, these are mostly to be found ‘indoors’ or under shelter, often in dedicated cubicles detached from the main building, rather than in the open air.

The predominance of indoor toilets, particularly modern ones, suggests a community that largely values and has access to improved sanitation, which is critical for preventing waterborne diseases and enhancing overall public health (Nasim, El-Zein & Thomas, 2021). However, the existence of traditional

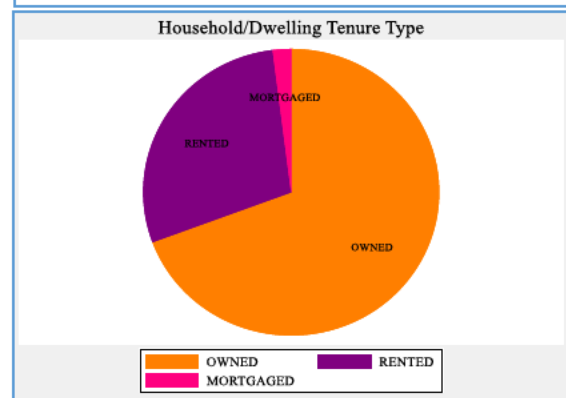
Table 37: Kinds of Toilet Facility (Modern/Pit)			
Kind of Toilet Facility	Type of Facility		
	Inside House	Completely Outside of main house	Total
Modern / Flush	99	18	17
	84.62	15.38	100.00
	78.57	75.00	78.00
Pit / Traditional	27	6	23
	81.82	18.18	100.00
	21.42	25.00	22.00
Total	126	24	150
	84.00	16.00	100.00
	100.00	100.00	100.00

pit latrines indicates that a subset of the population may still face significant health risks. Integrating comprehensive sanitation solutions that ensure all community members have access to modern facilities is essential for sustaining well-being and supporting health and environmental quality (Kitole, Tibamanya, & Sesabo, 2023).

5.5.2. Private Access to and Control Over Physical Assets/Capitals

Starting with the role of physical capital in enhancing well-being with a particular focus on dwelling tenure, Figure 58 reveals widespread property ownership, suggesting that while residential property homes may not be luxurious or grand, they offer an acceptable level of comfort and contribute positively to the standard of living of

Figure 58: Household / Dwelling Tenure



residents. The prevalence of outright property ownership not only represents the accumulation of physical capital, but also speaks to intergenerational wealth transfers, which play a significant role in providing shelter, improved living conditions and, possibly, overall well-being (Mueller & Tighe, 2022).

Conversely, a substantial portion of the population resides in rented accommodations, which can be attributed to recent migration or the lack of access to inherited family property. Despite not owning property, tenants access a form of physical capital through their renting, which provides some stability and supports their ongoing need for shelter, which often doubles as a place or location for practising livelihood activities like small-scale commerce (Adegun & Adedeji, 2017). This aspect of the housing dynamic highlights the varied pathways through which residents secure their livelihoods and well-being, regardless of their housing ownership status.

Overall, Figure 58 indicates the importance of physical capital in attempts to foster a decent quality of life. Both property ownership and renting offer residents a degree of security, autonomy, and a stable base from which to pursue their livelihoods, often in or in the immediate vicinity of residential buildings. The findings also make a case for the continued development and support of physical capital within the community as a means to enhance the overall well-being and economic stability of its members, notably recent arrivals and longer-term renters with little or no prospect of joining the local select few who have succeeded in securing mortgages (cf Leviatan, 2017). This analysis aligns with broader discussions in the literature on the impact of secure housing on livelihood sustainability within urban and rural settings (Moore & Doyon, 2023).

An overview of construction materials used for housing, categorizing these by quality from minimum to high, is provided in Table 38. This classification serves to assess the overall building standards prevalent in the Goderich housing sector.

Table 38: Construction Material					
Type of Houses	For constructing a house or renting				
	Minimum Quality	Low Quality	Medium Quality	High Quality	Total
Detached House	85	13	3	6	107
	79.73	12.15	2.80	5.61	100.00
	81.73	59.09	23.08	54.55	71.33
Semi-Detached	16	7	10	5	38
	42.11	18.42	26.32	13.16	100.00
	15.38	31.82	76.92	45.45	25.33
Flat / Apartment	1	1	0	0	2
	50.00	50.00	0.00	0.00	100.00
	0.96	4.55	0.00	0.00	1.33
Other	2	1	0	0	3
	66.67	33.33	0.00	0.00	100.00
	1.92	4.55	0.00	0.00	2.00
Total	104	22	13	11	150
	69.33	14.67	8.67	7.33	100.00
	100.00	100.00	100.00	100.00	100.00

Detached houses dominate this residential landscape accounting for more than 70% of the sample, although the overwhelming majority of these houses (almost 80%) are classified as of minimum quality, indicating a prevalence of basic construction materials and techniques within this housing type. This might reflect economic constraints or a prioritization of affordability over higher quality materials and construction standards or quality (Mueller & Tighe, 2022). In contrast, only a small fraction of detached houses is of medium (3 units, 2.80%) and high (6 units, 5.61%) quality, suggesting limited access to, or investment in, superior construction resources or a mostly ageing housing stock.

The distribution of semi-detached houses and flats/apartments paints a similar picture of material usage. Semi-detached houses, totaling 38 units, show a more balanced distribution across different qualities, although still leaning towards lower quality (16 units, 42.11% minimum quality). Flats and apartments, though minimal in number (2 units), are split evenly between minimum and low quality, highlighting a potentially tighter budget or lesser focus on these dwelling types in a context in which multi-generational and extended-family living arrangements predominate.

Overall, Table 38 illustrates a clear trend towards lower-quality construction materials in most of the housing within the study area, which could have implications for durability and living

conditions over the medium to long term. This raises questions about the need for policies aimed at expanding access to increasingly secure housing tenure at affordable cost, improving construction standards, and widening access to higher quality building materials to enhance housing safety and comfort. Addressing these concerns could significantly impact the community's well-being and economic stability (Adegun & Adedeji, 2022).

5.5.3. Household Asset Ownership

In this section, the analysis centers on ownership of household assets by residents (Figures 59-67), draws on data from the household survey and is aimed at understanding the role of these assets in enhancing well-being and social standing, as well as whether and how they facilitate livelihood pursuits. The patterns of ownership of items such as radios, cassette players, televisions, and other consumer assets summarised in the figures are not of interest purely because of the functionality of the items. Ownership of these items also contributes to social status in the community.

The figures illustrate that a substantial majority—over 60%—boast ownership of these assets in various combinations, with several (bicycles, phones, sewing machines, electric fans and refrigerators, for example) being integral to individual and household livelihood strategies and practices, particularly but not exclusively among lower-income earners, while also directly impacting quality of life more widely. For example, owning a sewing machine allows individuals to offer tailoring or repair services, thus contributing to their economic stability (Satterthwaite & Tacoli, 2003). It is for this reason that ownership of these assets is widespread, representing in the process a considerable investment in physical capital overall.

Moreover, the desire to stay informed about current affairs drives the ownership of information-enabling devices such as TVs and radios. These tools keep individuals connected to both local and

global events, fostering a sense of community engagement and empowerment. The access to information they provide is crucial for active societal participation and informed decision-making, thereby enhancing community well-being (Spyromitros & Panagiotidis, 2022).

In summary, the data from Figures 58-66 strongly affirm the significant impact of physical capital on sustaining a decent standard of living in Goderich. The extensive accumulation and strategic use of these assets not only improve personal comfort and economic prospects for many but also promote social connectivity and engagement. Thus, prioritizing the development and maintenance of access to, and control over physical capital is essential for increasing the viability and sustainability of individual and group livelihoods (Kitole, Tibamanya, & Sesabo, 2023). I examine this further in the following sections.

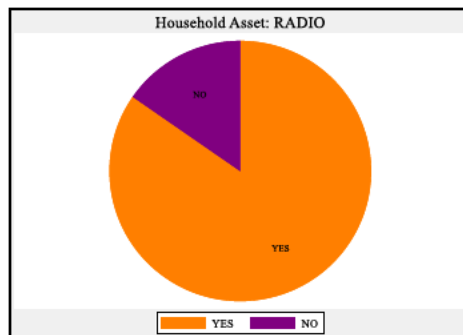


Figure 59: Radio as Household Asset

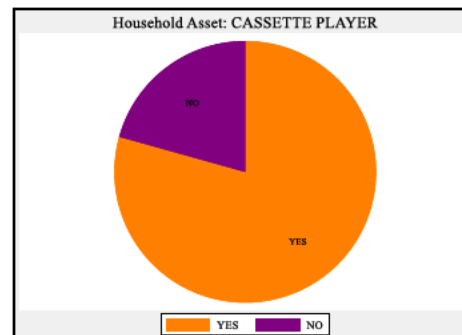


Figure 60: Cassette Player as Household Asset

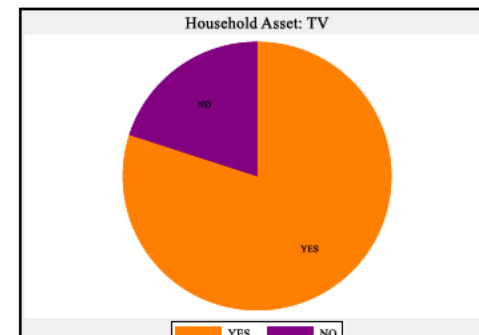


Figure 61: TV as Household Asset

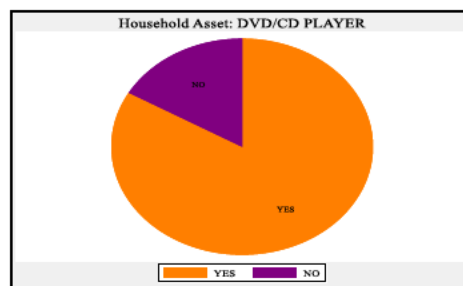


Figure 62: DVD / CD Player as Household Asset

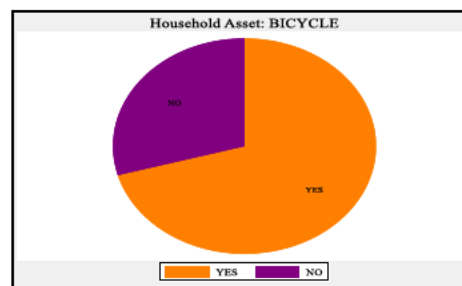


Figure 63: Bicycle as Household Asset

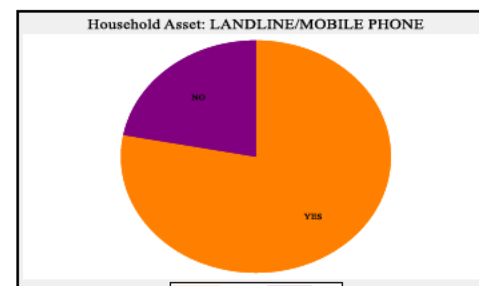


Figure 64: Phone as Household Asset

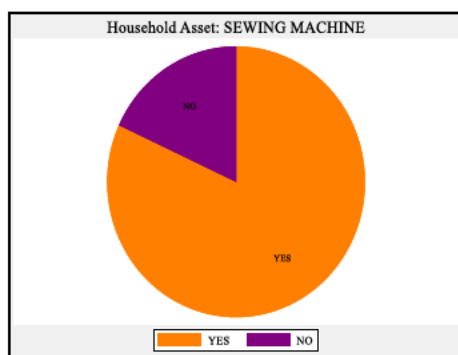


Figure 65: Sewing Machine as Household Asset

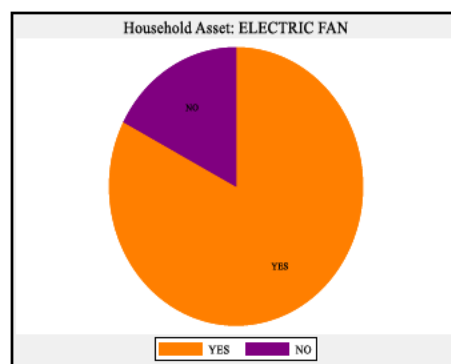


Figure 66: Electric Fan as Household Asset

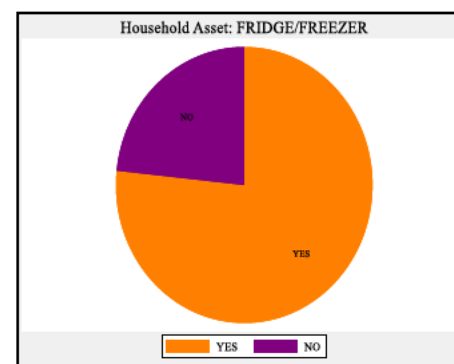


Figure 67: Fridge / Freezer as household Asset

5.5.4. Work-related Assets owned and/or Rented

Work-related assets owned by Goderich residents, play a critical role in facilitating diverse livelihood opportunities within a challenging economic environment. The ownership of these assets is vital in a region where employment options are scarce and earnings low, allowing households to maintain well-being through the possibility of tapping into a variety of income streams. The diverse range of assets owned — from agricultural implements to fishing gear and transportation vehicles — and detailed in Figures 68-78, reflects the coping and adaptive strategies employed in the community to enhance agricultural productivity, support the fishing industry, and improve mobility (Jackson, 2015).

Historically, Goderich has benefited from its geographic and environmental advantages, which facilitate multiple livelihood activities such as fishing, farming, and forestry, albeit to varying degrees for different groups. This has attracted migrants from across Sierra Leone seeking better economic opportunities (Walelign, Jiao, & Smith-Hall, 2023). The possession of relevant work-related assets is a tangible manifestation of the community's commitment to leveraging these advantages for sustainable livelihoods, at least by those fortunate enough or sufficiently well connected to be able to raise the monetary capital needed to cover the purchase or rental/hire cost of these assets. Moreover, recent infrastructural and service improvements suggest an upcoming increase in demand for housing and commercial spaces, emphasizing the need for strategic asset ownership to meet the needs of an expanding population (Ellis, 2000).

The findings from these figures resonate with diversification theories, which highlight the importance of asset possession in stabilizing and growing economies at the local level (ILO, 2019). As Goderich continues to develop, the strategic acquisition and use of work-related assets will

continue to be essential for supporting sustainable livelihoods and catalysing community-wide economic and social development. These assets not only bolster individual and household resilience but can also potentially drive broader economic growth and local development, aligning with the community's long-term goals for progress and prosperity.

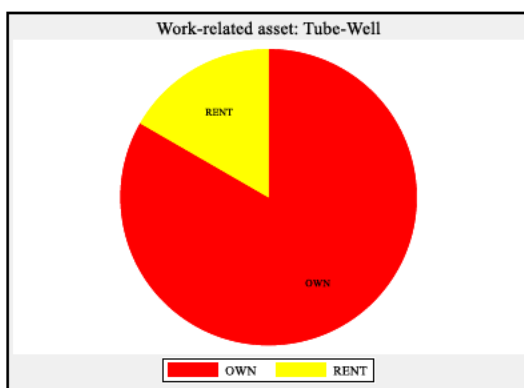


Figure 68: Work-related Asset: Tube-Well

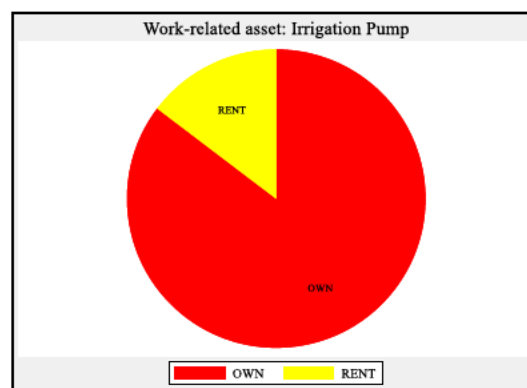


Figure 69: Work-related Asset: Irrigation Pump

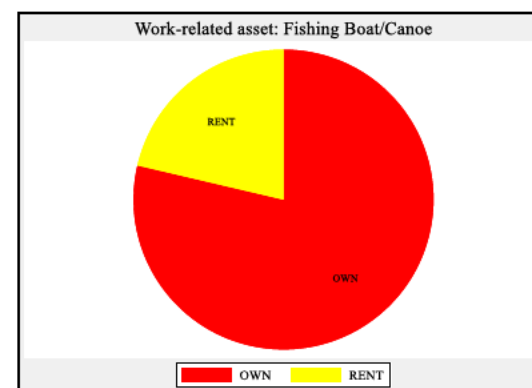


Figure 70: Work-related Asset: Fishing Boat/Canoe

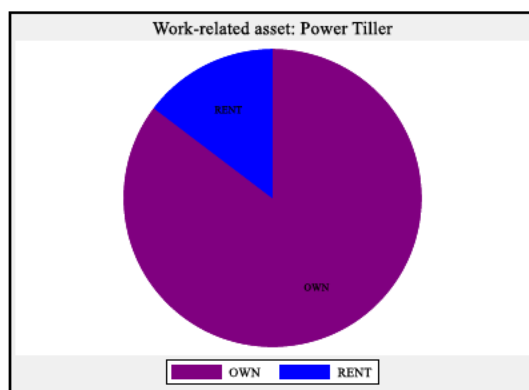


Figure 71: Work-related Asset: Power Tiller

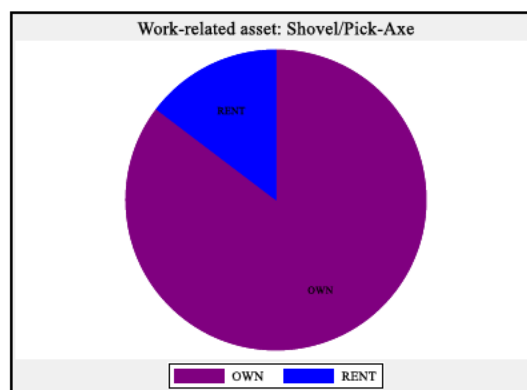


Figure 72: Work-related Asset - Shovel/Pick-Axe

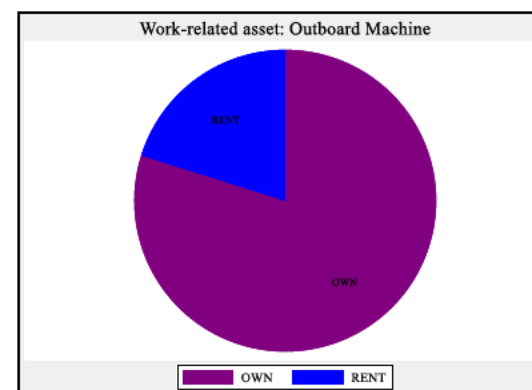


Figure 73: Work-related Asset - Outboard Machine

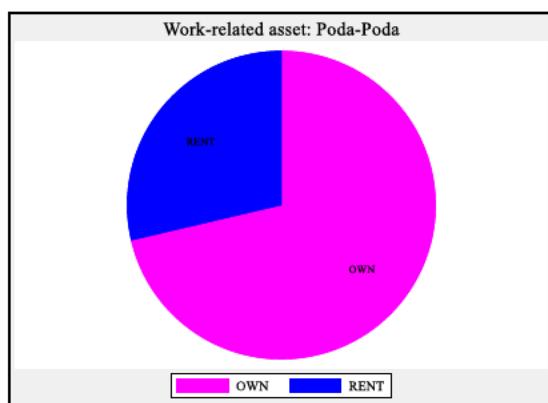


Figure 74: Work-related Asset – Poda-Poda

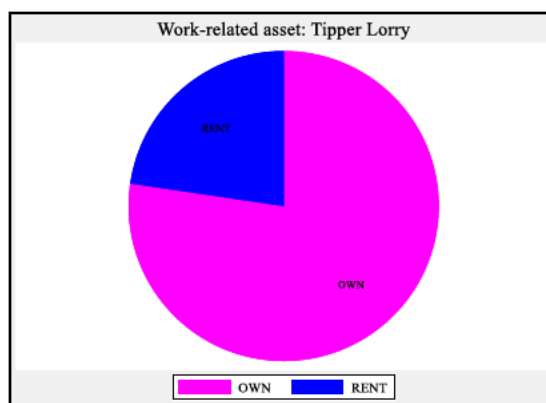


Figure 75: Work-related Asset - Tipper Lorry

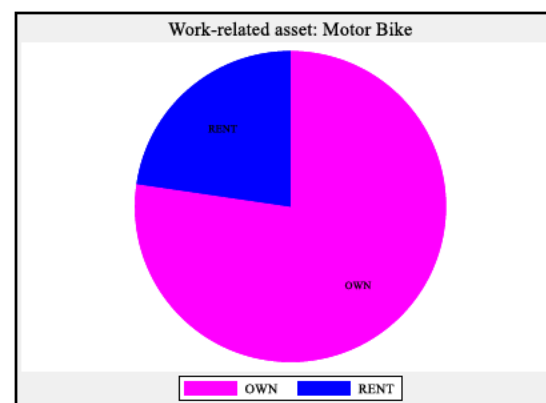


Figure 76: Work-related Asset - Motor Bike

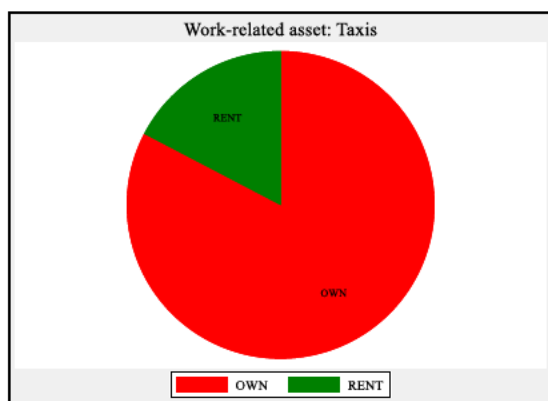


Figure 77: Work-related Asset - Taxis

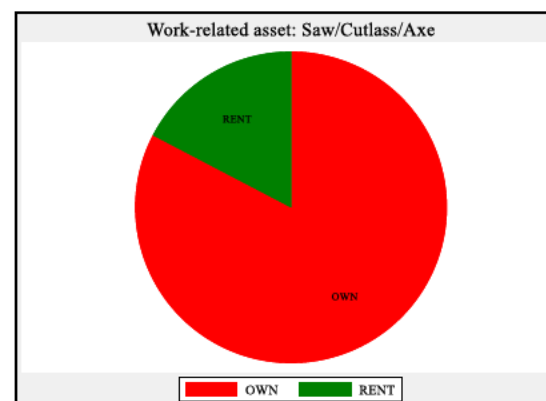


Figure 78: Work-related Asset - Saw/Cutlass/Axe

5.6 Integrating Natural and Social Capitals in Livelihood Strategies and Thinking

The findings from this chapter affirm the paramount importance of a selection of assets as valuable resources for enhancing livelihoods and promoting resilience. Thus, by leveraging a range of livelihood capitals, the population in Goderich seeks to navigate existential challenges and mitigate the adverse effects of shocks and, in the process, demonstrate how indispensable capital or asset mixes are for sustainable livelihoods and/or community development. The actual deployment of livelihood strategies which eventually prove effective, and durable, should direct attention to the importance of socio-environmental coherence and/or cohesion in livelihood management. For not only is combined environment and society stewardship of this kind capable of leveraging the intrinsic value of natural resources and the strength of community bonds, but it also points to the potential value of promoting strategic pathways toward greater livelihood diversification and sustainability.

Intertwining these different capitals in often complex and dynamic ways, as various parts of the chapter have hinted at, local inhabitants set out to navigate the complexities of their livelihoods, seeking to craft a resilient socio-economic fabric that is both adaptable and robust. This integrative practice is reflective of an asset-based development strategy, which posits that the synergistic utilization of diverse assets can significantly enhance livelihood security and sustainability. Such a perspective can be instrumental in transitioning from traditional, siloed approaches to development towards more inclusive and dynamic methodologies that recognise the interconnectedness of natural resources, social networks, and economic and cultural practices in the way that much critical livelihood thinking routinely advocates (Bebbington, 1999; Nel, 2015).

Moreover, the synthesis of livelihood capitals transcends the mere ‘mechanical’ combination of resources, embodying a profound understanding of how these capitals can be mutually reinforced

in pursuit of specified livelihood goals. Strategic engagement with natural assets, informed and supported by robust social networks, can potentially catalyse community-driven initiatives that are not only capable of preserving environmental integrity, but also of elevating social well-being. Reciprocal enhancement of this kind would be a testament to ingenuity in optimising the local asset base and might serve as an illustration of how communities such as those in Goderich can forge potentially sustainable livelihood pathways. Nonetheless, the previously mentioned consequences of unregulated sand mining and illegal forest and woodland clearance as livelihood strategies should act as reminders of why it is crucial for considerations of equity, fairness and inclusion to be at the heart of all such interventions. This and similar experiences elsewhere underscore the potential of, and necessity for livelihood capitals to be managed in accessible and sustainable ways, in order to collectively foster an environment where livelihood activities are not only sustainable, but also more equitable and inclusive.

By foregrounding the synthesis of capitals in livelihood strategies in a way which attends to such concerns, the chapter demonstrates and hopefully strengthens the case for adopting a holistic lens in examining livelihoods. This kind of approach has long challenged and extended once-dominant theoretical frameworks by advocating for a more nuanced understanding of the structures and dynamics at play within complex and differentiated livelihood contexts (Scoones, 1998). Among many advantages, such an approach can help to inform the formulation of interventions aiming to enhance livelihood security, resilience and sustainability. Insights gleaned from this chapter, as from the rest of the thesis, hopefully highlight the complexity and interconnectedness of livelihood strategies, and the latter's rootedness in the realities and potentials of local and wider contexts (Ellis, 2000).

5.7 Chapter Summary

Chapter 5 examines the intricate linkages of natural, social, physical, and financial capital as they affect the livelihoods of Goderich citizens. Using empirical data from household surveys, focus group discussions, and participant observations, this chapter provides a detailed assessment of how these resources work together to strengthen resilience and encourage adaptation in community livelihood practices. This comprehensive strategy stresses the significance of these interconnected resources for the region's sustainable development.

The chapter begins by examining livelihoods within Goderich's complex socioeconomic and environmental framework. It emphasises the problems associated with the acquisition and administration of natural capital, particularly land, which is a critical resource for both subsistence and commercial pursuits. By combining the frameworks provided by Ellis (2000) and Scoones (1998), land is viewed as a dynamic asset that fosters innovative strategies and resilience in the face of environmental and resource constraints.

Social capital is explored for its various roles, including boosting community cohesion, aiding dispute settlement, and increasing organisational involvement. The study investigates the dual nature of social capital, emphasising its ability to foster inclusivity while also offering hazards of isolation. Multinomial logistic regression results show that involvement in organisational structures correlates positively with livelihood outcomes, stressing the need for tailored, context-specific interventions to maximise its potential.

The community's borrowing and saving behaviours are meticulously scrutinised to assess the financial capital. These statistics reflect the population's proactive strategy for economic resilience, encompassing both informal and institutional mechanisms. The analysis highlights the importance

of savings as a safeguard against economic volatility and the judicious use of loans to obtain productive assets.

Physical capital, which encompasses infrastructure, housing, and public goods such as healthcare and education, is investigated for its impact on livelihood sustainability. The chapter shows significant disparities in access and quality, stressful areas that require policy intervention. Significant inadequacies, such as poor water infrastructure and reliance on traditional cooking methods, have been recognised as priorities for long-term solutions that align with broader public health and environmental objectives.

The chapter concludes by integrating these findings into a unified framework that clarifies the interdependence of the various types of capital. This integration demonstrates their combined impact on the resilience and sustainability of livelihoods in Goderich. The chapter combines empirical facts with theoretical rigour, strengthening the conversation about sustainable lifestyles and laying the groundwork for informed policies to strengthen the community's socioeconomic and environmental framework.

CHAPTER 6: VULNERABILITY, SHOCKS AND BARRIERS TO ACCESSING ASSETS

6.1. Chapter Introduction

This chapter examines the dynamics of vulnerability and the impediments faced by residents of Goderich in accessing vital assets, a critical aspect for understanding poverty and exclusion in specific socio-economic settings. Ian Scoones' (1998) work on livelihood perspectives helps frame this discussion, particularly his insights into how various forms of capital—social, physical, and natural—are crucial yet often inaccessible for the most vulnerable groups in a community (see also Sen, Nalla & Ranjit, 2023). This chapter, through its methodical analysis, explores the myriad ways in which vulnerability manifests itself, influenced by an amalgam of socio-economic and environmental factors that not only predispose certain groups to adverse shocks but also systematically block their pathways to essential resources and, potentially at least, increased resilience. It becomes clear that understanding these barriers requires a granular analysis of social structures and power dynamics, as highlighted by Fiona Nunan (2023) in her examination of natural resource governance, which emphasises the role of institutional arrangements in either facilitating or obstructing access to resources.

The chapter advances by dissecting the impact of shocks on the livelihoods of Goderich inhabitants, using a lens that captures both the immediate and prolonged repercussions of such disruptions on daily living and long-term security. The analysis incorporates the concept of adaptive strategies, a core component of resilience thinking, to understand how individuals and households navigate the challenges posed by these shocks. This approach resonates with Scoones'

(1998) broader framework on sustainable livelihoods, which not only stresses vulnerability but also adaptation and resilience in the face of socio-economic shocks. The chapter systematically identifies barriers—ranging from limited access to education and healthcare to constraints on financial services and productive assets—thereby highlighting the complex interplay of factors that entrench poverty. By leveraging the research instruments outlined in earlier chapters, this section of the thesis underscores the potential for crafting interventions tailored to enhance the capabilities of affected communities, thereby fostering equitable access, and promoting a more resilient socio-economic structure in places like Goderich.

6.2. Vulnerability as Concept and in Context

In this opening section, I engage with the concept of vulnerability as both a theoretical construct and a lived reality for the residents of Goderich, as extensively discussed in development studies more generally, but particularly so in the context of livelihood frameworks (Clay, 2023; Osmani & Ahmed, 2013). In Goderich, vulnerability manifests in various forms, including long-term trends, idiosyncratic shocks, and covariate shocks, all of which exert critical influences on livelihood strategies and resource accessibility. The section thus elaborates on these components by integrating earlier frameworks and ongoing narrative analyses to offer an understanding of how such vulnerabilities impact the community's ability to maintain sustainable livelihoods.

Initially, the discussion identifies trends—long-term changes impacting the socio-economic landscape—that significantly affect livelihoods in Goderich. These trends encompass demographic shifts, environmental changes such as deforestation and climate variability, and alterations in governance, which collectively exacerbate competition for scarce natural resources

like land (Clay, 2023). Such long-term patterns necessitate adaptive strategies, particularly post-civil war, highlighting the community's resilience in responding to ongoing environmental and socio-political changes. Subsequently, the discourse shifts to idiosyncratic shocks—specific, unpredictable events that directly impact individual households, such as illness, job loss, or natural accidents (Clay, 2023; Owusu-Sekyere et al., 2022). The resilience of individuals, often bolstered by social networks, plays a crucial role in managing these shocks, as detailed through qualitative data from local interviews. Lastly, the examination of covariate shocks, which affect large segments of the community simultaneously, brings to light broader risks like natural disasters and economic downturns, notably exemplified by the global disruptions caused by the COVID-19 pandemic (FAO, 2021a; Pradhan & Mukherjee, 2018; Dercon, 2005). This analysis, informed by both qualitative and quantitative methods, delineates the extensive and varied impacts of such shocks on the collective livelihoods of Goderich residents, emphasizing the interconnectedness of individual, local, and global vulnerabilities in shaping their experiences.

6.2.1. Vulnerability from the Context of Household Survey

To start, the chapter examines the qualitative aspects of vulnerability from the perspective of households in Goderich, engaging with the theoretical insights of Clay (2023) and supported by empirical survey evidence. This examination focuses on the Sustainable Livelihood Framework outlined in Section 1.4 and summarised in Figure 3, assessing the availability and adequacy of livelihood assets. Here, particular attention is paid to local perceptions of these assets, which are critical to understanding the layers of vulnerability that arise when these resources are limited or fail to meet community needs.

The analysis, which also incorporates participant observation, hinges on the perceptions held by individuals regarding the sufficiency and accessibility of essential livelihood assets. The latter shape the community's vulnerability profile, highlighting the integral role assets play in either perpetuating or alleviating vulnerability. The findings from a comprehensive household survey shed light on these perceptions, offering detailed insights into how the quality and quantity of assets affect daily lives and long-term security in Goderich. The survey results underscore the significant gaps in asset distribution and the potential for strategic interventions aimed at mitigating these gaps.

In addition, this exploration draws on further academic literature to broaden the analytical scope. Works such as Chambers and Conway's (1992) seminal piece on sustainable livelihoods provide a foundational academic context, enriching the discussion of how asset access and sustainability are pivotal in shaping economic and social outcomes. This integration of theory and practice facilitates a more nuanced understanding of the dynamic interplay between asset availability and community vulnerability. Subsequent sections will continue to expand on these insights, linking the empirical data with broader theoretical discussions on poverty reduction and sustainable development, thereby framing a detailed narrative of the challenges and potential interventions for enhancing livelihood security in and around Goderich.

6.2.1.1. Satisfaction with Quantity/Quality of Relevant Assets

Goderich residents' perceptions regarding vulnerability and their satisfaction or dissatisfaction with access to services and assets crucial to their livelihoods are detailed in Figures 85-99, constructed from household survey responses. The survey results reveal a complex picture: high degrees of satisfaction are noted with certain services such as "Solid/Liquid Water, Gravel/Stone-

quarrying, Entertainment, and Educational Facilities", while there is notable dissatisfaction with the availability and quality of other vital assets like agricultural land, news/communication services, and beachfront access.

Activities around sand mining on beaches elicited one of the two highest levels of dissatisfaction of all assets/activities (the other not surprisingly being the quality of the beachfront). Participant Observation PO 6.2.1.1a permitted close study of this essential but environmentally contentious activity. Usually conducted illegally at night along Oba Funkia and Shallow Water beaches, sand mining provides a means for overwhelmingly young men aged 18 to 35 from Oba Funkia, Sherbro Town, and Bushwater to engage in a remunerated livelihood activity. These individuals face arduous and hazardous conditions while mining sand illegally. Notwithstanding their considerable adverse environmental impacts, sand mining (and gravel mining/quarrying) are essential for individual and household income, underscoring the fragile balance between economic necessity and environmental sustainability.

For many, sand mining is a viable solution for urgent personal and familial requirements. Some perceive it as a provisional solution to meet urgent financial needs, such as funding their studies at tertiary institutions. Operations are generally conducted in groups at night to avoid discovery by law enforcement agents, particularly the community police unit at Adonkia police station. Group members work together to collect and bag the sand, and arrange with sales personnel for the bags to be transported by truck to Tipper Ground, situated about a mile and a half from Goderich, where it is sold. This collective endeavour highlights the ingenuity and resolve of the participants, notwithstanding the intrinsic hazards and considerable environmental repercussions of their actions.

Although less polarized, views on access to and quality of education proved deeply divisive, with almost identical levels of satisfaction and dissatisfaction being reported (Figure 85). A follow-up supplementary investigation to the main Household Questionnaire Survey (PO 6.2.1.1b) was thus undertaken, focusing specifically on the education reforms implemented by the SLPP regime since 2018, and which guarantee free education for children aged 5-18 years. The views of representatives from 10 randomly selected but financially struggling households from across the neighbourhoods covered by the study were canvassed on the perceived benefits of the reforms. The consensus view from this additional investigation can be summarised as follows:

“To a greater extent, we are satisfied with the support that the free education initiative has provided for our family, particularly in terms of cost relief. In the past, we have struggled to pay school fees due to our low income levels, but with free education, we are now assured that our children can complete their compulsory education.”

Nonetheless, there are emerging concerns regarding the impact of significant ongoing out-of-pocket expenses for uniforms, books, and other essentials on struggling families and households. This suggests a gap between the policy’s stated objectives and its practical implementation, underlining the ongoing financial pressures still faced by families despite the initiative’s overall benefits.

Satisfaction with water supply and solid/liquid waste disposal, as illustrated in Figures 84 and 86, points to successful regulatory oversight, yet the broader survey findings indicate that the overall quality and quantity of several critical assets are insufficient to meet the growing demands of an increasingly diverse population. This mismatch leads to widespread dissatisfaction and highlights

the community's struggles in navigating various socio-economic shocks, which is discussed further both in this and the next sections.

Moreover, clandestine livelihood activities such as sand mining and stone quarrying, while providing necessary income, raises significant concerns about sustainable resource management. These activities, lacking proper regulation as already noted in earlier chapters, exemplify the challenges posed by non-renewable asset extraction, an issue slated for in-depth discussion in Chapter 7, as they remain a source of deep division.

Of further relevance are the socio-economic repercussions of structural adjustment, particularly that recommended by the International Monetary Fund's Structural Adjustment Programme (SAP),² and successor interventions like Poverty Reduction Programmes (PRSPs). SAP which advocated the privatization of state and public resources and the informalization of the economy, has significantly influenced the economic landscape of Sierra Leone, exacerbating vulnerabilities. The historical backdrop of these policies helps to explain the persistent economic challenges and the normalization of the informalization of economic activities as survival strategies both pre- and post-civil war. Indeed, for significant numbers of civil war protagonists, war itself was replete with

² The IMF Structural Adjustment Programme (SAP) implemented in economies like Sierra Leone in the 1980s aimed to address economic challenges and promote sustainable development. The rationale behind the SAP was to address fiscal imbalances, external debt burdens, and inefficient resource allocation. However, the impact of SAPs on livelihoods and well-being in communities like Goderich in recent times has been a subject of concern. Studies have shown that SAPs, characterized by fiscal austerity and trade liberalization, have led to social and economic hardships, exacerbating poverty and inequality. For example, a study by Kidd and Negandhi (2016) found that the SAPs in Sierra Leone resulted in reduced public spending on social sectors, such as health and education, negatively impacting community well-being. The evidence overwhelmingly suggests that, despite their intended purpose of addressing economic challenges, the Structural Adjustment Programs (SAPs) have had profound adverse effects on the livelihoods and well-being of rural communities across Sierra Leone, with a particular emphasis on Goderich. This unfortunate situation is compounded by a multitude of issues, including changing regulations surrounding access to protected forest areas and fishing quotas, as well as population growth and redistribution trends. Consequently, the community finds itself engulfed in fierce competition for scarce resources, as vividly exemplified in the Sustainable Livelihood Framework (SLF).

livelihood opportunities, starting with soldiering for hire, but also expanding to incorporate looting, illegal mining, unauthorized timber exploitation, wildlife poaching, narcotics, armed robbery, etc. (Richards, 1996 & 2003; Peters, 2010 & 2011). And this in addition to the widespread disruption of livelihoods, destruction of life and limb, and deliberate attempts by mostly rebel forces and commanders to consciously undermine the bonds of social/cultural capital invested in justifying people's ongoing claims to place and society (Bangura, 2019). This was done by upending all norms of acceptable human behaviour, in order to alienate captive and other fighters from their pre-war homes, families and communities in a bid to make them less 'human' and more like ruthless 'killing machines' (Cline-Cole, 2003).

The recent Ebola outbreak and global COVID-19 pandemic introduced additional covariate shocks, compelling community members to incur unforeseen material expenses and other costs on protective measures, including quarantining and social distancing which undermined the structure and functioning of circuits of financial, social and cultural capital, further highlighting individual and group vulnerabilities. These circumstances underscore the resilience demanded of residents of Goderich and elsewhere in the country in the face of multiple shocks.

This scenario, where economic liberalisation under SAP and its persistent aftermath has intertwined with local vulnerabilities, demands a more context-specific approach to understanding and mitigating the socio-economic challenges faced in places like Goderich. The implications of these policies are critical in understanding the current socio-economic dynamics and form an essential part of recent empirical investigations (Jackson, 2023a; Jackson & Jabbie, 2020; 2021). In many ways, the emergence and spread of livelihood thinking, research and practice can be seen

to have emerged in part to reaction precisely to the shortcomings of SAPs, Austerity and, to a lesser extent, poverty reduction initiatives (Carney, 1998; de Haan and Zoomers, 2000).

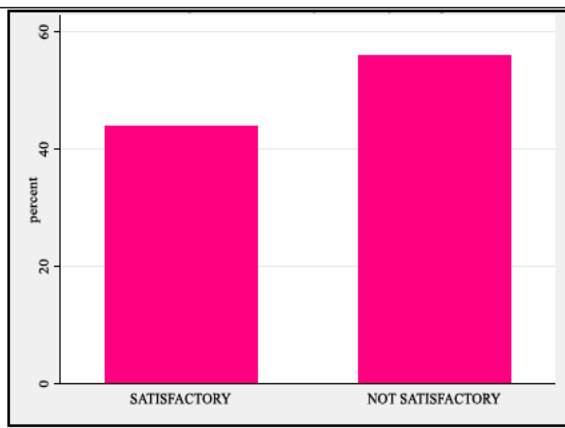


Figure 79: Satisfaction with Agricultural Land

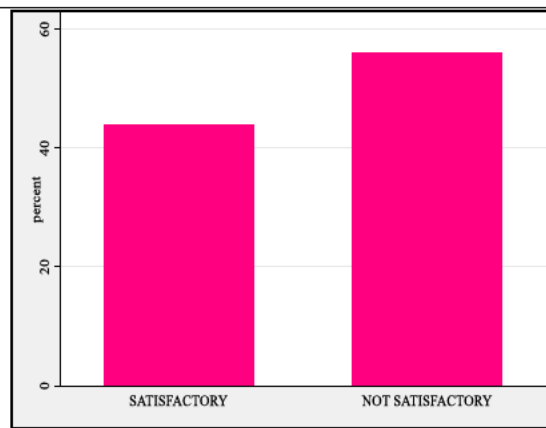


Figure 80: Satisfaction with Forest/bush for NTFP Agric

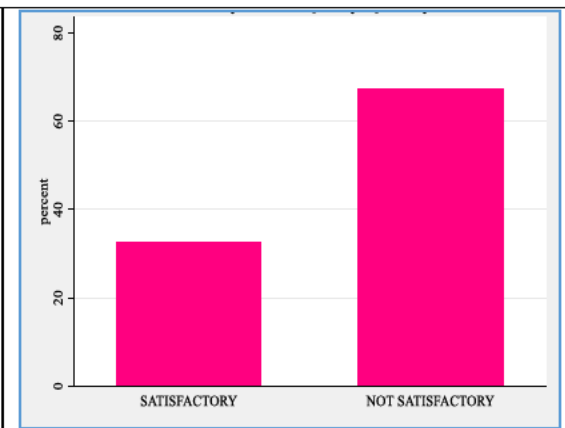


Figure 81: Quality / Quantity of Sand-Pit Mining/Collection

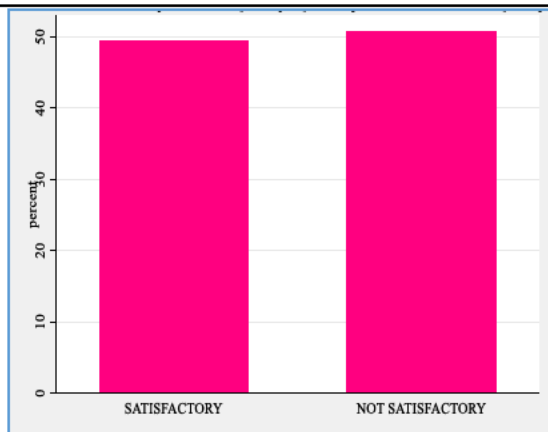


Figure 82: Gravel/Stone Quarrying

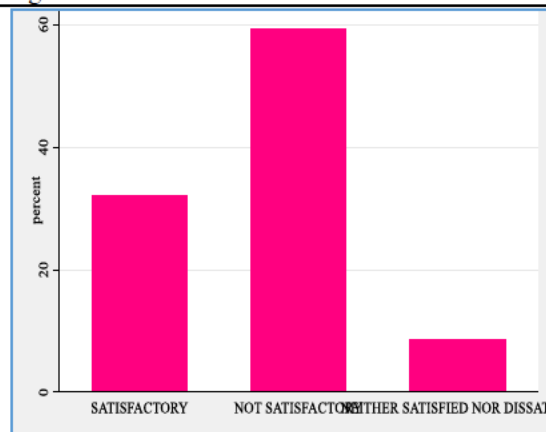


Figure 83: Quality/Quantity of Transport/Road System

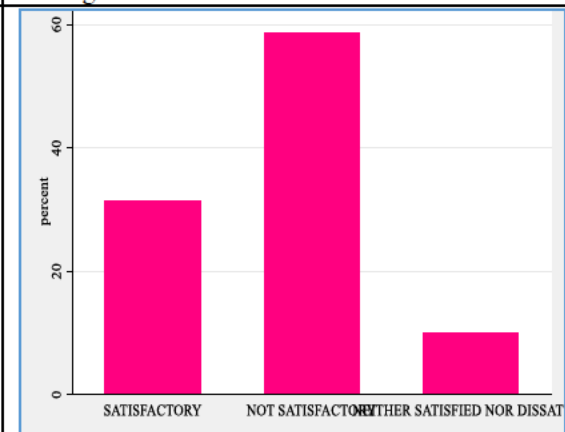


Figure 84: Quality/Quantity of Water Supply

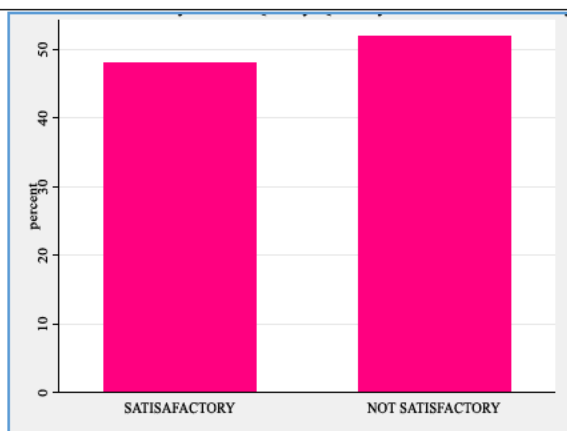


Figure 85: Quality/Quantity of Educational Facility

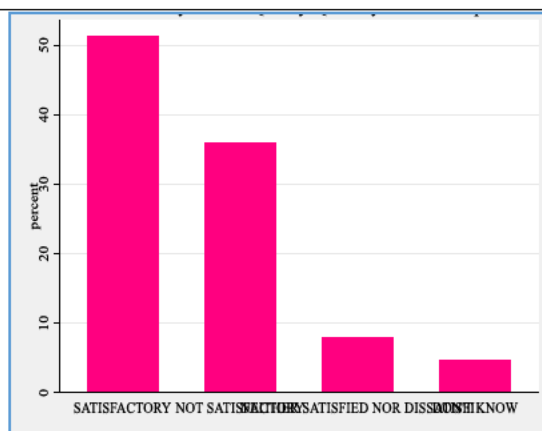


Figure 86: Quality/Quantity of Solid/Liquid Waste disposal

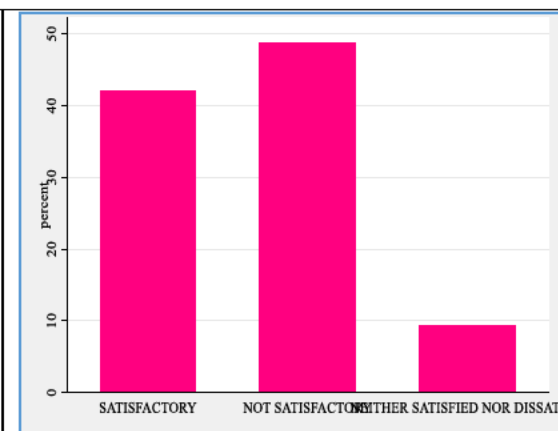


Figure 87: Quality/Quantity of Medical/Health Facility

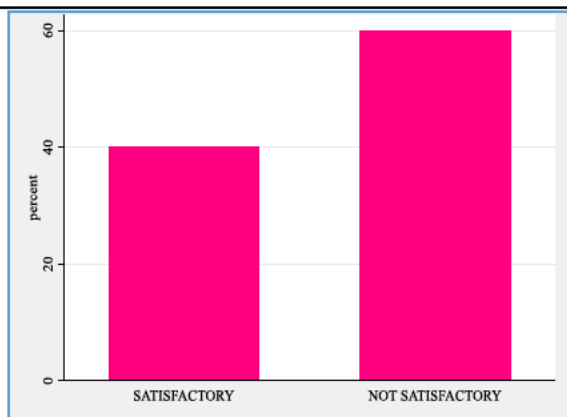


Figure 88: Quality/Quantity of News

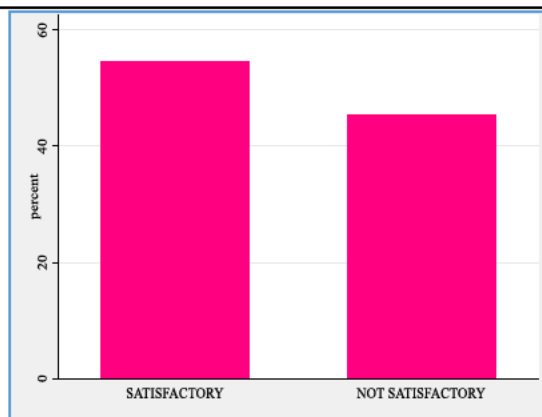


Figure 89: Quality/Quantity of Flood Control/Defence

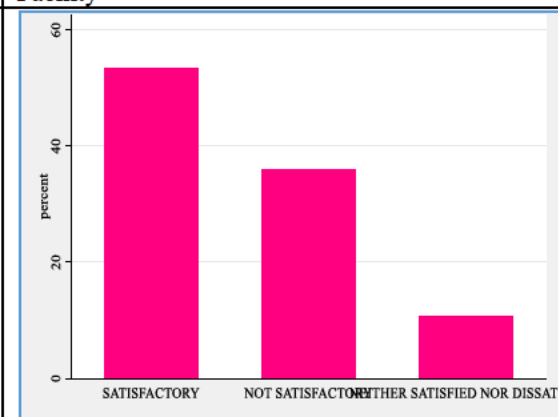


Figure 90: Quality/Quantity of Market Shops

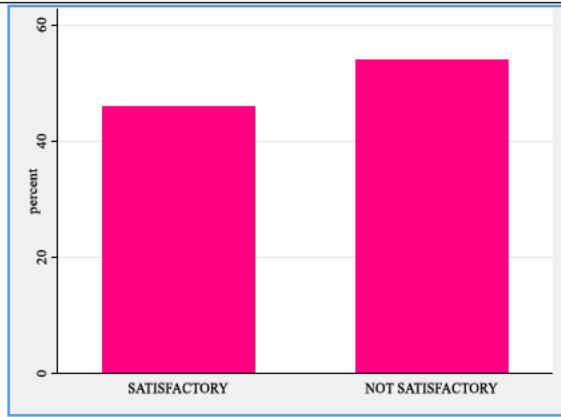


Figure 91: Quality/Quantity of Entertainment Facility

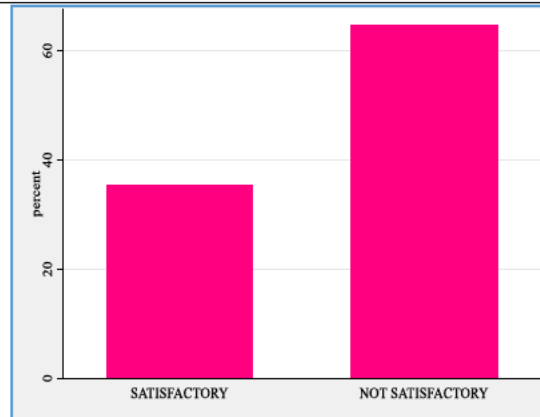


Figure 92: Quality/Quantity of Beach/Seafront

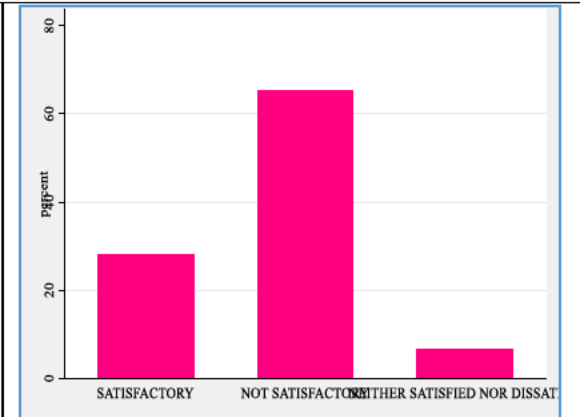


Figure 93: Quality/Quantity of Power/Energy/Street Lights

6.2.1.2. Livelihood Shocks and Stresses as Household ‘Problems’ and Indicators of Vulnerability

Figures 94-109 document a complex array of livelihood challenges, existential crises and/or life ‘problems’ encountered by households and their members in the two years prior to household survey interviews on which analysis of this section is based, and which highlights the fragile socio-economic and environmental balance in which residents operate, albeit to often slightly varying degrees. However, I focus here, at least to start, on the already mentioned landslide incident in the Oba Funkia community in August 2021 — a stark manifestation of the interplay of trend, covariate, and idiosyncratic shocks that exemplify the precarious conditions faced by locals (reference to Chapter 4, specifically Section 4.4.3, Figure 34). This catastrophic event, exacerbated by the detrimental effects of sand mining coupled with intense rainfall during July and August of that year, serves as a vivid example of the vulnerability of this locality and community.

In Participant Observation PO-6.2.1.2, residents of Oba Funkia recount vividly the landslide, describing how the combination of human-induced environmental degradation and natural forces wrought havoc in their lives. This narrative captures the immediate and residual impacts of such disasters, accentuated by economic strains from pandemic-related lockdowns and the ensuing financial losses. Such firsthand accounts emphasize the urgent need for community-driven solutions and robust policy frameworks to safeguard against similar future events.

The survey data reflects a broader spectrum of shocks affecting the community — ranging from job losses (Figure 104) to the pervasive impact of COVID-19 (Figure 109), and from personal health crises to climate- and weather-related disasters such as flooding and drought. These shocks are not isolated but are deeply interwoven with issues of job, land and property tenure insecurity, significantly affecting vulnerable populations such as migrants, who are often involved in rental disputes, or long-established others tangled up in inheritance disputes.

Drawing on the theoretical insights from Fiona Nunan and Ian Scoones, it is possible to point to a need to explore systemic vulnerabilities. Nunan's insights into resource governance illuminate the challenges faced by communities in managing communal resources under conditions of legal and economic uncertainty, notably where, as here, property and land seizures appear to be common (Nunan, 2023; Figure 106). Similarly, Scoones' work on livelihoods provides a framework for understanding how various forms of capital —human, social, physical, natural, and financial — interact and are impacted by external shocks and stresses (Scoones, 1998). These perspectives are crucial for appreciating the depth and breadth of vulnerabilities that the Goderich community faces, exemplified perhaps by a high local incidence of theft (Figure 105).

The historical context of limited economic opportunities, as detailed by Frank Ellis in his discussions on rural livelihood diversification, further complicates the local employment landscape, which is one clearly characterised by widespread precarity, given the reported pervasiveness of job losses (Ellis, 2000; Figure 104). Also, the reliance on precarious and environmentally detrimental activities such as sand mining highlights a critical survival strategy in the absence of viable alternatives, while a seeming ubiquity of work-related injuries would appear to indicate inadequately enforced or completely absent workplace safety measures or protocols for both self-employed and waged workers in often high risk livelihood pursuits (Figure 107). This is exacerbated by a growing youth population facing an increasingly competitive job market stifled by economic stagnation and the impacts of global health crises.

The necessity for adaptive strategies is pressing, as the community contends with ongoing environmental uncertainty and degradation (Figures 95-99), and socio-economic instability. Warburton and Jackson (2023) discuss the slow pace of economic diversification in sectors critical

for sustainable development, such as agriculture and manufacturing, which remains a significant hurdle for improving livelihood security in post-conflict settings.

In sum, the complex interdependencies that define the livelihood strategies of Goderich's residents call for a concerted effort to develop sustainable livelihood policies and practices that do not compromise environmental integrity or social stability. The insights from Ellis, Scoones, and Nunan provide robust academic reference points that support a deeper and more nuanced understanding of these dynamics capable of guiding future interventions aimed at fostering resilience and sustainable livelihoods in vulnerable populations and communities like Goderich.

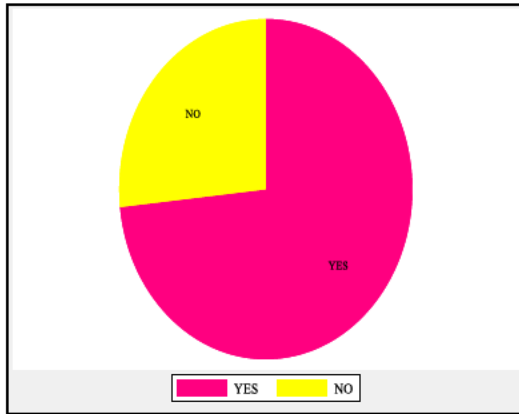


Figure 94: Fire

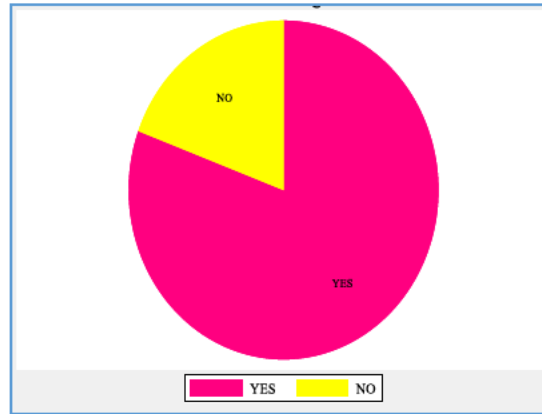


Figure 95: Flooding

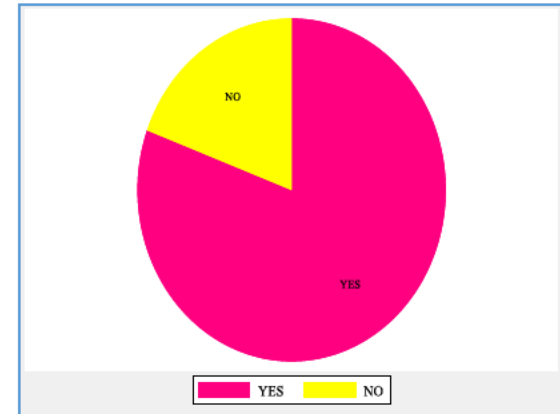


Figure 96: Drought

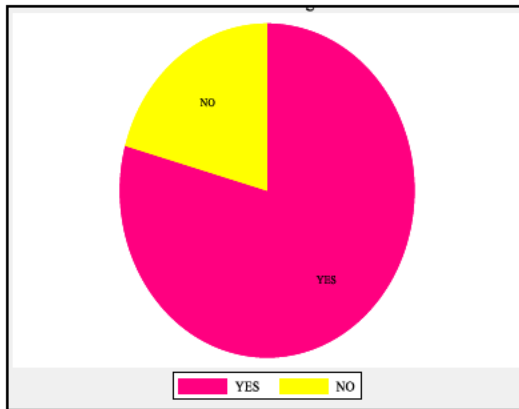


Figure 97: Wind Damage

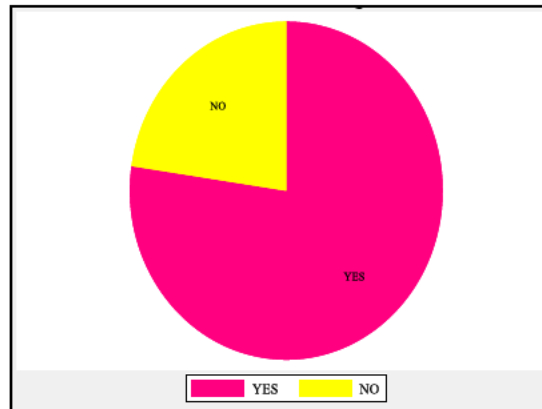


Figure 98: Flood/Water Damage

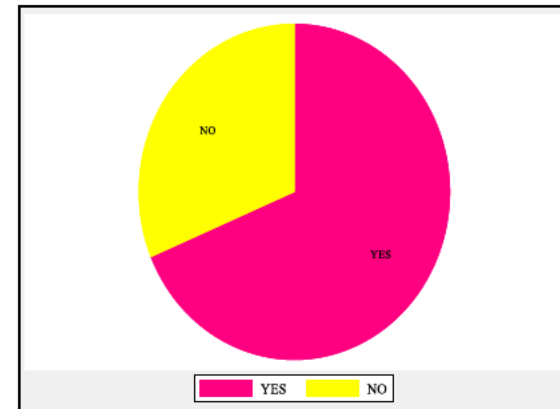


Figure 99: Riverbank Erosion

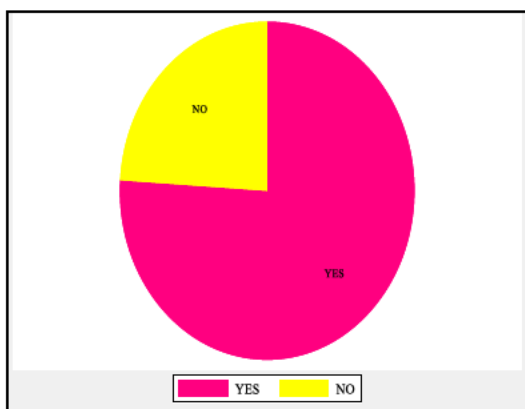


Figure 100: Illness of Household Member

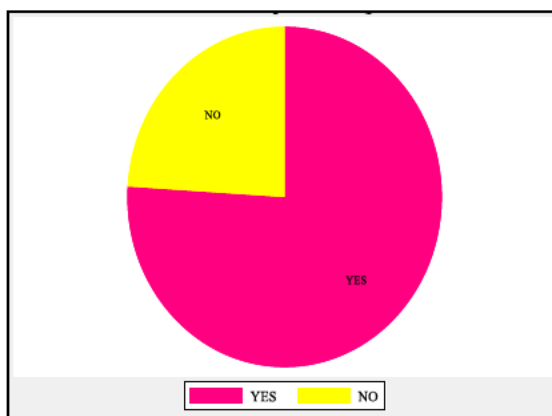


Figure 101: Poor Crop Harvest

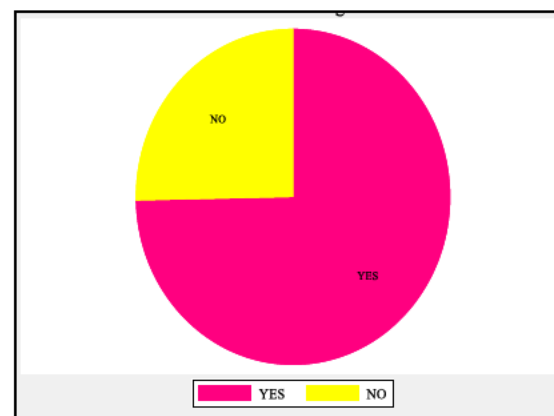


Figure 102: Food Storage Losses

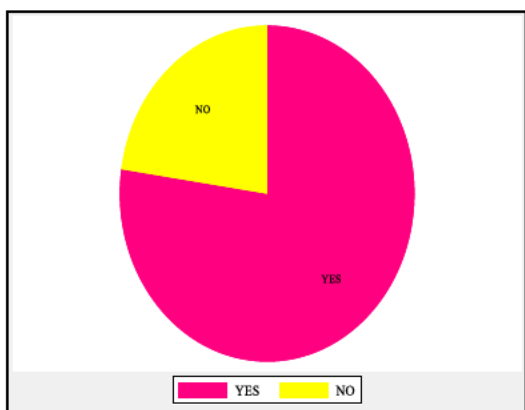


Figure 103: Death of Household Member

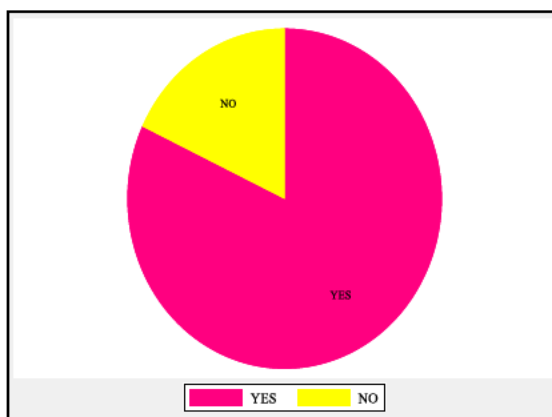


Figure 104: Loss of Jobs

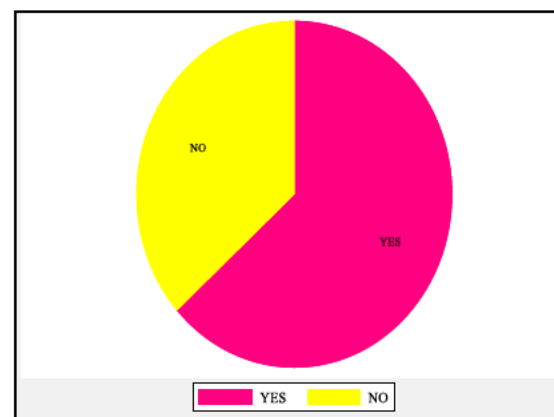


Figure 105: Theft

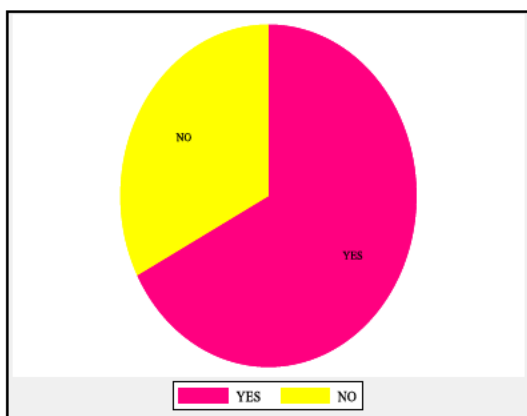


Figure 106: Property/land Seizure

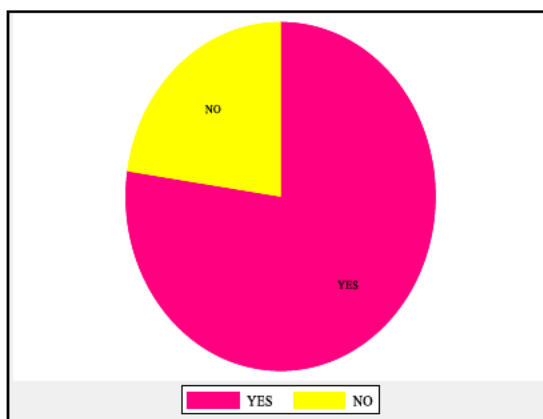


Figure 107: Injury at work

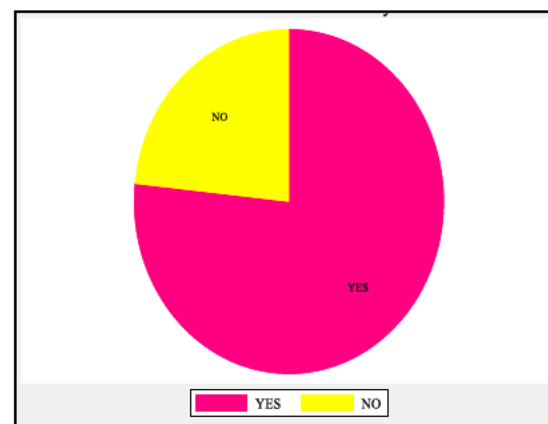


Figure 108: Loss of livestock/poultry

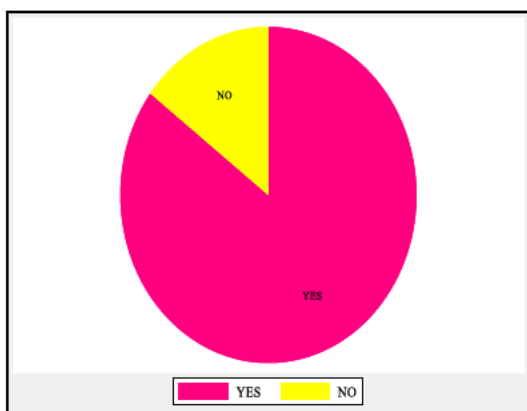


Figure 109: Influence of COVID-19

6.2.2. *Vulnerability in the Context of Focus Group Discussions (FGD)*

This section emphasises the narratives emerging from Focus Group Discussions, highlighting how covariate shocks, such as the COVID-19 pandemic, have reshaped social dynamics and economic activities within the community.

Insights from an FGD with local sand miners (Figure 110) and Keke or Bike Riders (Figure 111) discussed below illustrate the profound impact of the pandemic. This global crisis disrupted traditional norms of reciprocity and social support, significantly limiting access to both material and non-material assets, although it might also have initiated new and different forms of interaction as reported elsewhere (Cline-Cole, 2020). The pandemic's restrictions not only fuelled competition among community members but also spurred a form of resilience that is both compelling and desperate. The sand miners described how their reliance on sandmining and stone-quarrying intensified as they were forced to "*address the needful*" under constrained circumstances. This phrase poignantly captures their struggle to maintain livelihoods in the face of drastically reduced opportunities.

While the focus here is largely on sand miners and quarry workers, it is important to recognize that other groups within the community, such as young Keke or Bike Riders—who provide essential local motorbike taxi services—experience similar levels of vulnerability. The impact of the pandemic, serving as a covariate shock, extends across different occupational sectors, illustrating a broad spectrum of challenges that affect various aspects of life and work in Goderich.

The narrative shared in FGD Quotes, as I show shortly, is reflective of broader themes identified in the wider literature on vulnerability and resilience in livelihood studies.

Scholars such as Scoones (1998) and Chambers & Conway (1992) provide frameworks for understanding how rural communities manage to sustain their livelihoods amidst external shocks, while emphasising the importance of adaptive capacities and the role of accessible assets in shaping the responses of vulnerable communities to these stresses and shocks.

Additionally, Nunan (2003) has highlighted the significance of managing communal resources amidst external pressures and the crucial role of local institutional arrangements in supporting vulnerable groups. Her insights are particularly relevant in understanding how governance structures can either alleviate or exacerbate the vulnerabilities faced by communities like those in Goderich.

It is considering the foregoing that this section tries to not only shed light on the specific experiences of individuals engaged in often high-risk livelihood activities, but also paint a broader picture of the systemic challenges that pervade such communities. The FG discussions reveal how pervasive the effects of global events can be at local scales, affecting the most vulnerable populations disproportionately and necessitating a re-evaluation of strategies to support and enhance community resilience and sustainability.

The following quotes were expressed by Keke Riders and Sand-miners during Focus Group Discussions (FGD) conducted at Oba Funkia, Metchem, and Antar Town on July 25th and 27th, 2021:

FGD Quote 1: *“The experience of COVID-19 is unimaginable with the legislated lockdown of all activities in Sierra Leone at that time, life was hard for us in the transport and sandmining activities. Even friends who at some point used to assist us through, for example, as substitute rider/driver or as fishing assistants to*

negotiate prices of fish quotas, cannot trust us given the fears that were amplified about the deadliness of the epidemic... instead, we pledged our faith in God while addressing the needful to stock up on basic food items like Gari, Palm Oil, Salt, and Maggie to make sure we sustain the hard times that COVID-19 placed on our lives”.

Figure 110: Sand-miners during a Focus Group Session



Source: Own Photo

Similarly, in-depth interviews and a focus group session with Keke and bike riders offer a vivid window into the complexities of their daily experiences, particularly under the strain of the COVID-19 pandemic. This research thus tries to capture not only the resilience of these riders in the face of economic instability, but also the subtleties of the coping mechanisms they employ to navigate their vulnerabilities (Chambers & Conway, 1992).

During the focus group discussions, it became evident that the riders engage in a form of mutual aid, albeit at a cost. They offer each other the chance to earn a day's income by sharing rides—a practice that, while supportive, underscores their precarious economic

positions. As articulated, their willingness to accept such unequal exchanges stems from a blend of vulnerability—operating from positions of extreme weakness—and resilience, as they express a collective desire to:

"sustain the hard times" (FGD Quote 5).

The dual nature of their experiences is thus marked by both hardship and the agency to overcome such hardship. The riders' stories reflect a broader narrative of survival strategies employed by those in economically marginalised positions, particularly in the context of global shocks like pandemics. These dynamics are emblematic of the intricate interplay between economic challenges, social structures, and individual and group agency—a theme extensively explored in livelihood and resilience research.

Academic literature on livelihood resilience offers frameworks for understanding how individuals and communities adapt to and recover from stressors and shocks. Scoones (1998) provides a conceptual framework that emphasizes the importance of multiple forms of capital in sustaining livelihoods under stress (Scoones, 1998). Similarly, research on environmental governance highlights how local systems and community strategies play crucial roles in managing shared resources and navigating vulnerabilities (Nunan, 2023).

Moreover, the notion of ‘unequal exchange’ and coping strategies in economically marginalized communities is a topic that Frank Ellis (2000) has explored, noting that economic activities often emerge as responses to the limitations and opportunities presented by the broader socio-economic environment. Together, their combined perspectives prove crucial in understanding the observed behaviors and reported choices

of sand miners (Figure 110) and Keke riders (Figure 111) within the broader socio-economic fabric of Goderich.

This study thus expands the general understanding of how economic adversity, social networks, and individual agency intersect to shape the livelihood strategies of vulnerable populations. By focusing on the specific context of Keke riders and sand miners in Goderich, it contributes to the broader discourse on vulnerability and resilience, providing insights into the mechanisms that can enable survival in the face of persistent and emerging challenges.

Figure 111: Keke Riders during a Focus Group Session



Source: Own Photo

During focus group sessions (FGQ, Question 13, Appendix 3), it became evident that many participants have been forced to resort to land-based activities such as sand mining and, to a lesser extent, deforestation —activities necessitated by the lack of alternative options due to the already extensively deforested landscape, a consequence of ongoing population growth and redistribution. These activities, while providing immediate livelihood options,

contribute significantly to environmental degradation, including the risk of land degradation and landslides, a concern highlighted by Calgaro, Lloyd, and Dominey-Howes (2014), who note the direct impacts of such land use changes on increased erosion and land surface instability.

This precarious situation reflects the dire circumstances under which people operate, where the depletion of essential livelihood assets and the imposition of restrictive legislation to counter this (FGQ, Questions 10 and 13, Appendix 3) converge with environmentally harmful practices adopted as second and third order coping mechanisms. These activities not only threaten the sustainability of natural capital in its many forms but also pose a risk of exacerbating already poor sanitation conditions, leading to a compounded impact on the community's overall well-being and environmental health. The Food and Agriculture Organization (FAO, 2021a) has similarly documented the broad consequences of such environmental degradation on sanitation, highlighting the interconnectedness of environmental health and community well-being.

Understanding and addressing these often-complex challenges is critical for fostering sustainable improvements in the livelihoods and resilience of Goderich residents. This requires a comprehensive approach that considers the environmental, legislative, and socio-economic dimensions that shape the community's vulnerabilities. Such an approach would not only aim to mitigate immediate environmental impacts but also enhance the overall socio-economic resilience of the community, ensuring long-term sustainability and improved quality of life. The case of Goderich serves as a poignant example of how

intertwined and complex the challenges of sustainable livelihoods can be, especially in settings that face both socio-economic constraints and environmental vulnerabilities.

6.2.3. Vulnerability from the Context of Townhead Interviews

To return briefly to Townhead interview responses which constituted the basis of Chapter 4, Table 39 provides a revealing snapshot of the Townhead perceptions of vulnerability experienced by distinct groups in Goderich, specifically women, the disabled, and a broader demographic encompassing child, women and the elderly. Crucially, this analysis highlights what, for Townheads, are both assumed and actual barriers to asset access which significantly influence socio-economic security and day-to-day resilience of these groups.

The table illustrates a stark disparity in asset access among the identified groups. For women and disabled individuals, the lack of formal restrictions on asset access paradoxically coexists with full vulnerability status. This suggests that while legal barriers may not exist, other formidable barriers—such as

Table 39: Most vulnerable groups in Goderich and reasons for their vulnerability			
Who are the vulnerable groups in the village?	Why do you think they are vulnerable and how to reduce their vulnerability?		Total
	Asset restrictions	No Restriction	
Women	0	1	1
	0.00	100.00	100.00
	0.00	50.00	20.00
Disabled	0	1	1
	0.00	100.00	100.00
	0.00	50.00	20.00
All category of vulnerable groups (0-16, women, over 65)	3	0	3
	100.00	0.00	100.00
	100.00	0.00	60.00

societal norms, implicit discrimination, and inadequate supportive infrastructure—still severely limit their effective participation in economic and social activities. This insight aligns with the arguments presented by Naila Kabeer (2005), who emphasizes that real empowerment goes beyond legal rights to the actual ability to make and act upon economic, social, and political choices.

In contrast, the composite group of children, women, and the elderly are believed to experience complete restriction in accessing assets, pointing to deep-seated structural vulnerabilities. This complete exclusion from asset access would appear to indicate the existence of biased and discriminatory socio-political and economic policies and practices that urgently need reevaluation and reformulation. Amartya Sen's capability approach (1999) offers a valuable framework here, emphasizing the enhancement of individuals' capabilities as a means of improving their ability to lead lives they value, through the removal of a variety of barriers.

Addressing the vulnerabilities identified requires a comprehensive approach that tackles both the direct and indirect causes of exclusion and marginalization. Policy interventions must aim at revising existing legal and regulatory frameworks to ensure equitable asset access across all community members, with a keen focus on the most vulnerable. These policy reforms should be complemented by robust community-based initiatives aimed at altering discriminatory practices and fostering social inclusion.

Furthermore, economic empowerment strategies could be particularly transformative for women and disabled individuals. Initiatives such as vocational training, microfinance, and small business support not only provide necessary skills and financial capital but also promote long-term economic independence and societal integration. These recommendations are supported by the findings of Béné et al. (2012), who discuss the effectiveness of resilience-building strategies that extend beyond immediate relief to facilitate sustainable socio-economic empowerment.

The complex interplay of socio-economic challenges and structural vulnerabilities outlined in Table 39 underscores the urgent need for a multidimensional approach to enhance

community resilience. This should integrate targeted policy reform, community engagement, and empowerment programs, thereby paving the way toward a more inclusive and sustainable environment for all residents. By focusing on enhancing the capabilities and access to assets of these vulnerable groups, the community can hope to achieve a more equitable distribution of resources and opportunities, leading to improved overall well-being. It is thus noteworthy that the list of measures proposed by the Goderich leadership for enhancing the settlement's livelihood credentials and combating reputational damage (Chapter 4, Figure 40) do not address questions of this kind.

The (mostly self-) empowerment of women through various forms of mutual cooperation has been essential in mitigating the persistent vulnerabilities they have faced, particularly during the COVID-19 pandemic. Despite the challenging circumstances emphasised in the Focus Group Interview responses—especially the increasing hardships articulated by Warburton and Jackson (2020)—women have collectively exhibited remarkable resilience and an unwavering will to persevere (see Chapter 5, Section 5.3.1).

6.3. Covid-19: Local impact and livelihood responses

This section synthesizes qualitative field research findings, derived from open-ended questions posed during focus group discussions, to explore the profound impacts of, and local responses to, the COVID-19 pandemic — a period characterized by widespread stress and heightened vulnerability. Pradhan and Mukherjee (2018) classify COVID-19 as a covariate shock, a taxonomy that highlights its extensive impact across communities, inciting a spectrum of coping and adaptation responses. Notably, a significant response observed in Goderich has been the increased engagement in sand mining, an activity predominantly undertaken by younger men and, to a much lesser extent, women. This shift

has primarily been driven by the urgent need to sustain livelihoods amidst the extraordinary circumstances brought about by the pandemic. During more stable times, the residents of Goderich actively engage in developing resilience through a variety of coping strategies and innovative approaches to resource utilization, although it is crucial to acknowledge that these practices can pose substantial environmental risks and may exacerbate social tensions.

The profound local impact of the COVID-19 shock is further elucidated through FGD Quotes 2-5 below, which illuminate the community's concerted efforts to mitigate some of the pandemic's most severe consequences (Chambers & Conway, 1992). These quotes were obtained during interviews conducted on the 29th and 30th of July 2021 across various neighborhoods in Goderich, including Oba Funkia, Antar Town, MetChem, and Maggay Town. They provide insightful perspectives into the community's adaptive strategies. Participants in these discussions included a diverse group of adult women and men from various professional backgrounds, such as teachers, market traders, and civil servants. These narratives not only reflect the community's resilience but also its vulnerability to sudden economic and social disruptions, emphasizing the dynamic interplay between external shocks and local responses.

My interpretation below leverages, among several others, the theoretical framework provided by Pradhan and Mukherjee (2018), which offers a lens through which to understand the far-reaching consequences of such events and the types of adaptive strategies that communities might employ to navigate these challenges. Additionally, the environmental and social implications of these coping strategies underscore the need for integrated approaches to disaster management and resilience building that consider both

immediate needs and long-term sustainability (Norris et al., 2008; Aldrich & Meyer, 2015). Norris et al. (2008) emphasise the importance of community resilience as a foundation for psychological and social recovery in post-disaster contexts, while Aldrich & Meyer (2015) highlight the role of social capital in enhancing community resilience against external shocks.

Excerpts of Focus Group interview responses which speak to these preoccupations now follow:

FGD Quote 2: *“We have barely survived the trauma of the disaster in Goderich. Some of us have had to resort to selling personal possessions to survive because there are no job opportunities here for us”.*

FGD Quote 3: *“Life in general has been difficult... during the crisis time of COVID-19, and particularly with the government decision to lock down services, we were left with no support and our children starved. But by the grace of God, we survived on cassava tuber and salt to keep boiled items tasty. It was not easy, especially for those of us who have children”.*

FGD Quote 4: *“Some of us survived through the efforts of our young children, who for some reason have been making money from activities like sandmining. We did not support it, but it was necessary to keep us alive”.*

FGD Quote 5: *“We borrowed money from loan sharks, who preyed on our assets [like land used as collateral], with the condition that if we did not pay the money back within a certain time, we would forfeit the land”.*

These quotes serve as powerful testimonies, illuminating the arduous journey traversed during the difficult period of the pandemic as individuals and groups tried to (re-)build resilience against the all-encompassing threat it represented. The extracted narratives vividly portray the formidable challenges confronted by individuals and the extraordinary measures they resorted to in enduring the crisis. To gauge the extent and intensity of the pandemic's impact on life and livelihood, I provide an interpretation of each quote by deconstructing and scrutinizing it through the lens of Sustainable Livelihood and vulnerability thinking below.

In doing so, I attempt a more detailed appreciation of the complex hardships endured by families and households, revealing their often vastly increased vulnerability. The range of struggles includes economic deprivation, social disintegration, and environmental instability. Each individual testimony encapsulates a unique aspect of vulnerability, providing insight into the cumulative impact on livelihoods and overall well-being. Utilising the framework of the Sustainable Livelihood Framework (SLF) helps to focus attention on the lack of viable employment opportunities as a primary contributor to the vulnerability experienced by the community, something which both predated and has outlasted COVID-19 as noted earlier in the chapter. This situation is marked by a chronic inability to develop and maintain sufficiently diversified and sustainable livelihoods for individuals and households (Carney, 1998). As a result, many households struggle to accumulate savings for 'shock-proofing' their livelihoods, while others find it exceedingly difficult to meet daily living costs without falling into debt or even worse situations.

Moreover, the extreme measures required in response to COVID-19, such as selling personal belongings and pawning land or property, serve as stark reminders of the severe impacts of such crises. These actions exacerbate the fragility of the community's circumstances, demonstrating the urgent need for enhanced economic structures and support systems that can provide stability during and in the wake of shocks (Moser, 1998; Chambers & Conway, 1992). This insight highlights the necessity for policies that support economic resilience and help stabilize livelihoods both during crisis and in 'normal' times.

Furthermore, the intrinsic link between vulnerability and unsustainable livelihoods becomes clear upon close examination. The narratives in Quotes 2-5 explicitly underscore the multidimensional nature of vulnerability, unveiling its intricate interplay with socio-economic, governance and environmental factors. The negative impact of the government's decision to enforce a lockdown and, in the process, deprive residents of essential services and support networks, are evident in Quote 4. The distress endured by families, particularly concerning the welfare of their children, exposes the gravity of their predicament. Such vulnerability transcends mere economic challenges, permeating the realms of food security and access to necessities, as evidenced by the reliance on cassava tuber and salt for nourishment or sustenance. Vulnerability Theory, with its emphasis on the multifaceted dimensions of vulnerability, clearly aligns with these narratives, lending credence to the overall analysis (Clay, 2023).

Quote 4 unveils a troubling survival strategy within the community, where young children are involved in income-generating activities such as sand mining, putting their safety and well-being at significant risk. Although parents acknowledge the vital role these activities

play in sustaining individual, family and household livelihoods, they are concurrently apprehensive about the dangers involved. This scenario underscores the erosion of human capital, a direct consequence of covariate shocks like the ongoing pandemic (Pradhan & Mukherjee, 2018), which imperil income and lives, particularly affecting vulnerable groups like minors and the elderly who were at particular risk throughout. Due to restricted access to essential assets, young individuals are compelled to forego educational opportunities in favor of engaging in these risky yet economically crucial activities.

This complex interplay of economic necessity and risk highlights the broader systemic issues that covariate shocks exacerbate, leading to long-term detrimental effects on human capital development (Barrett, Carter, & Little, 2006). The need for strategies that protect children from hazardous labor while securing household income is crucial, suggesting a reevaluation of social safety nets and economic support systems to buffer families against such shocks (Dercon, 2002).

In this context, the importance of nurturing and safeguarding human capital is amplified, underscored by the need for enabling transformative structures like proper legislation to combat child labor and ensure access to essential livelihood assets (DFID, 1999). Such measures, aligned with the Sustainable Livelihood Framework (SLF), are crucial in protecting vulnerable populations and supporting sustainable livelihoods.

Quote 5 sheds light on another coping mechanism adopted by residents in response to COVID-19—the reliance on loans from predatory lenders. In regions like Goderich, rural money lending has long been an integral part of the socio-economic fabric, flourishing during periods of shock and extreme stress, be it seasonal production bottlenecks or less

frequent but more disruptive events like civil wars or disease epidemics (Scoones, 1998). The pandemic induced widespread destitution, compelling those with depleted assets to seek loans secured against collateral such as family land, heightening the risk of forfeiture. This practice, while offering a temporary respite, often perpetuates cycles of indebtedness and insecurity, exacerbating the hardships caused by the initial crisis (Moser, 1998).

The narratives from Quotes 4 and 5 underline the dire economic circumstances and the critical need for systemic solutions to mitigate exploitation and ensure long-term security and resilience for vulnerable communities.

The collective impact of vulnerabilities (including trends, idiosyncratic shocks, and covariate shocks) encapsulated within Quotes 2-5 resonated throughout my interactions with residents in the field. The narratives uncovered from these quotes reveal a complex web of challenges, underscoring the imperative for comprehensive emergency interventions and long-term support systems. The focus group discussions, as also emphasised in Staddon's (2023) research, raise pertinent questions regarding the most effective approaches to strengthen livelihood assets, foster economic opportunities, enhance access to essential services, and safeguard the rights and well-being of all community members.

At the same time, based on my personal experience as a student-researcher during my time in Goderich, crisis interventions by the national government and, specifically, local authorities deserve a special mention of praise. Their proactive approach in combating this public health crisis, built on lessons learned during the earlier Ebola outbreak, demonstrated their commitment to safeguarding the well-being of the community, even

though available resources were, as always, (and often grossly) inadequate (Douglas et al, 2006).

6.5. Chapter Summary

Chapter 6 explores the dynamics of vulnerability and the barriers to accessing essential assets among Goderich residents. It looks at the intricate interplay between socio-economic and environmental factors that predispose certain community segments to adverse shocks, while simultaneously obstructing their access to crucial resources. Drawing upon Ian Scoones' insights on the interplay between various forms of capital, the chapter highlights the critical yet often inaccessible nature of these resources for vulnerable groups, framed within the broader context of sustainable livelihood perspectives (Scoones, 1998). Fiona Nunan's examination of natural resource governance also enriches this discussion, emphasising how institutional arrangements can either facilitate or hinder access to resources (Nunan, 2023). The analysis from the chapter not only identifies the barriers ranging from limited access to education and healthcare to constraints on financial services and productive assets but also suggests potential interventions to enhance community capabilities and promote equitable access.

The narrative continues by engaging with the concept of vulnerability both as a theoretical construction and a lived reality for Goderich's residents. This section of the chapter weaves together the vulnerabilities manifested through long-term trends, idiosyncratic shocks, and covariate shocks, all of which critically influence livelihood strategies and resource accessibility (Clay, 2023; Osmani & Ahmed, 2013). It discusses how demographic shifts, environmental changes such as deforestation and climate variability, and alterations in governance intensify competition for scarce resources like land. The section further

explores how the community's resilience post-civil war is tested by these ongoing environmental and socio-political changes, demonstrating their adaptive strategies in response to both individual and collective shocks.

Looking ahead to Chapter 7, the focus will shift towards environmental concerns that stem from these adaptive strategies and their broader implications. The unsustainable livelihood practices such as sand mining and deforestation, highlighted in Chapter 6, not only pose significant environmental risks but also exacerbate the community's vulnerability to further socio-economic instability. Chapter 7 will explore the environmental degradation resulting from these practices in greater depth, discussing how the degradation impacts community well-being and proposing sustainable approaches to resource management. The chapter will aim to build on the groundwork laid in Chapter 6 by providing a detailed narrative of environmental challenges and by outlining potential policy interventions and community-led initiatives to address these issues. The discussion will integrate theoretical and empirical insights, aiming to foster a sustainable and resilient socio-economic structure in Goderich, ultimately enhancing both human and environmental well-being.

CHAPTER 7: LOCAL ENVIRONMENTAL RISKS, COPING MECHANISMS, AND LIVELIHOOD INTERVENTIONS

7.1. Chapter Introduction

This chapter examines the environmental challenges prevalent in Goderich and examines their implications for local livelihoods. Central to this analysis is the interplay between local livelihood pursuits and their long-term impact on environmental sustainability. In rural settings, especially within the global south, residents often adapt their livelihood strategies to navigate the constraints imposed by limited access to crucial livelihood assets. Smith-Hall, Jiao, & WaleLign (2023) have highlighted how these adaptations can sometimes lead to both literal and metaphorical exploitation of natural capital, which often results in environmental degradation. This degradation then escalates the vulnerability of communities and drives their livelihood practices towards unsustainability.

The relationship between societal actions and environmental responses is inherently complex, characterised by dynamic interactions and mutual influences. As such, livelihood components are not static but coevolve over time within this socio-ecological system. By leveraging an inside-outsider perspective, this chapter aims to interpret local concerns regarding environmental shocks, stresses, and trends through the lens of the Sustainable Livelihood Framework (SLF), specifically tailored to the context of Goderich.

Furthermore, this chapter seeks to illuminate the roles that key stakeholders, including non-governmental organisations (NGOs) and local leadership, can play in fostering access to essential assets and promoting their sustainable use and management. The overarching goal

is to provide an assessment of the risks current environmental conditions pose to both life and livelihood. This chapter will also explore the coping strategies and adaptation mechanisms that have emerged in response to these challenges. Additionally, it aims to propose targeted interventions designed to enhance sustainability, prevent further environmental degradation, and thus protect and improve the well-being of local livelihoods. In this way, the chapter endeavors to contribute meaningfully to the ongoing dialogue on sustainable livelihoods and development within vulnerable ecosystems. It is based, as with data analysis in previous chapters, on the same mix of research methods and data collection techniques identified in those earlier chapters.

7.2. Environmental Risk and Assessment

Drawing on responses from the Household Survey, Table 40 presents a summary of householder assessments of potential environmental risks to various natural and physical livelihood assets in decreasing order of perceived vulnerability or susceptibility to risks, or perceived resilience in the face of shocks. On the basis that Vulnerability

Table 40: Environmental Assessment (Vulnerability, Shock/Risk and Resilience) in Goderich		
Risks to assets	Yes	No
Drains/Gutter	98.00	2.00
Cemetery	89.00	11.00
Residential Compound	85.20	14.80
Street	85.00	15.00
Cropland	80.00	20.00
Beaches	77.00	23.00
Markets	72.00	28.00
Fallowland	70.00	30.00
Shops	60.00	40.00
Pond	55.00	45.00
Schools/Colleges	55.00	45.00
Council Office	48.00	52.00
Town Hall	46.00	54.00
Hospitals/Clinics	45.00	55.00

Theory posits that communities with limited resources are especially susceptible to environmental shocks affecting their socio-economic stability (Adger, 2006), the data can be seen as indicating what community members see as pressing environment- and

livelihood-related vulnerabilities and the risks they pose to assets which are central to everyday life, economy and society (Birkmann, 2006).

Thus, it is noteworthy that on a list dominated by concern for threats to public goods/facilities and communal resources, drains, gutters and cemetery are the assets considered at greatest risk, while council office, town hall and hospitals/clinics are those thought to be most resilient and least susceptible to shocks and stresses. But, the residential compound aside (it makes the top third of the list in third place), key natural, produced/physical and economic/financial livelihood assets like cropland, fallowland, markets, shops and fishpond are considered to be at only middling-to-low risk of succumbing to environment-related shocks and stresses. with These responses highlight widespread awareness of, and concern with, the inadequacy of existing drainage systems, which can and do lead to flooding or waterlogging during heavy rainfall events, a perspective which would provide corroboration for the reports of widespread flood and water damage experienced in the two years preceding research for this thesis (Chapter 6, Figure 98; see also Wisner et al., 2004). Similarly, responses related to perceived vulnerability of residential compounds, streets, and markets suggest prevalent issues with infrastructure quality, pollution, or exposure to hazardous materials (Pelling, 2003).

From personal observation in the field, particularly in relation to environmental risks, it was apparent that vulnerable localities include Metchem and the hilltop areas of Maggay Town. These areas, marked by steep terrain and dense habitation, exhibit clear signs of environmental distress. The visibly eroded pathways and the makeshift drainage solutions are testament to the community's struggle against both the natural elements and its own

humanization of the landscape. Furthermore, recent infrastructural improvements, although commendable, have often overlooked the integration of sustainable environmental management practices. For example, the deforestation noted in Maggay Town's hilltop areas (Figure 25) to accommodate an expanding population results in significant land degradation. These efforts often fail to consider the critical need for comprehensive drainage systems, leading to unmanaged water flow that exacerbates the risk of lowland flooding and subsequent marine pollution (Hardoy & Pandiella, 2009). In Antar Town, routine waste disposal into gutters, despite available garbage collection services, highlights significant environmental management issues, in a context in which such practices are exacerbated by economic constraints and/or a reluctance or inability to engage in the use of fee-based services (Dow, 1992).

A close examination of areas such as Oba Funkia, Milton Margai, Antar Town, Metchem, and Maggay Town reveals a pattern of pronounced environmental risk affecting economically marginalised communities. These residents, often engaged in low-income, precarious livelihood activities, inhabit improvised dwellings and face disproportionate exposure to environmental hazards (Blaikie et al., 1994). Seasonal monsoon effects further compound these vulnerabilities, causing extensive flooding and infrastructural damage, which severely impacts their health, safety, and economic activities (Few, 2003).

Historically, areas like Oba Funkia and Milton Margai were less impacted due to their structured urban planning origins. However, increasing activities such as sand mining and land encroachment in parts of these areas have escalated flooding risks, a phenomenon that was observed firsthand during this research (Cannon, 2002). Additionally, the subsistence

farming undertaken predominantly by local women faces significant threats from seasonal rains that disrupt farming cycles through increased waterlogging (Enarson, 2000).

Taken alongside the insights provided by Table 40, this additional investigation becomes invaluable in both understanding and explaining the distribution of environmental risks across different assets and communities. Furthermore, from a combined insider and outsider research perspective, it is vital to approach the evaluation of community actions with sensitivity, even while acknowledging the significant impact of these actions on environmental sustainability. Ongoing demographic pressures exacerbate challenges such as unemployment and economic downturns (Figure 5, Chapter 2), with these being compounded by inadequate social security measures to mitigate the challenges (Warburton & Jackson, 2023). The observed behaviors, although not always aligned with sustainable practices, often arise from the need for immediate survival or coping strategies, such as constructing unplanned shelters in precarious locations or engaging in environmentally destructive activities like sand mining (Oliver-Smith, 1996).

From a Vulnerability Theory perspective, it becomes clear that addressing these vulnerabilities through tailored interventions and policies is crucial for ensuring the sustainability of livelihoods and enhancing the overall well-being of the residents. Developing strategies that balance immediate needs with environmental stewardship is essential for fostering a resilient community where livelihoods can thrive alongside the sustainable management of natural resources, which represent often invaluable livelihood capitals in their own right (Benson & Twigg, 2007).

7.2.1. Environmental Risks, Threats and Impact on Livelihood Assets and Security

The respondents in this study exhibit a pronounced awareness of environmental threats, particularly highlighting the months from July to September when intense rainfall exacerbates the vulnerability of the community. The focal point of concern revolves around the risk of flooding in specific areas, notably the swampy locations near the Oba Funkia community which are illegally occupied, as previously mentioned. This encroachment into these fragile ecologies not only raises the risk of flooding but also risks disrupting the ecological equilibrium, compromising both human and environmental health (Few, 2003). Moreover, the hilltop zones of Maggay Town are witnessing alarming rates of deforestation driven by unchecked residential development. Such rampant environmental degradation not only enhances the landscape's susceptibility to hazards like landslides, but also erodes biodiversity, with cascading effects on ecosystem services vital for human survival (MEA, 2005). Little wonder, then, that householders consider cropland, farmland, ponds and beaches as ecologies which are variously locally threatened (Table 40).

This elevated concern among respondents underscores a clear recognition of the cascading risks these environmental issues pose, necessitating urgent and proactive community-wide strategies. This situation demands robust collaboration among diverse stakeholders, including government bodies, local authorities, NGOs, and community members, to forge and implement comprehensive land-use policies and projects that champion responsible land management (Satterthwaite et al., 2010). Initiatives must discourage illegal encroachment and advocate for sustainable development practices that align with environmental conservation goals (Adger et al., 2005).

Furthermore, educational campaigns and capacity-building workshops are vital in raising environmental awareness and cultivating a collective sense of responsibility towards sustainable practices (Ostrom, 2009). Where, as in Goderich, there is already much heightened if uneven environmental awareness, and even evidence of ‘popular’ albeit sectional or factional mobilization in socio-environmental activism, potential interventions and their designers would do well to pay heed and look to using these as possible entry points in integrating environmental considerations into settlement planning and development. Such integration would help Goderich balance the dual objectives of meeting its developmental needs and preserving its natural and humanized landscapes, thereby ensuring an ultimately resilient and sustainable community future of the kind championed in studies by Smith-Hall, Jiao & Walelign (2023), and Hardoy & Pandiella (2009), among others. This dual approach possesses the potential not only to mitigate immediate environmental risks but also to foster long-term community resilience, thereby aligning with global sustainability visions and targets (Benson and Twigg, 2007), although much would depend on how well tailored it is to local complexities and realities.

The nature, incidence and extent or severity of environment-related damage *actually* experienced by households two years prior to the start of our research, and which is best read as a complement to the information in Table 41, represents potentially useful information in discerning these realities and complexities. Respondents were asked during the Household Questionnaire survey to indicate which of 11 selected assets (farmland, livestock, fishpond, human life and limb, office buildings, residential property, roads, drainage, beach, fishing grounds and forests) had suffered recent damage of any sort. While all assets suffered some damage, this misfortune had in fact been visited on only between

a fifth and a quarter of households, with the overwhelming majority reporting no damage at all to either ‘their’ assets or those they depended on but did not own.

Starting with farmland, that most households (84%) reported no damage at all to farmland is indicative of either resilient agricultural practices or a period of minimal environmental stress during the reporting period, although this should not allow us to lose sight of the variability in agricultural vulnerability within the community implied here, which points towards a potential disparity in adaptive capacities or exposure to environmental hazards, to the detriment of the remaining 16% of households.

The findings suggest a need for a focused analysis of the factors contributing to the seeming resilience observed in most farmland. Studies elsewhere have shown that sustainable farming practices, effective land management, and access to agricultural innovation can contribute significantly to reducing vulnerability to environmental stresses (Reidsma et al., 2010). Conversely, the minority reporting damage to farmland indicates that targeted interventions like improved water management systems or enhanced crop diversification strategies to buffer against climatic variability may be required (Lin, 2011). But this will depend on the results of detailed diagnosis based on a complete overview of the agricultural status in the area, to allow for strategic planning and resource allocation. For future research, a deeper exploration into the qualitative aspects of the damage and the specific adaptive measures employed by the farmers could yield insights into effective strategies for enhancing agricultural resilience. This could include detailed soil health assessments, crop rotation practices, and the integration of technology in farming practices (Pretty, 2008).

Turning to livestock, a slightly lower, 80% of the surveyed owners reported that their animals suffered no damage at all; While this suggests a significant degree of resilience or perhaps minimal exposure to disruptive events during the reporting period, the existence of the remaining fifth of respondents whose livestock were adversely affected indicates areas of vulnerability that may require further investigation and targeted interventions.

It is of course possible that the seeming resilience of herds belonging to the majority might be attributable to effective livestock management practices and, possibly, the implementation of at least some preventative measures such as vaccination, adequate sheltering, and strategic feeding practices that enhance animal welfare and resistance to diseases and natural calamities (Rust & Rust, 2013). Yet this would depend on herd size and composition, as well as on the livelihood goals of the herd owners/operators. Nonetheless, we might need to look towards differential access to resources, varying levels of knowledge or adherence to best practices among livestock owners, or uneven exposure to environmental hazards such as floods, droughts or animal diseases which can directly impact animal health (Sejian et al., 2011), for explanation of animal injury, ill-health or loss which appear to have affected the herds of the less fortunate minority owners.

In these circumstances, policymakers and development practitioners need to consider both the elements of resilience and vulnerability within an often highly differentiated local livestock sector dominated by small stocks. Strategic enhancements in veterinary services, infrastructure improvements, and community training programs in animal husbandry could be instrumental in reducing the incidence of ill health and animal mortality and elevating the overall resilience of the sector (Thornton & Herrero, 2015). However, for a more

granular understanding of husbandry and livestock vulnerability, future studies should delve into the specifics of damage types and their causal factors, to enable a more tailored approach to mitigating risks and bolstering livestock health through targeted interventions, which will be essential for sustaining livelihoods dependent on livestock ownership and/or farming (Morton, 2007), notably those involving women, children and marginalised minorities.

Given that a substantial majority of fishpond owners (82.67%) report no damage to their assets, it is possible that most local aquaculture operations are either well-managed or positioned in relatively low-risk locations, but this would still leave 17.33% of respondents whose ponds had suffered some damage, and possibly linked to specific vulnerabilities within the sector, environmental factors, or management practices.

The resilience observed among the majority of pond operations could be attributed to effective water management, adequate disease control, and perhaps the use of resilient fish species and farming techniques that mitigate the impacts of environmental stressors (De Silva & Soto, 2009). These are all practices that have been shown widely to contribute to the robustness of aquaculture operations, enhancing their capacity to withstand adverse conditions such as floods, droughts, or disease outbreaks (Brugere & De Young, 2015).

Conversely, the damage reported by a noteworthy minority suggests their enterprises might benefit from focused improvements to do with inadequate pond construction, poor water quality management, or exposure to extreme weather events, which could be contributing factors to the reported damage (FAO, 2015). Addressing these issues through improved technology adoption, better training in fish health management, and enhanced disaster

preparedness strategies could significantly reduce vulnerability and bolster sustainability in the sector (Bondad-Reantaso et al., 2012), but only if they respond to felt local needs. The latter would require a strategic approach to aquaculture management that incorporates both the promotion of resilience-enhancing practices across all operations and targeted support for those areas or practices where vulnerabilities are evident, and their causes and dynamics understood. Future research should thus explore the specific types of damage encountered and their underlying causes to tailor interventions more effectively and ensure the sector's adaptive capacity and long-term viability (Barange et al., 2018).

Thankfully, as with 'damage' to livestock, fewer than a quarter of households (22.67%) reported human injury and death resulting directly from environment-related causes, with the rest, the overwhelming majority, reporting no lasting damage to human life or limb at all. While this might reflect effective local disaster management strategies or a period of relative calm, it also indicates the existence of significant vulnerabilities necessitating urgent attention and action, given that injury to or illness or death of key household members could easily tip their households into crises of survival and reproduction (Blaikie et al, 1994).

Thus, this data is crucial for understanding the scope of human vulnerability and resilience in facing crises. The presence of any damage to human life is a serious concern, highlighting the need for enhanced preparedness and response mechanisms. This could involve strengthening early warning systems, improving healthcare accessibility during emergencies and afterward, and enhancing community-based disaster risk management programs (Blaikie et al., 1994). Additionally, integrating psychosocial support into

recovery efforts is vital, as the impacts on human lives often extend beyond physical injuries to include psychological and emotional trauma (Norris et al., 2008). Sadly, in the aftermath of civil war, Ebola and Covid-19 bear out the truth and direct relevance of this in the case of Goderich and the rest of the country. Addressing these aspects comprehensively and sensitively can contribute to not only safeguarding lives but also to the overall resilience of communities against future adversities.

With orders of magnitude which are almost a carbon copy of those reported for damage to human life, reported cases of physical damage to office infrastructure by a non-negligible 22% of households highlight, nonetheless, both the resilience and vulnerability of the built environment, reflecting maybe robust construction standards or the effectiveness of local building regulations and maintenance practices. But that some damage was reported at all indicates the existence of areas that may require attention regarding construction quality, location choice, or disaster preparedness.

Damage to office buildings has significant implications for local economy and livelihoods, as the buildings serve as critical nodes in the economic infrastructure of any community, hosting a variety of business operations and services. Damage can thus disrupt business activities, leading to economic losses, job disruptions, and reduced productivity. This impact is particularly severe for small to medium enterprises that may lack the resources to quickly recover from physical damage (Hallegatte et al., 2017). Therefore, ensuring the resilience of office buildings not only protects physical assets but also supports economic stability and the continuity of livelihoods.

To mitigate future risks and enhance building resilience, it is essential to integrate more rigorous disaster risk reduction strategies into urban planning and building design. This includes adopting and enforcing stricter building codes, considering future climate scenarios, and enhancing the structural integrity of buildings to withstand a variety of shocks (Bosher & Dainty, 2011). Additionally, developing comprehensive emergency preparedness and business continuity plans can significantly reduce the downtime and economic impact when damages do occur, thereby safeguarding livelihoods and promoting quicker recovery and adaptation (Rose, 2004).

Reported damage to residential property provides crucial information on the state of housing in the context of environmental or other disturbances within the community of Goderich. On this score, residential property appears to be in reasonably good health, with 80% of households surveyed reporting no damage, indicating a high level of resilience or possibly less severe environmental conditions during the study period. Existing vulnerabilities remain an important challenge for the remaining fifth of householders and their property, suggesting the need for addressing existing vulnerabilities within the housing sector to improve overall community resilience.

In a context in which residential property in Goderich are multiple occupation and multi-use resources in and around which livelihood activities of various kinds commonly operate, the impact of physical damage extends beyond mere physical repair needs; it profoundly affects the livelihoods and well-being of the residents. Housing stability is fundamental to social and economic stability; thus, damage to homes can lead to significant disruptions. These disruptions might include displacement, loss of personal security, increased

expenditure on repairs, and a potential decline in mental health due to stress and anxiety (Peek & Mileti, 2002). The economic implications are also significant, as housing damage can strain household finances, especially for those without sufficient insurance or savings, thereby increasing vulnerability to future crises (Comerio, 1998).

Addressing these challenges requires a multi-pronged approach that includes enhancing building codes to improve structural resilience, promoting community-based disaster risk management programs, and ensuring adequate access to financial instruments such as insurance. Moreover, recovery and rebuilding efforts where necessary must prioritize not only the physical reconstruction of homes but also the restoration of livelihoods and community networks to foster a quicker and more sustainable recovery (Aldrich, 2012). The aim should be to build back better, incorporating resilience into the recovery process to mitigate future risks and enhance the adaptive capacities of the community of Goderich.

Along with reports on the status of drainage and buildings, reported damage to roads contributes to a snapshot of the infrastructure integrity within Goderich, in addition to shedding some light on the resilience or otherwise of road systems in the face of environmental or man-made challenges. That 76% of households observe no damage to roads would appear to suggest effective local maintenance or construction practices that mitigate the impacts of potential disruptors. Yet, for the remaining quarter of households who have had to deal with damage to roads, the resulting inconvenience may have had significant implications for their mobility and livelihoods, given that roads are vital arteries of commerce and social interaction.

Clearly, damage to road infrastructure can isolate communities, hinder emergencies, and health services, and disrupt economic activities by affecting the transport of goods and the mobility of labor. The economic costs of damaged roads extend beyond immediate repair needs; they include increased vehicle operating costs, lost productivity, and diminished access to markets (Blaikie et al., 1994). Such disruptions can disproportionately affect lower-income households, which may rely heavily on local roads for daily subsistence and employment opportunities.

To enhance the resilience of road infrastructure in Goderich, it is imperative to integrate robust construction standards with regular maintenance schedules that consider future climate scenarios and potential urban and peri-urban growth. Strategic planning and investment in infrastructure resilience can reduce the long-term economic impacts of road damage and support sustainable development goals (Wilbanks et al., 2012). Additionally, fostering community engagement in infrastructure planning and emergency preparedness can enhance local capacities to manage and respond to infrastructural damages more effectively, thereby safeguarding livelihoods and promoting community well-being.

Details of the state of drainage systems in Goderich are crucial for understanding the community's capacity to manage water-related challenges. Significantly, too, as we saw earlier in Table 40 in Section 7.2, local inhabitants consider the drainage system to be the most vulnerable to shocks and stresses of all public and/or community assets. Yet, somewhat revealingly, almost 80% of households report little or no damage to the local drainage infrastructure, suggesting a particularly robust infrastructure, or perhaps a period of low environmental stress. However, the existence of slightly more than a fifth of

households with first-hand experience of some damage points to specific vulnerabilities that pose serious risks during adverse weather conditions, such as flooding or heavy rainfall, something which is a widely reported problem or challenge in Goderich.

While it is currently the inadequacy or unsuitability of, rather than damage to the drainage infrastructure which is a big challenge locally, damage does have direct and impactful implications for the livelihoods of Goderich's residents. Effective drainage systems are essential for preventing water accumulation that can lead to flooding, which not only damages property but also disrupts economic activities and poses health risks. Inadequate drainage can exacerbate the spread of waterborne diseases and create breeding grounds for vectors such as mosquitoes, thereby impacting public health (Prüss-Ustün, Wolf, Corvalán & Neira, 2016). Additionally, persistent issues with drainage can lead to long-term economic challenges for local businesses and households, which face recurring costs related to flood damage and mitigation (Fews Net, 2017).

Improving drainage infrastructure resilience in Goderich involves not only repairing and maintaining existing systems but also planning and implementing advanced and sustainable drainage solutions that can adapt to increased rainfall and urbanization pressures. This might include green infrastructure techniques like bio-swales and rain gardens that naturally absorb and manage stormwater runoff. Policymakers must prioritize these upgrades and consider them essential investments for reducing the future economic and health impacts of inadequate drainage, thus safeguarding both the environment and the livelihoods of community members, as demonstrated in Atanga & Tankpa's (2021) study in the area of climate change and flood disaster risk.

This section of the chapter will close with consideration of environmental-related damage to three natural asset categories, all of which have low reported incidences of damage: beach/waterfront, fishing grounds and forests/woodland. For 78.67% of householders, the beach and waterfront areas have had little, or no harm inflicted on them, an assessment reflecting effective coastal management or perhaps mild environmental conditions during the assessment period. However, with more than 20% of respondents reporting some damage to a landscape and natural assets of critical economic and ecological importance, possible or potential vulnerabilities in coastal resilience that could have significant implications for local livelihoods and economy cannot be ignored or dismissed out of hand. In addition, the waterfront/coastal area is the location of two of the most contentious local political economic issues, illegal sand mining and the ongoing threat to the ancestral cemetery in Oba Funkia (considered in Table 40 to be the second most vulnerable of all assets) from coastal erosion.

In any case, the reported damage to beach and waterfront areas can severely impact tourism, a vital source of income. Disruptions or degradation of these natural assets could deter tourists, leading to reduced business for local shops, hotels, and restaurants, which rely on a thriving tourism sector (Houston, 2008). Moreover, damage to natural barriers such as dunes and mangroves can increase the risk of further erosion and flooding, exacerbating the vulnerability of coastal properties and infrastructure to storm surges and sea-level rise (Nicholls & Cazenave, 2010).

To enhance the resilience of Goderich's coastal areas, it is crucial to implement integrated coastal zone management practices that balance environmental conservation with

livelihood or development needs. This approach includes restoring natural buffers, enforcing building regulations to limit development in high-risk zones, and investing in sustainable tourism practices that do not compromise the ecological integrity of the waterfront. Strengthening the resilience of these areas not only protects the natural environment but also secures the livelihoods dependent on healthy, accessible beaches and waterfronts, promoting long-term economic stability and community well-being (Beatley & Newman, 2013).

Turning to damage to coastal fishing grounds and inland water bodies next, responses from 84.67% of sample households indicate that these environments have not sustained damage, suggesting that most of these critical aquatic resources remain intact and potentially productive. However, according to the rest of the households, there are indications of damage, which would suggest that ecological health and fishing productivity might be being compromised, with direct repercussions for the livelihoods dependent on these resources.

Damage to fishing grounds and decline in water quality can significantly disrupt the local fishing industry, a primary source of income and food security in a coastal and riverine community like Goderich. Degradation of these habitats often results in reduced fish populations and biodiversity, which in turn affects catch volumes and the economic stability of fishermen and related businesses (Barange et al., 2018). Furthermore, water pollution can lead to health issues in the community, compounding social and economic challenges and increasing vulnerability often among the poorest segments of the population (Halpern et al., 2015).

Addressing these issues requires targeted environmental management strategies to restore and protect the aquatic ecosystems that are vital to the community's economic well-being. This includes implementing sustainable fishing practices, improving waste disposal and runoff management to reduce water pollution, and enhancing monitoring and enforcement of environmental regulations. By securing the health of fish grounds and water bodies, Goderich can safeguard its fishing industry and promote a sustainable economic future, reducing the community's overall vulnerability to environmental changes and shocks (Worm et al., 2006).

Finally, to forests which are crucial for environmental health and economic stability, both locally and regionally. Surprisingly, according to 80% of respondents, forest land shows little or no signs of damage. Yet while this might suggest robust forest management practices and a potentially lower incidence of disruptive activities such as logging or agricultural encroachment, it might also indicate limited direct contact with local and regional forests which, for the remaining 20% of the population, display signs of damage which might signal critical vulnerabilities that need to be addressed to prevent further degradation and loss of biodiversity. Certainly, earlier chapters of this thesis have documented real and potential damage and ongoing threats to local forests and woodland.

Damage to forested land carries significant implications for the livelihoods of local communities, who rely on these forests for resources such as timber, non-timber products, and ecotourism. Thus, the degradation of these lands can lead to diminished habitat quality, reduced resource availability, and loss of income, impacting community resilience and economic opportunities. Effective forest management and restoration strategies are thus

imperative, involving local stakeholders in conservation efforts and utilizing sustainable practices to mitigate environmental impact. Enhancing the health of forest ecosystems in Goderich not only supports local livelihoods but also contributes to broader ecological stability, offering a buffer against climate change and preserving biodiversity (Sayer et al., 2013; Chazdon, 2014).

7.2.2 Community Perspectives on Environmental Challenges Affecting Livelihood Assets in Goderich

The environmental risks and threats detailed in the preceding section highlight the urgent need to enhance the resilience of livelihood assets in Goderich. To this end, educational campaigns designed to raise awareness and generate a deeper understanding of these risks will have a pivotal role to play. Insights from the Focus Group (FG) discussions (Figures 47, 110, and 111) indicate that there is widespread community support for educational programs to eliminate environmentally harmful practices including sand mining, stone quarrying and deforestation in Goderich. A young 25-year old respondent from the Women's FG captured this mood in her declaration:

“Our lives are dependent on the land; however, these practices—if unregulated—will overwhelm not only the ecosystem but also the future of our community”.

Education is vital in teaching people how to protect the shared resources available in Goderich. FGD participants emphasise the transformative capacity of interventions like public awareness and environmental education campaigns in altering local perspectives and promoting sustainable habits. Adger et al. (2005) contend that integrating local

knowledge and insights into such projects is likely to enhance their relevance and strengthen community resilience. Ostrom's (1990) research underscores the critical role of education in promoting collective management of environmental resources. These programs must transcend mere information dissemination; they should actively include the community in co-creating knowledge and fostering a culture of environmental accountability and sustainable livelihood practices.

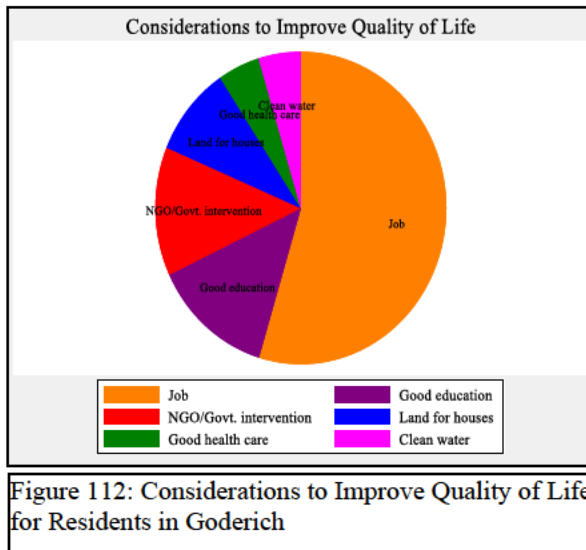
Securing access to essential assets such as land and financial resources is equally critical for the sustainable development of livelihoods in Goderich. The World Bank (2013) emphasizes that secure land tenure is fundamental for economic stability and serves as a key asset for agricultural productivity. Furthermore, financial support in the form of microcredit and insurance against environmental risks can provide the necessary buffers to promote investment in sustainable practices. Such economic tools have been discussed by Barrett and Carter (2013) as essential for reducing vulnerability to environmental shocks. They advocate for tailored financial products that address the specific risks and opportunities in vulnerable communities like Goderich, enhancing their capacity to adapt and thrive in the face of environmental uncertainties.

To effectively harness these educational and economic strategies, a collaborative governance framework is essential. This framework must be inclusive, leveraging partnerships across government, non-governmental organizations, and the private sector to ensure comprehensive support for Goderich's communities. Agrawal (2010) highlights the importance of governance that is responsive to local needs and adaptive to changing environmental conditions. Likewise, Berkes (2007) points out that multi-stakeholder

engagement can enhance resource governance, making it more effective at addressing the complex interplay of social and environmental challenges. Implementing such a framework will require ongoing evaluation and adjustment, ensuring that Goderich's approach to environmental risks and livelihood sustainability remains dynamic, effective and, above all, inclusive and locally embedded.

7.3. Resilience, Intervention and Coping Strategies

This section evaluates strategies aimed at mitigating environmental challenges as revealed in Section 7.2.1, with a focus on ensuring sustainable livelihoods for residents of Goderich. Insights drawn from household questionnaire surveys underscore the critical importance of local employment opportunities to facilitate meaningful and fulfilling livelihoods, as posited by Frediani & Walker (2018), who advocate livelihood interventions aligned with local economic activities such as fishing, farming, and transportation, but also wider local aspirations for more diversified and sustainable livelihoods. This is essential for meeting both basic needs and broader community aspirations. Furthermore, remittances from the diaspora and localized resource exploitation activities, such as sand mining and stone quarrying prevalent in Oba Funkia and Shallow Water beach areas, provide crucial economic sustenance, the questions they raise about long-term external dependence and short-term resource excavation rather than management notwithstanding. Contributions from NGOs and governmental initiatives have significantly bolstered these efforts by supplying essential tools like outboard motors and sewing machines, which are utilized at a local trade or craft center in Oba Funkia to uplift unskilled residents through targeted training programs, enhancing community skills and promoting economic independence.



The influence of non-governmental organisations, especially Plan International and Action Aid, is significant in improving the welfare and resilience of the local population. These groups facilitate infrastructural development, including the construction of schools and the distribution of business incentives,

which stimulate local economic growth and promote wider community engagement in the economy. Korten (1980) contends that community-based development efforts foster immediate economic empowerment while also fostering long-term self-reliance capacity. The establishment of technical institutes in Oba Funkia, which teach critical skills like sewing, exemplifies the implementation of these efforts. These institutions serve as vital avenues for individuals to acquire occupational skills that enhance their employment prospects and economic security.

Figure 112, an extract from the Household survey, enhances this narrative by depicting the factors considered essential for enhancing the quality of life in Goderich. Employment options ("Job") predominate the chart, highlighting the community's urgent requirement for economic stability and livelihoods. "Quality education" is a crucial priority, underscoring its acknowledged capacity to facilitate socio-economic progress. Figure 112 also highlights the importance of "NGO/Government intervention," illustrating the essential role of institutional support in addressing systemic challenges. Additional considerations, including "Adequate healthcare," "Housing land," and "Potable water,"

underscore the community's desire for stable living conditions and essential utilities that have a direct impact on well-being. The insights align with the methodologies utilised by non-governmental organisations, offering a good understanding of community aspirations and establishing a foundation for focused interventions that harmonise immediate requirements with sustainable development goals.

The significance of government intervention in driving economic prosperity through infrastructural development is well-documented in the literature (Jackson and Jabbie, 2019). Strategic governmental policies aimed at improving road infrastructure and providing necessary amenities are crucial for enhancing the livability and economic potential of Goderich. These improvements are vital for facilitating access to markets, healthcare, and educational facilities, which are essential for sustainable community development and attracting eco-tourism, a growing sector with significant economic potential as discussed by Bramwell & Lane (2011). By improving infrastructure, the government not only enhances the daily lives of residents but also supports the expansion of economic activities and investments in the area. Such comprehensive developmental strategies are crucial for fostering a resilient, vibrant community capable of maintaining sustainable livelihoods amid evolving environmental and economic challenges.

Quote FGD6 recorded during discussions with vigilantes and other community members illustrates the value of money and other support from family members residing abroad as a coping mechanism and a form of resilience during challenging times, especially in the context of the COVID-19 pandemic:

“For us, we have been fortunate to receive support from family members overseas, which is helping to keep our lives going in the short term but that is not enough to sustain family livelihood dynamics”. (FGD6; informal discussion, Community Centre, Antar Town, August 5-6, 2021)

It sheds light on how access to external support plays a crucial role in ensuring the continuity of individuals' lives in the immediate term. The support received, whether in the form of financial or material assistance, serves as a lifeline that helps individuals and families navigate the difficulties brought about by the pandemic. Assistance of this kind offers a temporary reprieve by providing resources to meet immediate needs and maintain a basic standard of living. The recognition of this support reflects the resilience of the individuals involved, as they actively seek and receive assistance from their extended network to endure the hardships they face.

However, the quote also draws attention to the limitations of relying solely on external support, which aligns with the key tenets of vulnerability theory (Jones, 2013). While the assistance from family members overseas may provide temporary relief, it is acknowledged that it is insufficient to sustain the broader dynamics of family livelihoods in the long run. This realization underscores the importance of comprehensive and sustainable support systems. It highlights the need for interventions and strategies that not only address immediate challenges but also promote self-sufficiency, long-term stability, and the development of local resources. By recognizing the inadequacy of external support alone, individuals and communities have shifted their focus towards building resilience through the cultivation of local assets, fostering economic opportunities, and strengthening social networks within their own contexts. For instance, despite the engagement of vigilante

groups in combating destructive practices such as sandmining (Figures 119 and 120), young unemployed individuals continue to engage in such activities in the absence of viable alternatives which are less socially divisive and more environmentally benign. Quote FGD6 serves as a reminder of the complexity involved in navigating difficult times and emphasizes the importance of a multi-faceted and integrated approach to support and resilience-building initiatives.

The challenges encountered by people in Goderich are not unique, as many communities worldwide grapple with similar issues. The United Nations Development Programme (UNDP, 2021) highlights that poverty poses a significant challenge for numerous countries, particularly in sub-Saharan Africa. To effectively address these challenges, innovative solutions are required to foster the development of more resilient communities. It is imperative to design interventions that empower individuals, promote local resource utilization, and enhance community capacities to withstand shocks, including both covariate and idiosyncratic ones, to build a sustainable future.

In Goderich, specific interventions can be designed to address the unique needs of the community. For example, providing skills training in areas such as Outboard motor repair can empower individuals with valuable expertise that aligns with the prominent livelihood activities in the area. Equipping community members with these essential skills can enhance their employability, create income-generating opportunities, and contribute to the overall economic development of their settlement.

Over the years, NGOs like Plan International have been actively engaged with various communities, including Goderich, to support and empower individuals. Their efforts have focused on building capacity through essential skills training, as highlighted above. By

providing individuals with the necessary tools and knowledge, these organizations have helped to enhance the resilience and self-sufficiency of the community members. Through initiatives like skills training, individuals are empowered to improve their livelihoods, reduce their vulnerability to shocks, and create a potentially sustainable future for themselves and their families.

7.4. Livelihood/Development Intervention Strategies

This section delineates potential intervention strategies aimed at ameliorating environmental challenges and enhancing sustainable livelihoods in Goderich, based on insights from key stakeholders including government bodies, local authorities, NGOs, and the private sector. Effective collaboration among these entities is vital in ensuring sustainable living standards while safeguarding environmental integrity through robust legislation enforcement and efficient management of public assets such as community land and beaches/seafronts. However, there is a notable gap in support from community leaders and a scarcity of resources to aid residents in harnessing assets that could sustain their livelihoods. According to Adger (2003), the integration of local knowledge with institutional support enhances resilience and sustainable resource management, pointing to the necessity of inclusive governance structures that actively involve community input in decision-making processes.

The critical role of government in fostering economic prosperity through infrastructural development and essential services provision is well documented (Samal & Dash, 2023; Jackson & Jabbie, 2019). By enhancing infrastructure such as roads and public amenities, governments can create conducive environments for emerging sectors like eco-tourism,

which has significant potential in coastal towns like Goderich. However, the development of infrastructure alone is insufficient without parallel efforts in environmental conservation and social welfare improvements, which are integral to long-term sustainability (Berkes & Folke, 1998). This holistic approach necessitates governmental strategies that do not only focus on economic outcomes but also prioritize ecological and social resilience, aligning with the Sustainable Livelihood Framework that emphasizes the multifaceted nature of livelihood sustainability (Scoones, 1998).

NGOs play a substantial role in resource capacity building, significantly impacting Goderich's developmental trajectory through the construction of educational facilities, provision of grants, and facilitation of developmental projects (Islam & Walkerden, 2022). Organizations like Plan International and Action Aid have been active in delivering developmental assistance, thereby enhancing human capital through training in skills such as tailoring and mechanical repairs. Such capacity-building initiatives are crucial for empowering residents with the skills necessary for economic independence and are aligned with the community's needs (Kabeer, 2005). Furthermore, the engagement of local and indigenous groups, such as the Oba Funkia Development Association, in these efforts increases the likelihood of interventions being culturally appropriate and community-driven, enhancing their sustainability and effectiveness in fostering long-term well-being (Arnstein, 1969).

7.4.1. Government (including local Authorities)

This section examines intervention strategies essential for safeguarding Goderich's environmental assets while enhancing the living standards of its residents. Oba Funkia and

the surrounding hilltop regions near Maggay Town, known for their natural beauty, are currently under threat due to local economic pressures. High poverty rates drive unsustainable practices such as deforestation, which compromise the ecological integrity and future habitability of these areas (Jackson, 2015). The challenge lies not only in preserving the natural environment but also in maintaining it as a viable living space for both established residents and newcomers who are drawn to its untapped beauty.

Effective management of environmental concerns in Goderich requires robust government action, as outlined by Nunan (2023). This involves enforcing environmental legislation and improving access to basic amenities that can elevate the local quality of life. Moreover, fostering inter-agency collaboration can address the diverse needs of impoverished communities. The implementation of volunteer watch groups, particularly for vulnerable locations like the seafront, offers a dual benefit of protection and promotion for eco-tourism, although such initiatives require sustainable funding to ensure their effectiveness throughout the day and night. Such strategic environmental governance can enhance Goderich's reputation, shifting perceptions from a risky to a desirable habitat (Turner & Berkes, 2006). The success of these interventions hinges on continuous financial and logistical support to maintain vigilant conservation efforts.

In parallel with environmental preservation, economic stability must be addressed to mitigate the adverse effects of inflation, which exacerbates the vulnerability of Goderich's residents. Coordinated economic policies by the Bank of Sierra Leone (BSL) and the Ministry of Finance are crucial to control inflationary pressures that erode living standards by diminishing purchasing power (Warburton & Jackson, 2023). Such economic strategies

should aim to stabilize prices and support sustainable livelihoods by alleviating the financial strain on households. Additionally, the global economic disruptions caused by events such as COVID-19 and geopolitical conflicts further emphasize the need for resilient economic policies that can shield the community from external shocks (Stiglitz, 2020). By integrating these economic measures with environmental strategies, Goderich can foster a holistic approach to development that discourages harmful practices like sand mining, promotes sustainable economic activities, and ultimately enhances the overall well-being of its residents.

7.4.2. NGOs / Private Sector Support

Judging from responses gathered during Focus Group interviews (with special reference to FGD TQ7), there is a pressing need for NGO intervention to address the challenges faced by vulnerable individuals across the various communities of Goderich. This sentiment is reflected in Quotes 7 and 8 from personal interviews conducted with a women's group on 1st August 2021:

"In the early to late 1990s, we used to have a significant presence of NGOs in Goderich, such as Plan International, that aimed to address the needs of the poor in our community. However, more recently, we believe that the effective management of funds has declined, leaving us in desperate situations" (FGD Quote7).

"We are in desperate need of assistance from NGOs in our community. Our children are left stranded, with limited support from us, and as impoverished

individuals, we are unable to seek help from the local council and the government”
(FGD Quote 8).

FGD Quote 7 highlights the historical presence of NGOs in Goderich. However, it also suggests that in recent years, the availability of funds by these NGOs has declined, resulting in sometimes deplorable conditions of existence for the residents. This observation sheds light on the changing dynamics of NGO involvement and raises concerns about the adequacy of support available to address the ongoing challenges faced by the community.

For its part, FG Quote 8 further emphasizes the community's desperate need for assistance from NGOs. It highlights the vulnerable state of children, who are left stranded with limited support, and the inability of impoverished individuals to seek help from the local council and government. The quote underscores the critical role that NGOs can play in providing essential support and services to those in need, especially in contexts where other avenues of assistance are limited or inaccessible. It draws attention to the pressing needs of the community and emphasizes the urgency of external intervention and support to alleviate their hardships and improve their well-being.

As an ‘inside-outsider’ researcher, I can confirm the critical need for substantial and immediate support from NGOs to improve the livelihoods of the people in Goderich. Providing direct grants to individuals for investment in business activities can be an effective approach to promoting economic independence and self-sufficiency. This aligns with the findings of other studies that underscore the importance of direct financial support for individuals living in poverty (Braunstein, 2015).

Furthermore, it is imperative for NGOs to collaborate closely with community leaders and stakeholders to ensure the effectiveness and sustainability of their interventions. This approach aligns with recommendations from experts advocating community-based interventions that are tailored to the specific needs of the local population (Minkler & Wallerstein, 2011). By working together with community leaders, NGOs can gain valuable insights into the challenges and aspirations of residents, thereby developing interventions that are more responsive and impactful.

7.4.3. Engineered Practice of Community Cohesion and Resilience

This section of the thesis explores community cohesion within the context of governance and livelihood mediation in Goderich, particularly through the lens of the Oba Funkia community and its interaction with the diaspora. This practical case study delves into how local residents, supplemented by support from the diaspora, are addressing environmental challenges and devising sustainable livelihood strategies against the backdrop of environmental degradation, such as that caused by sand mining. The establishment of community vigilante groups to protect Goderich's natural assets represents a dynamic form of community engagement that encapsulates the concept of "engineered social ties," as discussed by Putnam (2000), where deliberate interventions are designed to foster social cohesion and enhance collective action.

The collaborative efforts in Goderich, including the formation of vigilante groups, highlight the application of horizontal social capital where community members unify around common goals—specifically, the preservation of their environmental resources. This social capital not only fortifies community ties but also aligns with Pretty & Ward's

(2001) findings on how social cohesion can drive sustainable environmental management. These groups are important in curbing the exploitation of natural resources through night patrols and community watch programs, which not only help maintain the ecological balance but also pave the way for sustainable economic opportunities such as ecotourism. Such initiatives are critical as they not only address immediate environmental concerns but also foster long-term economic development, particularly for the youth in the community, aligning with the broader goals of sustainable development (Berkes & Folke, 1998).

Furthermore, the case study of Goderich illustrates the broader impacts of community-based environmental conservation efforts on sustainable livelihoods. By preventing unsustainable sand mining, these vigilante groups help preserve the ecological integrity essential for the community's resilience and sustainability. This approach is supported by the work of Ostrom (1990), who argues that local governance and community-led resource management often result in more effective and sustainable environmental stewardship. The promotion of ecotourism, driven by these conservation efforts, does not only mitigate the impact of harmful practices but also provides a viable economic alternative that enhances community livelihoods. Additionally, these initiatives empower local youth, providing them with roles that contribute constructively to their community's socio-economic fabric, thus fostering a sense of agency and participation that is crucial for nurturing future community leaders (Bandiera et al., 2010).

Figure 113: Ecotourism efforts of young vigilante men at Oba Funkia Beach



Figure 114: Ecotourism to beautify the Oba Funkia Beach by local Vigilante'



Source: Own Photo

With reference to Figures 113 and 114, the 'Oba Funkia Development Association (OFDA)' exemplifies a successful model of local governance and community engagement in Goderich, aligning governmental bodies and security agencies to curtail the detrimental sand-mining activities plaguing the area. This concerted effort mirrors the findings of Smith-Hall, Jiao, & Walelign (2023), who document the effectiveness of similar partnerships in mitigating environmental exploitation. Despite these advances, there remains an urgent need for additional funding to elevate the profile of the youth in the community. By providing them with vital training and skills development opportunities, it is possible to divert their involvement from destructive practices such as sand mining towards more sustainable economic activities.

The proactive stance of the OFDA in securing Goderich's environmental assets is crucial in a region where economic scarcity exacerbates the risk of resource depletion. Strengthening community-led security measures is vital for protecting these assets, an initiative that must be coupled with broader socio-economic development strategies.

Following the guidance of Nunan (2023), it is critical to leverage direct government interventions and foster inter-agency collaborations to address the comprehensive needs of Goderich's impoverished communities. Such strategies should focus not only on environmental preservation but also on creating substantial support systems for the youth, equipping them with the skills needed to engage in sustainable livelihoods.

To effectively transition Goderich from reliance on environmentally harmful practices to a more diversified and resilient socio-economic base, concerted efforts are needed to secure external funding and enhance local capacity-building initiatives. These efforts should aim at integrating the younger population into the mainstream of economy and society through education and skills training in viable sectors such as ecotourism, agriculture, and digital services. Implementing such transformative strategies will require ongoing collaboration between government agencies, non-governmental organizations, and community groups, aiming to create a sustainable framework that not only addresses immediate environmental issues but also fosters long-term socio-economic stability (Barrett, Travis, & Dasgupta, 2011).

7.5. Chapter Summary

Chapter 7 offers an in-depth examination of the environmental challenges in Goderich, discussing their profound implications for local livelihoods. The exploration is rooted in the Sustainable Livelihood Framework (SLF), tailored specifically for Goderich, emphasizing the dynamic interactions between livelihood pursuits and environmental sustainability. Smith-Hall, Jiao, & WaleLign (2023) underscore the importance of understanding these interactions, particularly in rural areas of the global south where

residents adapt livelihood strategies to the availability of critical assets. This adaptation, however, often leads to environmental degradation, thereby increasing vulnerability and driving practices towards unsustainability.

The responses captured in the qualitative segment (Appendices 4 and 5), ‘Open Response to Environmental Risks, Threats, and Impact on Livelihood Assets in Goderich’, reveal a community keenly aware of the environmental threats they face, especially during the rainy months of July to September. The collective narrative view as captured from engagement with all three Focus Groups (see Section 7.2.2), advocates for enhanced educational campaigns and improved access to assets like land and financial support. This aligns with insights from Adger et al. (2005) and Ostrom (1990), who argue that education and asset security are foundational for fostering resilient, sustainable communities. These findings guide the proposed interventions in this chapter, aiming to balance immediate needs with sustainable resource management.

Furthermore, the chapter looks at the specific roles of key stakeholders, including NGOs and local leadership, in promoting access to essential assets and their sustainable use. The strategic engagement of these stakeholders is crucial for implementing effective interventions designed to enhance sustainability and prevent further environmental degradation. The community's existing coping strategies and the adaptation mechanisms that have emerged in response to ongoing environmental challenges are discussed. These strategies are informed by a wealth of academic literature, including works by Benson & Twigg (2007) and Hardoy & Pandiella (2009), emphasizing the need for a nuanced approach that integrates environmental management with economic and social development to ensure comprehensive community resilience.

In summary, Chapter 7 synthesizes the complexities of coping with environmental risks in Goderich, proposing targeted interventions to enhance the sustainability of livelihoods and improve the overall well-being of the community. The chapter contributes to the broader dialogue on sustainable livelihoods and development within vulnerable ecosystems, advocating for a community-informed approach to environmental governance and resource management that respects local knowledge and leverages existing social capital to build a resilient future.

CHAPTER 8: CONCLUSION

8.1. Summary of the Research

This thesis examined the intricate dynamics of livelihood strategies in Goderich, Sierra Leone, foregrounding the intricate interplay between residents' access to and utilisation of resources under diverse socio-economic and environmental pressures. Employing a robust mixed-methods approach, the research illuminated the resilience of the community against a backdrop of both persistent and emergent stresses, notably the multifaceted challenges associated with the COVID-19 pandemic. The findings reveal the adeptness with which individuals in Goderich navigate their socio-economic environment, strategically managing and optimizing their assets to sustain livelihoods despite fluctuating economic conditions and environmental degradation. This study aligns with the frameworks suggested by Scoones (1998), who emphasises the importance of exploring the "dynamic nature" of livelihood assets within the Sustainable Livelihood Framework, illustrating how communities adjust their strategies in response to external pressures.

Further, the research contributes to a deeper understanding of how such resilience is not merely about survival but involves sophisticated strategies that leverage both natural and social capitals to forge sustainability within given livelihood contexts. The adaptive responses observed in Goderich, from diversifying income sources to enhancing communal networks for support during crises, underscore a complex interdependence within the community that safeguards against economic and environmental shocks. These strategies reflect the theoretical insights of Chambers and Conway (1992), who argue for the

recognition of indigenous knowledge and practices in enhancing livelihood sustainability. This thesis thereby not only expands the academic discourse on sustainable livelihoods by applying it within a less-studied context but also enriches our understanding of how resilience and adaptability are crucial in maintaining sustainable livelihoods amidst adversity. The detailed examination of Goderich's asset management and strategy adaptation provides a valuable model for similar contexts globally, offering insights into the resilience mechanisms that can inform both policy and practice in sustainable livelihoods and development.

8.2. Contribution to Knowledge

This thesis significantly enhances our academic understanding of the Sustainable Livelihood Framework (SLF), with a particular focus on its application in the understudied locale of Goderich. The research analyzes how local livelihood decisions are entwined with the broader socio-economic and environmental contexts. It highlights the critical role of severe stressors, exemplified by the COVID-19 pandemic, in shaping these strategies. Through this examination, the thesis brings to light a nuanced interpretation of livelihood diversification as a strategic response to both immediate and prolonged crises.

Integrating empirical insights with broader theoretical discussions on rural-urban dynamics and urban political ecology, the thesis bridges localized experiences with overarching sustainability challenges. It resonates with Chambers and Conway's (1992) framework, which emphasizes the utilization of capabilities and assets to ensure survival and sustainability. By contextualizing the SLF within a lesser-known region, the research

expands coverage of the applicability of the framework in new contexts, thereby adding to the existing literature.

Additionally, by employing a mixed-methods approach, the dissertation contributes to academic discourse by illustrating the complex interplay of social, economic, and environmental factors at the local level, without losing sight of the relevance of wider spatial, structural and temporal scales for livelihood negotiations at the local level. This approach not only helps to capture the intricate nature of livelihood strategies but also highlights the ongoing normalization of crisis conditions as a backdrop for daily life in Goderich. This nuanced examination sheds light on how individuals, groups and entire (sub-)communities navigate both chronic and acute stresses.

In summary, this thesis extends the existing body of knowledge by demonstrating how the practical application of SLF can deepen our understanding of the complexities surrounding sustainable livelihoods as a desired goal in under-explored areas. This work is a valuable addition to scholarly discussions on urban political ecology and the interaction between rural and urban settings, offering reflections on the differentiated dimensions of sustaining livelihoods amidst ongoing crises.

8.3. Theoretical Implications

The study presented in this thesis enhances the academic understanding of Sustainable Livelihood Frameworks (SLF) and their application by contextualizing them within the understudied environment of Goderich. This research aligns with Carney's (1998) definition of SLF, which emphasizes the integration of various types of capital—human, social, natural, physical, and financial—in understanding and promoting sustainable

livelihoods. By focusing on Goderich, the study not only fills a geographic gap, but it also engages methodologically and conceptually with evolving thinking and practice around SLF, notably that involving the challenges of incorporating spatial and temporal dynamics of livelihood strategies under constant but changing types and forms of stress. The findings highlight how local-level livelihood choices are deeply embedded in broader socio-economic and environmental contexts, resonating with Scoones' (1998) argument for a more dynamic and responsive application of SLF that accounts for the fluidity of such contexts.

Furthermore, the thesis underscores the role of acute stressors, like the COVID-19 pandemic, in shaping livelihood strategies, thus providing a nuanced view of how communities adapt to both immediate and long-term challenges. This approach to livelihood diversification as both a proactive and reactive response to crises and the ongoing threat of crises enriches the theoretical model proposed by Ellis (2000), who discusses the importance of adaptive strategies in managing shocks and stresses. By empirically demonstrating the practical application of SLF in a specific setting, the research bridges the gap between localized experiences and global theoretical frameworks on rural-urban dynamics and urban political ecology. Such integration offers a good understanding of the complexities involved in sustainable livelihoods, which is crucial for developing effective interventions that are both culturally and environmentally specific. The study not only contributes to academic discourse by expanding the existing body of knowledge on SLF but also provides a critical assessment of the framework's ability to address the multifaceted nature of community challenges as advocated by de Haan (2000) in his critiques of livelihood approaches.

8.4. Limitations and Future Research Directions

The research acknowledges the limitations imposed by the COVID-19 pandemic, which significantly affected the depth and breadth of fieldwork and data collection. This disruption underscores the necessity for future studies to examine the long-term implications of such crises on livelihood sustainability and the efficacy of community-led adaptation strategies. Indeed, exploring these aspects is critical to understanding how communities like Goderich navigate and mitigate the impacts of both sudden and ongoing crises. The study suggests a vital need to examine further the policy measures required to enhance the resilience and sustainability of livelihood systems across diverse socio-economic settings. This direction aligns with the broader academic discourse that emphasizes adaptive management and resilience in socio-ecological systems, as discussed by Folke et al. (2010), who explores how societies can manage crises and disturbances without compromising future opportunities.

Additionally, the constraints of the pandemic highlighted the potential for innovative research methodologies that could circumvent physical restrictions, such as enhanced remote data collection techniques or the use of digital platforms for community engagement. Future research could benefit from a more detailed understanding of the interplay between policy interventions and community resilience, especially in underexplored settings that face similar socio-economic challenges as Goderich. This recommendation is supported by the work of Adger (2006), who emphasizes the importance of understanding social and institutional responses to environmental risks and economic shocks in fostering sustainable livelihoods. These insights could guide the

development of tailored, context-specific strategies that enhance the adaptive capacity of vulnerable communities, ensuring their sustainability amid fluctuating environmental and economic conditions.

8.5. Recommendations for Policy and Practice

This thesis provides a suite of policy recommendations designed to enhance the infrastructural and systemic support necessary for fostering sustainable livelihood outcomes. Central to these recommendations is the strategic stabilization of livelihood assets, coupled with the fortification of community capacities to effectively respond to socio-economic disruptions. The research underscores the imperative for integrated policy interventions that bolster resilience against both endemic and emergent stresses, such as those presented by the COVID-19 pandemic. It promotes a multidisciplinary collaboration framework that brings together governmental bodies and non-governmental organizations to craft and implement robust support systems. These systems are envisioned to be comprehensive enough to address the nuanced vulnerabilities identified in the study, ensuring a resilient infrastructure that can withstand and adapt to the challenges highlighted throughout the research.

Moreover, the conclusions drawn in this thesis articulate the synthesis of its primary findings while integrating critical feedback from supervisory insights. This synthesis not only reaffirms the study's contributions to the existing body of knowledge but also exemplifies the application of empirical evidence within the broader theoretical frameworks of sustainable livelihoods and environmental resilience. The recommendations put forth are informed by a deep engagement with both established and emergent literature,

reflecting a thoughtful consideration of how theoretical insights can be pragmatically applied to enhance policy and practice in real-world settings. This approach ensures that the strategies recommended are not only grounded in rigorous academic research but also tailored to meet the specific needs and challenges faced by communities striving to achieve sustainable and resilient livelihood outcomes.

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APPENDICES

Appendix 1: Participatory Livelihood Assessment Tool				
Livelihood Component		Theme for discussion and analysis	Principal Tool	Tools for triangulation
Livelihood context	Organisation	Incorporating community institutions relating to livelihoods.	Mapping exercise	Interviews to be conducted with participants and survey questionnaire.
	Natural Environment	Locate key neighbourhoods and sub-communities with characteristics relating to slumps, environmental hazards, etc.	Neighbourhood mapping	Secondary data from key governmental and non-state institutions and interviews with participants
	Infrastructure	Access to education, health, social services; water and sanitation infrastructure, roads and transport, markets; electricity, access of population and households to infrastructure.	Neighbourhood mapping	Participant interviews and secondary data.
	Cultural Environment	Ethnic diversity; religious institutions; gender equality; mobility and mixing	Historical profiling	Secondary and Interviews.
	Political environment	Political institutions; voting rights; influence of politics on way of life; tenancy laws and zonal boundaries	Secondary data; informants and discussion with groups	Household interviews and interviews with economic groups.
	Economic environment	Macro-economic trends; employment and cost of living (inflation); access to micro-financing and regulations.	Secondary data; group interviews with informants	Household interviews; economic activity matrix.
Household Assets (incorporating how best they are used and their ability to recover from stresses and shocks)	Human	Skills; entrepreneurial ability; educational attainment; income earner dependent ratio	Household interviews	Livelihood profile of households
	Social	Presence of network support; community support and social organisations	Household interviews	Secondary data, interviews with participants
	Economic (incorporating physical and financial)	Land; home ownership; transport; equipment; shops; market stalls; household water and sanitation	Household interviews	Livelihood profile of households and participant interviews.
Livelihood strategies (production, processing, exchange and income generating activities)		Activities undertaken by each household member, level of contribution to household economy; access to employment; income generating activities; access to credit; diversification vs. dependence on single earner; flows of money,	Household interviews	Livelihood profile of households and participant interviews.

		people and goods from rural to urban areas.		
Nature of shocks and stresses and responses	Area level	Occurrence, intensity and duration of disasters [natural or man-made], influence of gang and criminal activities, police harassment; power cuts. Nature and origin of neighbourhood associations; activities; external assistance and relief activities	Household interviews	Historical profiling; secondary data and interview with participants
	Household level	Nature and sources of shocks on household; Impact of shock; unemployment; illness; imprisonment; personal security Coping mechanisms, such as diversification of livelihood strategies; sale of assets	Household interviews	Household interviews
Livelihood Outcomes		Shelter, food, nutrition, health, water, education, community participation and personal safety.	Household interviews	Secondary data; Informant interviews
Source: Adapted from Sanderson and Westley (2000) cited in de Haan et al, (2002: 7)				

Appendix 2: Population of Goderich (2015 Census)

Age Group	Milton Margai		
	Total	Female	Male
15 - 19	4,811	2,390	2,423
20 - 24	4,491	2,230	2,261
25 - 29	3,989	1,982	2,008
30 - 34	2,666	1,325	1,343
35 - 39	2,550	1,266	1,284
40 - 44	1,764	876	888
45 - 49	1,372	682	690
50 - 54	1,028	511	517
55 - 59	602	299	303
60 - 64	519	258	261
65 - 69	362	179	183
70 - 74	276	137	139
75 - 79	171	85	86
80 - 84	106	54	54
85 - 89	62	31	33
90 - 94	29	15	15
95+	34	18	18
	24,832	12,338	12,506

Age Group	Metchem		
	Total	Female	Male
15 - 19	1,211	594	617
20 - 24	1,129	553	576
25 - 29	1,003	491	511
30 - 34	671	328	341
35 - 39	641	315	326
40 - 44	444	217	227
45 - 49	344	170	176
50 - 54	258	127	132
55 - 59	152	73	77
60 - 64	131	64	67
65 - 69	91	44	46
70 - 74	69	34	36
75 - 79	42	21	21
80 - 84	26	13	13
85 - 89	16	8	8
90 - 94	7	3	3
95+	8	5	5
	6,243	3,060	3,182

Age Group	Gbendembu		
	Total	Female	Male
15 - 19	2922	1454	1468
20 - 24	2728	1356	1370
25 - 29	2423	1204	1217
30 - 34	1618	804	814
35 - 39	1548	770	778
40 - 44	1070	532	538
45 - 49	832	414	419
50 - 54	623	310	313
55 - 59	365	181	183
60 - 64	315	157	158
65 - 69	219	109	111
70 - 74	166	140	85
75 - 79	104	52	52
80 - 84	64	31	33
85 - 89	38	18	20
90 - 94	16	8	8
95+	21	10	10
	15,072	7,550	7,577

Source: Statistics Sierra Leone

Appendix 3: Focus Group Questionnaire

Village/District/Town:

Date:

Conductor and Assistant:

Description of the group/people involved:

Group Name	Brief description / Group Characteristics	Tick as appropriate
Youth group [18 – 25]		
General Adult group [26 – 59]		
Senior Citizen group [60+]		
Fishmonger group		
Fishers group		
General Traders group		
Car / Van Drivers group		
Ethnic Group [please specify]		
Okada and Keke riders group		
Christian Organisation group		
Muslim Organisation group		
Other [Please specify]		

Total number of people present in the meeting:

Characteristics of Participants

Sex	Age	Marital status & No. of children	Education	Occupation	Other Information

General and Specific Questions

1. Please provide some information about your group's means of livelihood in the village?

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2. Please explain how your group is experiencing life in the village?

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3. What do you do on a normal day [identify means of livelihood activity]? Please explain your relationship with other people/group in the village?

Name of People/Group [Please specify as many group as possible]	Primary Activity	Secondary Activity	Relationship with people

4. Do you experience conflict/problems with other people in your normal choice of work/(group) livelihood activity?

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5. What do you consider to be the main livelihood problem[s] experienced by group members in the village? How do you think the problem can be addressed? Please give reason[s] for your answer[s]?

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6. Are you aware about any form of activity/project [e.g., financial help from NGOs/local government or provision of land for agricultural activity] that may help to address livelihood concerns of group members and generally by people in the village? *[If your answer is Yes, move to Question 7 and if your answer is No, please move to Question 8]*

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7. If Yes, Please identify the project/livelihood activity name and how involved are you, if at all?

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8. If No, what type of livelihood activity/project do you think will best address your group's concern in the village and give reason[s]?

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9. Do you consider your group to have gained good access to livelihood opportunities since 5 or 10 years ago given the increase in population in Goderich? If Yes, please specify areas of livelihood gains you have made in terms of activities.

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10. Do you think that Government legislations [e.g., areas related to forest access, limited use of the sea-front/beaches, etc.] have actually impacted on your group's access to diversified range of livelihood opportunities? If Yes, please suggest ways you can substitute loss of income from earlier means of livelihood activities?

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11. Specifically for those of you whose livelihood is sought from Forest Product and Non-Forest Timber Product, do you think deforestation activities in Goderich is impacting on your sustained access to income opportunities? Suggest ways you think lost earnings can be restored?

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12. Has there been any noticeable problems or tension caused to groups/family members on account of restrictions imposed by authorities/government on the access to forest environment or sea-front and also deforestation activities carried out in the village?

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13. Are you aware of any form of adaptable livelihood/survival strategies [e.g., sand-mining, stone-quarrying, land-grabbing, etc.] people have used in your group to supplement income on account of restricted access to Natural asset/resources like Land/Forest and Sea-front?

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14. If your answer to Question 13 is Yes, do you consider these adaptable means of survival are posing risks to the long-term sustainability of the environment? If Yes, please identify some of the likely risks to the village and its environs?

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15. Do you think support is needed from the government or NGOs in improving your group's scope of decent livelihood income? Identify possible means of livelihood activity that will best support the management of your group's survival?

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16. Is there anything else you feel that will be of relevance to meeting your group's livelihood needs while living in Goderich? How do you think these can be achieved?

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Appendix 4: Townhead Questionnaire
GROUP QUESTIONNAIRE FOR HEADSHIP[S] IN GODERICH VILLAGE

GENERAL PROFILE QUESTION

Questionnaire

No:

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Date

of

Interview:

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Name

of

Interviewer:

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Name

of

Interviewee(s):

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1 () Questionnaire administered to town headman

2 () Questionnaire administered to other key informant

Please

specify:

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Please select from the following the most common types of accommodation or dwelling properties common to residents in Goderich/towns in the village.

Property Type	Tick [If appropriate]	How is it used by residents [for dwelling/business or both]
Clay house		
Thatched/Bamboo		
Corrugated Iron Sheet House		
Wood-carved house		
Block / Concrete Bungalow		
Detached house		
High rising apartment building		
Other [Please specify]		

1. HISTORICAL PROFILE

Please provide a short history of the village (when was it founded and by whom?).

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2. DEMOGRAPHY OF THE VILLAGE/TOWN**2.1.** What's the population of the village/town? How many households are there?

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2.2. What are the different ethnic groups in the village/town (please indicate in decreasing order of numerical importance)? Which are considered the most/least influential, and by whom and why? What are the main cultural differences between the different ethnic groups?

Ethnic Groups	Most/Least Influential	Cultural differences

2.3. Which languages are spoken by people in the village/town?

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2.4. What are the main religions in the village, and which one is the most widely practised?

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2.5. Have you noticed an increase or decrease in population of the village in the last 10 years? Last 5 years? How do you explain such population change?

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2.6. Have you noticed a Low/Medium/High level of migration of people to the village/town in the last 10 years? Last 5 years? If Yes, who/what are they and where have they come from [other parts of Sierra Leone or outside the country]?

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2.7 What do you think has attracted them to the town/village?

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2.8 Have you noticed Low/Medium/High migration of people out of the town/village in the last 10 years? Five years? Who has left and where have they gone to? Do you know what prompted them to leave?

[illegible]

2.9 Please highlight in the table your perceived positive and negative effects of In/Out migration

Positive Effects of In/Out Migration	Negative Effects of In/Out Migration

2.10 Do you have any suggestions for maximizing the advantages and minimizing the disadvantages of local migration?

[illegible]

3. LEADERSHIP AND ADMINISTRATION

3.1. What is the system of town/village administration? Does anyone assist the headman in running or supervising village affairs (e.g., village council/committee)?

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3.2. Who can or cannot become village/town headman and/or council/committee members? Why or why not?

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3.3. How (and by whom) are town/village leaders s/elected? Are the position/s or offices held for fixed terms or for life?

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3.4. Is there any specialist office/s and holders for NR?

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3.5. Who are the main opinion formers (influential individuals/groups) in the town/village? Do they represent any particular sectional or other interests? What is the nature of their relationship with the village/town leadership?

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3.6. Are there any social or cultural groups/organisations/associations in your village /town (e.g., savings group, fishers association, cooperatives, hunting club, craft guild, etc.)?

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3.7. How are they organized (eg, age, gender, neighbourhood, occupation, etc.)?
Which are the most active and/or involve the most people (and why)?

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3.8. Are any of these organisations involved in community development activities?
Please provide details.

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3.9. What are the main development activities taking place in your town/village at the moment, and who was responsible for initiating and/or running them?

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3.10. Please explain whether and how your town/village leadership was/is involved in any or all these activities.

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3.11 Are you aware of any future development activities planned for the town/village? Has the leadership been involved in planning any of these?

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3.12 How do you think the role of village/town head be made easier and/or more effective? Why have you not made these the adjustments or changes so far, and what would prompt you to make them?

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4. LOCAL ECONOMY / LIVELIHOOD ACTIVITIES

4.1. What are the livelihood activities/jobs of the people in your village/town? Please list and rank in order importance for (1) participation rates or number of people involved in activity; and (2) income earning potential

Livelihood Activities / Jobs	Participation Rate / Number of People	Income earning potential

4.2 Where are these different livelihood activities practised/located? 1: Main locations; 2. Secondary locations; 3. Occasional sites

Primary location	Secondary location	Occasional location

4.3 Who are the main practitioners of each of the livelihood activities identified?

Practitioners of livelihood activities	Please select as appropriate with a tick
Ethnic group	
Religious group	
Youth group	
Gender group	
Other [Please specify]	

4.4 Is your town/village famous or well-known as a good and reliable location for any of the livelihood activities identified above? How did it acquire this reputation, and how long has it been famous for this activity?

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4.5 Does the village/town leadership do anything to continue to promote this reputation?

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4.6 Are there any particular livelihood activities which give your town/village 'a bad name' locally or more widely? How/why did it develop this bad reputation, and for how long has this been the case?

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4.7 Is the leadership doing anything to try and counter this bad reputation? If not, why not?

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5. FOREST AND TERRESTRIAL LAND RESOURCES IN GODERICH

5.1.

Statement / question	Very easily accessible	Somehow easy to access	Very difficult to access	Difficult to access	Not sure
How easy or accessible is it for groups / people in the village are able to make do with natural resources like fertile land or forest to					

5.2. Which of the groups / category of people in the village do you think are more likely to access natural resources for their livelihoods?

Group / Category of residents	Likely to access resource [Please specify as many resource code as applicable to group]	Not sure	Tenure type [Please specify by selecting appropriate code]
Ethnic group			
Religious group			
Youth group			
Gender group			
Other [Please specify]			

Natural Resource Code	Tenure Type Code
Agricultural land for plantation = 1 Forest Land for wood fetching = 2 Forest land for hunting bush meat = 3 Sea shore / beaches for fetching fishes = 4 Communal market place = 5 Private land with constructed house[s] = 6 Other [Please specify] = 99	Owned = 1 Rented = 2 Publicly accessible on leasehold = 3

5.3. Do you consider yourself as head of the village / section head to be providing any of the undermentioned support to user groups in enhancing their livelihood potential through access to natural or other forms of resources?

Resource type / support provided	Tick as appropriate
Meet with stakeholder groups to apportion community land for agricultural plantation	
Meet with stakeholder groups to apportion community land for erecting buildings for business / as market stall	
Provide financial support to all relevant stakeholder groups	
Collaborate with external stakeholders like NGOs and Government to make available grant to support the development of small businesses	

Support educational and training activities that enhances scope for sustained livelihood	
Other [Please Specify]	

5.4.

Statement /Question	Very cooperative	Somehow cooperative	Not very cooperative	Un-cooperative	No comment / Reserve opinion
How cooperative is the central local / government in supporting livelihood accessibility to natural and other forms of resources for groups / people in Goderich?					

5.5. In your own opinion, explain how best you think group / people's effort can be enhanced in terms of making use of available resources to meet their sustained livelihoods in Goderich?

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6. SOCIAL COHESION / MIXING

6.1. Did you experience tension amongst people in the village over the past 10 years? If yes, please use the table below to identify which areas you have experienced tension and the reason[s] for such tension and how disputes have been resolved.

Tension/Disputes over	Individuals/Groups involved or affected	Nature/causes of tension/dispute	Resolution
Natural resources [e.g., water, energy, etc.]			
Employment opportunities / jobs			

Cultural / religious differences			
Conflict between households			
Other [Please specify]			

6.2. Has there been any noticeable conflict/tension with neighbouring villages / towns? If Yes, give reasons for such tension[s] / conflict[s] and is it still ongoing? If No, how were they resolved?

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6.3. Have you experienced conflict/tension with industrial/commercial/state/non-state facilities/activities nearby? If Yes, what was the main cause of such conflict/tension? Has this been resolved? If yes, how and who by? If not, why not, and how can or should it be resolved?

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6.4. Has there been any history of tension/conflict between migrants and locals in the past? Is there any evidence of such tension/conflict at present? If yes to either or both, what were or are the reported causes? How were/can these be resolved?

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7. SOCIOECONOMIC INFRASTRUCTURE

7.1. Please indicate which of the following public and/or private socio-economic infrastructures is available in your village/locality and how many?

Socio-economic infrastructures	Select as appropriate with a TICK	If none, where is the nearest and how far away is it?	Adequate to meet current demand?
Primary school			
Secondary School			
Hospital			
Health care centre / village clinic			
Other health facilities			
Police station			
Library			
Shops [Market, butcher, bakery, kiosk, bar, restaurant, 'cookery', etc.].			
Financial [e.g., Bank, ATM, Exchange bureau]			
Post Office			
Other [Please specify]			

7.2. Who is your main electricity supplier? How satisfied are people in your village/town with the cost, adequacy and reliability of local electricity supply? If No, what problems do they experience, and who are the worst affected? Roughly what percentage of households do you think have access to electricity in your village / locality?

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7.3 What do the other households use for lighting, refrigeration, etc.? Who are the main suppliers of each of these alternative energy types? How satisfied are households with the cost, reliability and adequacy of supplies of these alternative sources of energy?

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7.4 What are the main sources of water supply for people in the village/town? How reliable are they? Do they supply enough water to meet demand all year round? What are the main problems linked to water supply (quantity, quality, reliability)? What is being done to address these? Does the village/town leadership have any responsibility for water supply?

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7.5 How do you dispose of sewage in the town/village? Does the town/village leadership have any role to play in sewage disposal? What, if any, are the problems associated with sewage disposal, and how can these be solved?

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7.6. How do the people in the town/village dispose of their solid waste? How well do these systems/arrangements work at the moment? What, if any, are the problems associated with current arrangements for solid waste disposal? How can these be solved? Does the town/village leadership have any responsibility for solid waste disposal?

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7.7 What educational facilities are available in the town/village [Nursery, Primary, Secondary and College/University]? Is the provision adequate in terms of quality and/or quantity? If No, how can current provision be improved? Does the town/village leadership play any role in educational provision?

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7.8 What are the health facilities available in the town/village? Are these adequate for local needs? How well staffed and stocked are they? Are they easily accessible to everybody? What are the problems associated with health provision? How can they be addressed? Does the local administration play any role in health provision?

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7.9. Did residents in your village experience risk of illnesses like Ebola in the recent past? If Yes, how did it affect people's behaviour towards victims and their social life in the village?

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7.10. What are the main means of transportation used locally?

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7.11 Which of these are private, and which ‘public’ or shared means of transport?

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7.12. Who are the owners and/or operators of the public or commercial vehicles?

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7.13. How has the transport system changed in recent times (say, the last 10 years or so)? Has this been for the better or the worse?

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7.14. How well do you think the current system responds to the needs of all sectors of local society?

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7.15. What proportion of roads in this area are (please give some indication of proportion of overall road length):

- [] paved-tar
- [] stabilised
- [] unpaved
- [] other [please specify].....

7.16. How busy are the roads around here? Is traffic made up mostly of 4-wheel or 2-wheel vehicles?

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7.17 How much of this traffic is ‘through traffic’ and how much actually terminates here? What proportion of the traffic is made up of private vehicles and what proportion of commercial/public vehicles?

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7.18 How would you assess the state of local roads: Good/Bad/Passable? Are most local roads motorable? Where they are motorable, is this all year round or only during the dry season? Who is responsible for maintaining/improving these roads?

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7.19 Do you have any suggestions of how to improve the transport system system? If Yes, are you satisfied with it and what support do you think that can be provided to improve on the existing system of transportation system? Is the local council/town administration active in any sector of the local transport system or economy (eg own/run buses, own/manage motor park, etc.)?

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8. ENVIRONMENTAL CONCERNS

8.1. What are the main environmental problems in your town/village?

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8.2. How do they impact on the lives and livelihoods of residents?

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8.3 Which individuals and groups are those most affected? Who are those least affected?

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8.4. What are the main social problems in your village (e.g. Youth delinquency, riots, etc.)?

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8.5. Which individuals and groups are those most affected? Who are those least affected?

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8.6. What are the main economic problems in the town/village [e.g., unemployment, acute poverty of residents]? If so, please identify some and explain their impact on residents' lives.

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8.7. Which individuals and groups are those most affected? Who are those least affected?

.....

8.8. Do residents in the village experience problems associated with access to assets needed to increase their livelihood opportunities? If so, please explain why and how as village head you can help address the problems using the table below?

Livelihood Assets			Problems/Issues	How to address the problem?
Human training	Capital and	[e.g., skills]		

development, education provision, etc.]		
Financial Capital [e.g., access to loans for business, etc.]		
Physical Capital [e.g., Building or places to engage in livelihood activities, etc.]		
Natural Capital [e.g., land for agricultural or forest activities, etc.]		
Social Capital [e.g., Network groups like Women's activities, societies, etc.]		

9. PERCEIVED LEVEL OF VULNERABILITY AMONGST GROUPS IN THE VILLAGE

9.1. How vulnerable do you perceive groups in the village are?

Statement	I strongly agree	I agree	Neither agree nor disagree	I disagree	I strongly disagree	I don't know/refuse to answer
The neighbourhood / groups are very vulnerable	1	2	3	4	5	99
Rich or affluent people in the village are very kind in supporting those that are vulnerable	1	2	3	4	5	99

HOUSEHOLD QUESTIONNAIRE

Vulnerable groups / people feel very confident in asking for support when needed	1	2	3	4	5	99
Vulnerable groups / people feel very disgruntle about their state of vulnerability	1	2	3	4	5	99
Vulnerable people / groups are very willing to do anything to earn their living	1	2	3	4	5	99
There is always work available for vulnerable groups / people to engage themselves in	1	2	3	4	5	99
Vulnerable groups / people often engage themselves in environmentally dangerous activities that seek to meet their livelihood needs	1	2	3	4	5	99
Vulnerable groups / people would occasionally receive support from NGOs / local government during time of distress / hardship	1	2	3	4	5	99
I have received [personal] death threats from vulnerable group members / people when they feel there is no way of meeting basic livelihood needs	1	2	3	4	5	99

9.2. Whom do you considered to be the most common vulnerable groups in the village [Please identify from the list below and explain how these can be addressed? Identify from the table below groups you consider to be most vulnerable in terms of poverty status by rating them on a scale of 1 -10 [with 1 as the most vulnerable and 10 being the least vulnerable].

Vulnerable Group	Tick by indicating a scale from 1 to 5 [1 is considered the most vulnerable in term of poverty status]	Why do you consider the selected group as being secure or vulnerable]	Please indicate using the code below to identify ways to improve their poverty / vulnerable status
Young men [11 – 25yrs]			
Young women [11 – 25yrs]			
Adult women [26 – 59]			
Adult Men [26 – 59]			
Senior citizens [60+years]			
Disabled [both men and women]			
Gay and Lesbian group			
New Migrants			
Minority Ethnic groups [Please specify]			
Other [Please specify]			

Codes for improvement to vulnerable / poverty Status [This can be used to answer question 9.2, column 4 above]
Improved education standard at all level = 1
Development of training centres to improve skills for the less educated = 2
Grant / loan facilities to support business development = 3
Development of common marketplace to help promote businesses = 4
Low-cost housing for those that cannot access the housing ladder = 5
Access to restricted natural resource areas like agricultural land and sea-shore / beaches to increase residents opportunities for earning income = 6

Access to financially sound social network groups = 7
Knowledge of local language[s] = 8

9.3. Which of the following [legislative] policy / measures would you not like to see implemented in your village on account of their impact on livelihood for the vulnerable?

Category of Policy / Measures	Select as considered appropriate	
	Certainly not	Don't know / Reserve opinion
Restriction on access to sea-shore / beaches for fishing		
Restriction on access to forest area [for the purpose of wood fetching / other use that sustain livelihood]		
Uniformed security patrol officers in beaches to prevent sand mining		
Uniformed security patrol officers in forest / protected locations to prevent deforestation or abuse of natural resources		
Restricted access to fertile land owned by the village that can be used for agricultural / other forms of business activities		
Restricted opening time of business hours or days in the week		
Other [Please specify]		

Appendix 5: Household Questionnaire

A. GENERAL INFORMATION ABOUT THE RESPONDENT:

1. Name of the:

- a. Respondent:
- d. Village:
- e. Town:
- f. Sex: M/F
- g. Age: years.
- f. Education:
- g. Religion:
- h. Ethnicity
- i. Community:
- j. Occupation:
- k. Marital status: (See codes)

B. HUMAN CAPITAL:

2. Name of the:

- a. Household Head:
- b. Sex: M/F
- c. Age:
- d. Education:
- e. Occupation/s: (Refer to codes)

3. What is the size of your household?

4. State the demographic characteristics of your household:

HOUSEHOLD QUESTIONNAIRE

SI. No.	NAME	Sex (See Codes)	Age (In Years)	Relation to Household Head [HH] (See Codes)	Residential Status	Education (See Codes)	Marital Status (See Codes)	Primary Occupation and Location (See Codes)		Secondary Occupation and Location (See Codes)	
								Primary Occupation	Location	Secondary Occupation	Location
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											

Code:

HOUSEHOLD QUESTIONNAIRE

Sex	Relation to the HH	Residential Status	Marital Status	Occupation	Location of Occupation	Education
Male – 1 Female – 2	Head – 1	Permanent constant	Married –1	Farmer/Cultivator – 1	Goderich - 1	Class (1-6) – 1
	Wife/Husband – 2	Temporary/fixed	Unmarried – 2	Agricultural labourer – 2	Freetown – 2	Form (1-3) – 2
	Son/Son-in-law – 3	Short-term	Divorced/Separated – 3	Construction and related work – 3	Provincial Town – 3	Form (4-6) – 3
	Daughter/Daughter-in-law – 4	Permanent intermittent	Abandoned – 4	Skilled/semi-skilled/other non-Agricultural labourer – 4	Other - 4	Technical/Vocational Qualification – 4
	Grandchild – 5		Widowed – 5	Service (Govt./Pvt.) – 5		Graduate – 5
	Parent/Parent-in-law – 6			Petty business/small shop – 6		Post Graduate – 6
	Brother/ Brother-in-law – 7			Large business/medium business – 7		Other – 7
	Sister /Sister-in-law – 8			Small artisan in household and cottage industry – 8		Illiterate – 99
	Other/relatives/Friends – 9			Self-employed/professional – 9		Not applicable – 0
				Transport Workers [Commercial vehicle, Taxi, Poda-Poda]– 10		
				Transport workers [Keke Rider, Okada Rider]-11		
				Pensioner/Retired – 12		
				Domestic servant -13		
				Fishing/Fish selling – 14		
				Poultry farming – 16		
				Housewife – 17		
				Student – 18		
				Unemployed – 19		
				Other – 99		

HOUSEHOLD QUESTIONNAIRE

C. NATURAL CAPITAL:

6. Do you personally own land? If Yes, please tick location(s) and the size in Acre/town lot.

Location in Goderich /other location in Sierra Leone			
	<i>Tick as many as applicable</i>	<i>Used for livelihood activity</i>	<i>Size [Town lot / Acre]</i>
Oba Funkia			
Adonkia			
Sherbro Town			
Anta Town			
Maggay Town			
Other places – Please specify			

7. If No, do you pay rent for accessing land? How much on average per month (Leones) and location?

Location in Goderich /other location in Sierra Leone			
	<i>Tick as many as applicable</i>	<i>Used for livelihood activity</i>	<i>Monthly cost [Le]</i>
Oba Funkia			
Adonkia			
Sherbro Town			
Anta Town			
Maggay Town			
Other places – Please specify			

8. Which of the following activities do you use the land for [select all those applicable]?

Use of Natural Asset	Yes – 1 No - 2 Not Applicable – 3
Agriculture / Rice Farming/ Vegetables	
General Merchandise	
Retail Business [Shop]	
Building Materials	
Car Repair	
Outboard vessel repair	
Office space	
Other [Mention]	

9. Why do you choose to engage in these activities?

HOUSEHOLD QUESTIONNAIRE

Code: family income use only-1, business only-2, both family use & business-3, NA.-99

10. Is there organised marketing available for agricultural produce or other goods/products?
Yes-1, No-2, NA.-99
11. Is there any storage or preservation facility for your chosen activities [e.g., agriculture]? Yes-1, No-2, NA.-99
12. Do you use fertilizer/manure for the production of agricultural crops, if a chosen activity? Yes-1, No-2, NA.-99
13. If yes, how do you determine the quantity for use? Selfstudy-1, neighbouring cultivator-2, Customer demand-3, Soil nutrient analysis-4, suggested by seller-5, NA.-99.
14. Do you own small-stock, poultry or another form of livestock?: Yes-1/No-2
15. Which and how many?
16. What are they used for? : Own use/consumption -1, Sale/hire/rental – 2, Both – 3.
17. How much money did you earn from livestock-related activities last year (Le)
.....
18. What kind and quantity of livestock products went to own and family consumption?
.....
19. Do you have a pond? : Yes-1/No-2 Where?
20. Status of the pond you have: own-1, joint-2, leased-3, NA-99
21. Do you produce/culture fish in your pond? (Yes-1, No-2, NA-99)
22. Is your fish production for: own consumption-1, commercial-2, both-3, NA-99. If 2, who to and where?
23. How much did you get from fish-related activities last year?
For sale/exchange.....(in Le./ NA-99)?
For own/family consumption (quantity).....?
24. Do you undertake any NTFP activities? Yes – 1, No – 2.
[Note for Q. 24: NTFP –products or services other than timber produced in the forest.]
25. If Yes, select from the list below that form part of your household livelihood with the appropriate classification.

Non-Timber Forest Products [NTFPs]		
	Subsistence	Income
Fruits		
Nuts		

HOUSEHOLD QUESTIONNAIRE

Vegetables		
Fish and game		
Medicinal plants		
Bamboo / Rattans		
Other		

26. How much did you get from NTFP-related activity last year?
For own or family use (Quantity).....?

For exchange/trade (Le).....?

D. SOCIAL CAPITAL:

23. Have you been involved in any collective effort/activity/project in the last three years? (e.g., road, bridge, house repair, market, community centre, mosque, school, health centre, etc.) Yes-1/No-2/ NA-99 & if yes, mention what/which & who with

23. Are you a member of any social, cultural or professional organisation? Yes-1, No
24. If yes, which type of organization? NGO-1, Hunting/Ojeh/Lodge-2, Cooperative org.-3, Govt. org.-4, Social club-5, School committee-6, Mosque committee-7, Trade or craft guild/Trade union-8, others-9, NA-99
25. Impact/value of membership for life generally and livelihood specifically?

26. Have you had any major disagreement/conflict with your neighbours/relatives/work colleagues & rivals in the last three years? Yes-1, No-2. Details (incl. impact on livelihood)

27. How did you solve this/these conflict/s? Own initiatives-1, internal intervention-2, external intervention-3, through dispute in court-4. NA-99

28. . How safe do you feel (i) at home/in your neighbourhood Very-1, So-so-2, Not at all-3; and (ii) Where you work: Very-1, So-so-2, Not at all-3. If 2 or 3 in either case, why?.

29. How did you first learn about the livelihood activities you are engaged in? [*Please specify, for example, Agriculture, Sand Mining, Hunting*]? Neighbours-1, friends-2, relatives-3, NGO-4, Department (Govt.)-5, self-study-6, various agents-7, NA-99

HOUSEHOLD QUESTIONNAIRE

30. Did you receive any training for the activities? Yes-1, No-2. If yes, which/where/from whom?

31. Do you discuss livelihood matters with your husband/wife/children/others before taking final decisions? Yes-1, No-2. In either case, please provide details.....
...

32. Do the other people in your household discuss their livelihoods with you or ask for advice and/or other assistance? Yes-1, No-2. If yes, who & what kind of intervention?

E. FINANCIAL CAPITAL:

33. What are the main sources of household income in the order of importance [1 to 5], with 1 being the highest ranking?

Household income item	Ranking [1 – 5], with 1 being the highest
Loan from bank	
Selling assets [e.g., Land, furnishings, jewellery, etc,]	
Funds from credit unions [OSUSU]	
Remittance from family members/friends overseas	
Grant from charity funds	
Salary / Wage	
Pension	
Rental Income	
Other [Please specify]	

34. Which of these is in cash-1, Kind-2?

Household income item	“Kind” or “Cash”
Loan from bank	
Selling asset [e.g., Land, furnishings, jewellery, etc,]	
Funds from credit unions [OSUSU]	
Remittance from family members/friends overseas	
Grant from charity funds	
Rent-free or subsidised accommodation	
Other [Please specify]	

HOUSEHOLD QUESTIONNAIRE

35. Do you or members of your household have any savings? Yes-1, No-2. Is this in 1-Cash, 2-Kind?
36. If yes, how often do you save? Daily-1, weekly-2, monthly-3, yearly-4, No specific time-5, NA-99
37. What are your household's main reasons for saving? Family security-1, Children's wedding expenses-2, Old age-3, Investment in assets-4, others (mention.....)-5, NA-99
38. Where do you save money? Commercial Bank-1/Post Office-2/Credit Union-3/Other-4/ NA-99
39. Do you have a rough idea of how much your household's savings in cash and other assets add up to? (Le0-5000)-1, (Le5000-10000)-2, (Le10000-20000)-3, (Le20000 & above)-4, NA-99
40. Do you or any of your family members invest in any business or other venture? Yes-1/No-2/ NA-99
41. If yes, what did you invest in and how much money did you invest Le.....last year?
42. Did your investment yield any returns? Cash-1, Kind-2. What was it used for?
- _____
- _____
43. Have you or members of your household borrowed money during the last year? Yes-1, No-2. If yes, do you borrow money regularly? Yes-1, No-2.
44. State the sources of borrowing: (if NA-99)

Sources	Yes-1	No-2	Sources	Yes-1	No-2
Govt. Bank			Friends and relatives		
Private Bank			Local trade/craft union		
NGO			Wholesaler businessmen		
Cooperative Society			Community organization		
Money lender			Others(specify)		

45. How much (in Le.) have you borrowed in the last year?

HOUSEHOLD QUESTIONNAIRE

46. How was the loan repaid? Weekly-1, fortnightly-2, monthly-3, yearly-4, no specific time-5, NA-99

47. What was the loan for: (if NA-99)

Purpose of taking a loan	Yes-1	No-1	Purpose of taking a loan	Yes-1	No-1
Buying / hiring land			Children's education		
Buying work/livelihood equipment			Medical expenses		
Buying			Festivals / social		
Livestock / poultry			Obligations		
Housing construction / rent			Birth / Marriage / Death expenses		
Repayment of old loan			Purchasing household		
			Asset / Domestic supplies		

48. Does any member of your family migrate Regularly-1, Occasionally-2, Not at all-3?

49. If 1 &/or 2, who migrates; where to; what for; and for how long?

50. What if anything, does the migration contribute to individual & household livelihoods in Cash-1, Kind-2?

51. How would you rate your household's ability to satisfy its basic livelihood needs (food, clothes, goods, services, shelter, etc.) – Very strong/Self-sufficient-1, Average/Barely self-sufficient-2, Weak/Inadequate-3

F. PHYSICAL CAPITAL:

52. House/dwelling unit tenure: owned-1, rented-2, mortgaged-3, free use-4, other-5

53. Type of accommodation: Detached-1/Semi-Detached-2/Flat-3/Other-4.

54. Construction material used:

- ✓ Minimum (made of light materials, e.g., Poles/stick, leaves, mud, tarpaulin, etc.)-1;
- ✓ Low (made of light materials plus wood or galvanized metal)-2;
- ✓ Medium (combination of wood and galvanized metal)-3;
- ✓ High (made of concrete materials and galvanized roof)-4

55. What household assets do you own/have?

Items	Yes-1	No-2	Items	Yes-1	No-2
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HOUSEHOLD QUESTIONNAIRE

Radio			Telephone/Mobile		
Cassette Player			Sewing machine		
Television			Electric fan		
DVD/CD Player			Freezer		
Bicycle			Fridge		

56. Accessibility of the following facilities:

Facility	Yes-1	No-2	Facility	Yes-1	No-2
Medical facility			Education		
Electricity supply			Banking facility		
Postal service			Police/Security agency		
Waste disposal					

57. What is your main source of drinking water: tube-well-1, well-2 pond-3, river -4, tap-5, Other-6

58. Which of these do you own/is private property.....? Public facility
.....? Pay for
access.....?

59. What is your main source of cooking fuel? Fuel wood-1, Charcoal-2, electricity-3, kerosene-4. Liquid petroleum gas-5, Fuel wood+LPG-6, Fuel wood + Kerosene + LPG-7, Fuel wood+charcoal-8, kerosene and charcoal-9, charcoal+kerosene-10.

60. If wood/charcoal, what kind of stove do you use? Stones-1, Traditional/Improved metal-2, Traditional/Improved Clay-3, Improved mixed clay and metal-4..

61. What kind of toilet do you have? Modern/flush-1, Pit/traditional-2, Bucket-3, Other-4, None-5.

HOUSEHOLD QUESTIONNAIRE

62. Type of facility: Inside house-1, completely detached-2/Semi-detached/Adjoining-3, and Other-4.

63. Construction material used [Please tick the most appropriate]:

Minimum – 1	Low – 2	Medium – 3	High – 4	Other – 5
light materials, e.g., Poles/sticks, leaves, mud, tarpaulin, etc	light materials plus wood or galvanized metal	combination of wood and galvanized metal	concrete materials and galvanized roof	Please specify

64. Which of the following work-related assets/capitals do you own or rent/hire/lease? Own-1, Rent-2

Items	1	2	Items	1	2
Tube-Well			Outboard motors / engines		
Irrigation Pump			Poda-Poda		
Fishing Boat / Canoe and nets			Tipper lorries		
Power tiller			Motorbikes		
Tractor			Taxis		
Shovel / Pickaxe			Saw / Cutlass /Axe		
Other			Other		

G. ENVIRONMENT ASSESSMENT [VULNERABILITY / SHOCKS & RESILIENCE]:

65. Does this part of Goderich experience environmental problems like *flood, drought, coastal erosion, cliff fall/collapse, Bush/forest fires, deforestation, stone quarrying, sand mining, storms, noise pollution, air pollution, water pollution, etc.*? Yes-1, No-2

66. Which of the following areas are usually particularly affected?

Land Type	Yes – 1	No – 2
Residential Compound		
Streets / Roads		

HOUSEHOLD QUESTIONNAIRE

Drains / Gutter		
Markets		
Cemetery		
Shops		
Schools / Colleges		
Hospital / Clinic		
Council Offices		
Town Hall		
Cropland		
Fallowland		
Fish Pond		
Beaches		
Other [Please specify]		

67. Please indicate the extent/intensity of damage/destruction/impact associated with these problems in your village or town, and elsewhere in and around Goderich in the last 3-5 years.

Type of damage / impact	None - 1	Some damage – 2	Completely damage – 3
Farmland / Crops			
Livestock			
Fish pond			
Human lives			
Residential property			
Office buildings			
Roads			
Drainage			
Beach / Waterfront			
Fish grounds / waters			
Bush/forest/hunting grounds			
Forest land			
Other			

68. How satisfied or dissatisfied are you with access to, and the quantity and quality of the following assets and facilities in and around your village/town?

Asset / Facilities	Use code	Assets / Facilities	Use code
Agricultural land		Medical / health facility	
Forest / bush for NTFP, etc.		News	
Sand pit		Flood control and defenses	
Gravel / stone quarry		Markets and shops	

HOUSEHOLD QUESTIONNAIRE

Transport system and roads		Entertainment facilities	
Water supply		Beaches / seafront	
Education facility		Power / Energy [incl. street lightening]	
Solid & liquid waste disposal			

Code: satisfactory-1, not satisfactory-2, neither satisfied nor dissatisfied-3, don't know-4

69. Please suggest ways for improving the shortcomings identified in Q66:

70. What type of personal/family crisis have you experienced over the last two years?

Crisis	Yes-1	No-2	Crisis	Yes-1	No-2
Flood			Illness of a household member		
Drought			Death of a household member		
Fire			Loss of job		
River bank erosion			Theft		
Flood/water damage			Property/land seizure or confiscation		
Wind damage			Loss livestock/poultry		
Poor crop production/harvest			Injury at work		
Food shortage			Others(Specify)		

HOUSEHOLD QUESTIONNAIRE

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71. How were these resolved? If not, why not? [*Consider support from the government, family members, NGO aid and also loan received from banks or other sources*]

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72. What would improve the quality of life of your family/household the most [please consider support from central government, local council and NGO aid], and what is preventing you from achieving it [consider limitations to asset acquisition]?

Things to improve quality of life for family/household [Rank them in order, with 1 being the highest]	Limitations to sustained quality of life for family/household [Rank them in order, with 1 being the highest]

Appendix 6: Focus Group Consent Form

Title of Study: *Sustainable Livelihood Diversity: A Reflection on Practice in Goderich*

My name is Emerson Abraham Jackson. I am a PhD student at the Department of African Studies and Anthropology, University of Birmingham, UK. I am undertaking research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted. It is for this reason that I am inviting you to take part in a focus group interview as part of this research. Your participation in this focus group is voluntary and you will be free to withdraw at any time without reason or explanation. However, if you do decide to withdraw, it would be helpful for you to let me know before the end of December 2018, by which time I should have commenced data compilation and analysis for the study. Discussions from the focus group interview will be recorded using a digital device like a *Dictaphone*, but the information will be kept confidential and the only person that will have access to it is myself as the researcher for the study.

If you eventually consent to take part in the interview, you will be expected to keep information that other group members will have provided during the focus group discussion confidential from non-participants. All other participants in the focus group will be required to abide by the same rules of confidentiality. However, as this all depends entirely on focus group participants abiding by the request for confidentiality, I cannot guarantee that what you say during a focus group discussion will remain totally confidential. For that reason, please think about what you do say in the focus group and do let me know in confidence if there is anything you would like to say but that you do not want other people to hear, so that I can arrange a private discussion between just the two of us.

Please initial in the box to confirm your agreement of the following statements:

1. I have read and understood all the information provided in this form.
2. I have had the opportunity to ask questions about the content.

3. I understand that I can withdraw at any time without having to give a reason (until the end of December 2018). ☐
4. I understand that all data from this focus group will be securely stored under the terms of the UK data protection act and that records of the focus group will be kept private and confidential. ☐
5. I agree to keep what is said during this focus group confidential. ☐
6. I understand that although other members of the group have also agreed to keep what is said during the focus group confidential, no guarantee can be given that this confidentiality will be respected in all cases. ☐
7. Having read and understood all the above, I agree to take part in this study. ☐

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Appendix 7: Focus Group Oral Consent Script

Title of Study: *Sustainable Livelihood Diversity: A Reflection on Practice in Goderich*

My name is Emerson Abraham Jackson. I am a PhD student at the Department of African Studies and Anthropology, University of Birmingham, UK. I am undertaking research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted. It is for this reason that I am asking for your '*Oral Consent*' to take part in a focus group as part of this research. Your participation in this focus group is voluntary and you will be free to withdraw at any time without reason or explanation. However, if you do decide to withdraw, it would be helpful for you to let me know before the end of December 2018, by which time I should have commenced data compilation and analysis for the study. Discussions from the focus group interview will be recorded using a digital device like a *Dictaphone*, but the information will be kept confidential and the only person that will have access to it is myself as the researcher for the study.

If you eventually consent to take part in the interview, you will be expected to keep information that other group members will have provided during the focus group discussion confidential from non-participants. All other participants in the focus group will be required to abide by the same rules of confidentiality. However, as this all depends entirely on focus group participants abiding by the request for confidentiality, I cannot guarantee that what you say during a focus group discussion will remain totally confidential. For that reason, please think about what you do say in the focus group and do let me know in confidence if there is anything you would like to say but that you do not want other people to hear, so that I can arrange a private discussion between just the two of us.

Please initial in the box to confirm your agreement of the following statements:

1. I have read and understood all the information provided in this form.

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2. I have had the opportunity to ask questions about the content. ☐
3. I understand that I can withdraw at any time without having to give a reason (until the end of December 2018). ☐
4. I understand that all data from this focus group will be securely stored under the terms of the UK data protection act and that records of the focus group will be kept private and confidential. ☐
5. I agree to keep what is said during this focus group confidential. ☐
6. I understand that although other members of the group have also agreed to keep what is said during the focus group confidential, no guarantee can be given that this confidentiality will be respected in all cases. ☐
7. Having read and understood all the above, I agree to take part in this study. ☐

_____	_____	_____	_____
Name of Participant	Signature	Thumb Print	Date

_____	_____	_____	_____
Name of Researcher	Signature	Thumb Print	Date

Appendix 8: Questionnaire Schedule

Title of Study: *Sustainable Livelihood Diversity: A Reflection on Practice in Goderich*

My name is Emerson Abraham Jackson. I am a PhD student at the Department of African Studies and Anthropology, University of Birmingham, UK. I am undertaking research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted. It is for this reason that I am inviting you to take part in a *Questionnaire Survey* as part of this research. Your participation in this Questionnaire Survey exercise is voluntary and you will be free to withdraw at any time without reason or explanation. However, if you do decide to withdraw, it would be helpful for you to let me know before the end of December 2018, by which time I should have commenced data compilation and analysis for the study. Responses received as part of your participation in this questionnaire survey exercise will be stored securely for analysis, but the information will be kept confidential and the only person that will have access to it is myself as the researcher for the study.

If you eventually consent to take part in the survey, you will be expected to keep information that you have provided confidential from non-participants. All other participants in the survey exercise will be required to abide by the same rules of confidentiality. However, as this all depends entirely on all participants abiding by the request for confidentiality, I cannot guarantee that responses you have provided will remain totally confidential. For that reason, please think carefully about responses you provide on the questionnaire and do let me know in confidence if there is any information you would like to provide but that you do not wish to disclose openly on the questionnaire, so I can arrange a private discussion between just the two of us.

Please initial in the box to confirm your agreement of the following statements:

1. I have read and understood all the information provided in this form.
2. I have had the opportunity to ask questions about the content.

HOUSEHOLD QUESTIONNAIRE

3. I understand that I can withdraw at any time without having to give a reason (until the end of December 2018). ☐
4. I understand that all data from this focus group will be securely stored under the terms of the UK data protection act and that records of the focus group will be kept private and confidential. ☐
5. I agree to keep what is said during this focus group confidential. ☐
6. I understand that although other members of the group have also agreed to keep what is said during the focus group confidential, no guarantee can be given that this confidentiality will be respected in all cases. ☐
7. Having read and understood all the above, I agree to take part in this study. ☐

Name of Participant	Signature	Thumb Print	Date
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Name of Researcher	Signature	Thumb Print	Date
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Appendix 9: Self-Recording Consent Form

Title of Study: *Sustainable Livelihood Diversity: A Reflection on Practice in Goderich*

My name is Emerson Abraham Jackson. I am a PhD student at the Department of African Studies and Anthropology, University of Birmingham, UK. I am undertaking research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted. It is for this reason that I am inviting you to take part in a '*Self-recording exercise*' as part of this research. Your participation in this self-recording exercise is voluntary and you will be free to withdraw at any time without reason or explanation. However, if you do decide to withdraw, it would be helpful for you to let me know before the end of December 2018, by which time I should have commenced data compilation and analysis for the study. Discussions from the self-recording will be recorded using a digital device like a *Camcorder*, but the information will be kept confidential and the only person that will have access to it is myself as the researcher for the study.

If you eventually consent to take part in the self-recording exercise, you will be expected to keep information that you have provided confidential from non-participants. All other participants in the self-recording exercise will be required to abide by the same rules of confidentiality. However, as this all depends entirely on other self-recording participants' abiding by the request for confidentiality, I cannot guarantee that what you say during your participation will remain totally confidential. For that reason, please think about what you do say during self-recording and do let me know in confidence if there is anything you would like to say but you do not want anyone else to hear, so I can arrange a private time for discussion between just the two of us.

Please initial in the box to confirm your agreement of the following statements:

1. I have read and understood all the information provided in this form.
2. I have had the opportunity to ask questions about the content.

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3. I understand that I can withdraw at any time without having to give a reason (until the end of December 2018). ☐
4. I understand that all data from this focus group will be securely stored under the terms of the UK data protection act and that records of the focus group will be kept private and confidential. ☐
5. I agree to keep what is said during this focus group confidential. ☐
6. I understand that although other members of the group have also agreed to keep what is said during the focus group confidential, no guarantee can be given that this confidentiality will be respected in all cases. ☐
7. Having read and understood all the above, I agree to take part in this study. ☐

Name of Participant	Signature	Thumb Print	Date
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Name of Researcher	Signature	Thumb Print	Date
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Appendix 10: Oral Script for Interview Consent Form

Title of Study: *Sustainable Livelihood Diversity: A Reflection on Practice in Goderich*

My name is Emerson Abraham Jackson. I am a PhD student at the Department of African Studies and Anthropology, University of Birmingham, UK. I am undertaking research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted. It is for this reason that I am asking your '*Oral Consent to take part in an Interview*' as part of this research. Your participation in this interview is voluntary and you will be free to withdraw at any time without reason or explanation. However, if you do decide to withdraw, it would be helpful for you to let me know before the end of December 2018, by which time I should have commenced data compilation and analysis for the study. Discussions from the interview will be recorded using a digital device like a *Dictaphone*, but the information will be kept confidential and the only person that will have access to it is myself as the researcher for the study.

If you eventually consent to take part in the interview, you will be expected to keep information that you have provided during the interview confidential from non-participants. All other participants in the interview exercise will be required to abide by the same rules of confidentiality. However, as this all depends entirely on participants abiding by the request for confidentiality, I cannot guarantee that what you say during an interview discussion will remain totally confidential. For that reason, please think about what you do say in the interview and do let me know in confidence if there is anything you would like to say but that you wish for it to remain anonymous, so it can be noted during my analysis of interview responses.

Please initial in the box to confirm your agreement of the following statements:

1. I have read and understood all the information provided in this form.
2. I have had the opportunity to ask questions about the content.

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3. I understand that I can withdraw at any time without having to give a reason (until the end of December 2018). ☐
4. I understand that all data from this focus group will be securely stored under the terms of the UK data protection act and that records of the focus group will be kept private and confidential. ☐
5. I agree to keep what is said during this focus group confidential. ☐
6. I understand that although other members of the group have also agreed to keep what is said during the focus group confidential, no guarantee can be given that this confidentiality will be respected in all cases. ☐
7. Having read and understood all the above, I agree to take part in this study. ☐

Name of Participant	Signature	Thumb Print	Date
Name of Researcher	Signature	Thumb Print	Date

Appendix 11: Questionnaire/Household Survey – Oral Consent Script

Title of Study: *Sustainable Livelihood Diversity: A Reflection on Practice in Goderich*

My name is Emerson Abraham Jackson. I am a PhD student at the Department of African Studies and Anthropology, University of Birmingham, UK. I am undertaking research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted. It is for this reason that I am asking your '*Oral Consent to take part in a Questionnaire Survey Exercise*' as part of this research. Your participation in this survey is voluntary and you will be free to withdraw at any time without reason or explanation. However, if you do decide to withdraw, it would be helpful for you to let me know before the end of December 2018, by which time I should have commenced data compilation and analysis for the study. Responses from the survey will be securely analysed on a computer, but the information will be kept confidential and the only person that will have access to it is myself as the researcher for the study.

If you eventually consent to take part in the survey, you will be expected to keep information that you have provided during the survey confidential from non-participants. All other participants in the survey exercise will be required to abide by the same rules of confidentiality. However, as this all depends entirely on participants abiding by the request for confidentiality, I cannot guarantee that what you say during your survey exercise will remain totally confidential. For that reason, please think about your responses during the survey and do let me know in confidence if there is anything you would like to provide but that you wish for it to remain anonymous, so it can be noted during my analysis of the survey responses.

Please initial in the box to confirm your agreement of the following statements:

1. I have read and understood all the information provided in this form.
2. I have had the opportunity to ask questions about the content.

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3. I understand that I can withdraw at any time without having to give a reason (until the end of December 2018). ☐
4. I understand that all data from this focus group will be securely stored under the terms of the UK data protection act and that records of the focus group will be kept private and confidential. ☐
5. I agree to keep what is said during this focus group confidential. ☐
6. I understand that although other members of the group have also agreed to keep what is said during the focus group confidential, no guarantee can be given that this confidentiality will be respected in all cases. ☐
7. Having read and understood all the above, I agree to take part in this study. ☐

Name of Participant	Signature	Thumb Print	Date
Name of Researcher	Signature	Thumb Print	Date

Appendix 12: Participant Observation – Introduction to the Research

Title of Study: *Sustainable Livelihood Diversity: A Reflection on Practice in Goderich*

My name is Emerson Abraham Jackson. I am a PhD student at the Department of African Studies and Anthropology, University of Birmingham, UK. I am undertaking research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted. It is for this reason that I wish to announce my role as a participant in this research. Information collected during my participation as an observer will be used in my analysis, but these will be kept confidential and the only person that will have access to your information is myself as the researcher for the study. However, if you do feel uncomfortable about my presence as an observer during an exercise, for example focus group or self-recording, it would be helpful for you to let me know in confidence before the end of December 2018, by which time I should have commenced data compilation and analysis for the study.



Appendix 13: Participant Information Sheet

PARTICIPANT INFORMATION SHEET

WORKING TITLE: *SUSTAINABLE LIVELIHOOD DIVERSITY: A REFLECTION ON PRACTICE IN GODERICH*

Dear Participant,

Thank you for showing an interest in the above mentioned study. Here are some information provided regarding the nature of my investigation, along with answers to some questions you may wish to ask. You will be supported throughout the way in answering further questions you may wish to answer during the course of your participation in the research exercise. Please feel free to ask questions along the way in the event that you feel like doing so.

Location of the study:

The study will take place in Goderich, now considered a sub-urban part of Freetown, the capital city of Sierra Leone. For more information about research in the department of African Studies and Anthropology (DASA), please visit:

<https://www.birmingham.ac.uk/schools/historycultures/departments/dasa/research/index.aspx>

Investigators:

Mr. Emerson Abraham Jackson,
Doctoral Researcher,
Department of African Study and Anthropology,
University of Birmingham

Who is funding the research?

The research study is self-funded, but with support from the University to cover expenses in carrying out field investigation.

Who is to take part in the study?

I am looking for individuals with the following criteria:

2. Male and Female
3. Aged 18+ years old
4. Residents in the wider area of Goderich covering: Sherbro Town, Antar Town, Oba Funkia, Milton Margai College of Education and Technology, Fonima, Maggay Town, 7th Battalion, Adonkia and Ogu Farm.
5. Participants as demonstrated by voluntary written informed consent

What is the study about?

I am undertaking the research to find out the different things people in and around Goderich do for a living; where and how they undertake these livelihood activities; and whether and to what extent these livelihoods meet people's subsistence and other needs. I am also interested in finding out how these livelihoods have changed over time, including during the civil war, and what the biggest advantages of, and most serious challenges associated with, these activities are at the current time. Finally, I am interested in what different people

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think might be the best way to make their livelihoods more secure in the short term and more sustainable over the long term. I will use the findings from the research to write a thesis for my degree, and the thesis will be deposited at the University of Birmingham. All or some of the information in the thesis will be published in journals, or as a whole book, or as chapters in books. I intend to disseminate the research findings as widely as possible. I will therefore be discussing them with colleagues in other universities, as well as in NGOs, the private sector and relevant government ministries, departments and parastatals. I will also be sharing them with elected representatives and other officials in local and city councils. In particular, I will be discussing the findings with the specialist livelihood groups and their wider neighbourhood/town communities in Goderich, both separately and together in larger town meetings. I hope that the research will promote dialogue between stakeholders in Goderich, as well as between them and stakeholders based elsewhere, both nationally and internationally, and that such dialogue will help to make policy formulation and other kinds of livelihood intervention both better informed and more targeted.

How will I be involved?

Your participation in this study will involve one or all of the undermentioned activities:

- Questionnaire Survey
- Focus Group Interview
- Personal / One-to-One Interview
- Self-recording

Preliminary visitation / Discussion:

This exercise will involve an opportunity for your views to be heard about livelihood activities and challenges in your sustained access to assets. Access will be sought through contacts made with local organisations / institutions like Churches, Mosques and others. Once questions are satisfactorily answered and authorisation given by the Ethics Committee at the University of Birmingham, consent forms for each of the above mentioned activities will be issued for your authorisation [*signature or finger print*]. Finally, you will receive instruction on how each exercise will be conducted and also specifics of timeline or date[s], which should be done within two months.

How do I benefit from participation?

By taking part in this study, you will have the opportunity to express your views about the creation of relevant livelihood assets that will help improve your life-style, while at the same time managing the environment sustainably for the benefit of both present and future generations.

Are there any risks involved in participation?

There are no obvious noticeable risks to your participation, but the researcher will endeavour to support you, particularly during interviews and participant observation sessions in addressing areas of particular concerns on how assets are currently being utilised by people in Goderich. At this point, I will encourage your indulgence in limiting stigmatisation of people considered as being engaged in some form of activities others would regard as destructive to the environment in Goderich. In this regard, you will be

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encouraged to embrace diversity, while at the same time finding a lasting solution to situations people may considered as being unconventional.

Can I change my mind?

If at any point you wish to withdraw from the study, you may do so without providing a reason. In doing so, I will indulge you to exercise patience about issues or points you may consider too sensitive to your concerns. Participation in the exercise is NOT compulsory and therefore, prior to committing yourself, I will ask that you think carefully about your intentions and your time to enable the exercise to be successfully complete within the allocated time.

What happens to my information?

Personal data like age, sex, address, etc., collected as part of the research exercise will be stored in a safe environment by the principal researcher. In line with the University's guidelines on records management, research data will be retained for a period of ten years from the date of collection. Should you wish to withdraw from the study, your research data will be destroyed, and subsequently your opinion / data will not be included in any publications. Results from the study will remain the copyright of the University of Birmingham, but it is possible that subsequent publication of excerpt of it will be utilised for scientific publication(s) in referred journal articles. Please be rest assured that your name will never be published and all data will remain completely confidential.

What happens if something goes wrong during the research process?

All procedures have been included within the University of Birmingham Liability Insurances and if by no reason of yours, you are [physically or psychologically] hurt through your participation in the research exercise, your normal rights will apply and you may have grounds for legal action.

Complaints procedure:

If you have any complaints regarding my approach to you or anything else relating to the research exercise, please send your complain to my research supervisor for this exercise, who will be the first point of contact for the University of Birmingham to investigate matters fully.

Dr Reginald Cline-Cole
Senior Lecturer,
Arts Building,
The University of Birmingham,
Edgbaston,
Birmingham B15 2TT
United Kingdom
Tel: [REDACTED]
Email: [REDACTED]

What do I do next?

If you feel you would like to be involved in this study, have any questions, or would like some further information, please contact *Emerson Abraham Jackson* to arrange further

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meetings or expressing your concerns about the exercises [*Survey, Focus Group Interview and Personal Interview*] that are meant to be carried as part of this research. If you confirm that you do wish to participate, a time and date for the initial visit will be arranged, where you will be asked to complete relevant informed consent forms to confirm that you are happy to participate in this study.

Contacts:

Mr Emerson Abraham Jackson

Phone: [REDACTED] or [REDACTED]

Email: [REDACTED] or [REDACTED]

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Appendix 14: Ethics Review Form

UNIVERSITY OF BIRMINGHAM APPLICATION FOR ETHICAL REVIEW
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Who should use this form?

This form is to be completed by PIs or supervisors (for PGR student research) who have completed the University of Birmingham's Ethical Review of Research Self-Assessment Form (SAF) and have decided that further ethical review and approval is required before the commencement of a given Research Project.

Please be aware that all new research projects undertaken by postgraduate research (PGR) students first registered as from 1st September 2008 will be subject to the University's Ethical Review Process. PGR students first registered before 1st September 2008 should refer to their Department/School/College for further advice.

Researchers in the following categories are to use this form:

1. The project is to be conducted by:
 - staff of the University of Birmingham; or
 - postgraduate research (PGR) students enrolled at the University of Birmingham (to be completed by the student's supervisor);
2. The project is to be conducted at the University of Birmingham by visiting researchers.

Students undertaking undergraduate projects and taught postgraduate (PGT) students should refer to their Department/School for advice.

NOTES:

- An electronic version of the completed form should be submitted to the Research Ethics Officer, at the following email address: aer-ethics@contacts.bham.ac.uk. Please do not submit paper copies.
- If, in any section, you find that you have insufficient space, or you wish to supply additional material not specifically requested by the form, please it in a separate file, clearly marked and attached to the submission email.
- If you have any queries about the form, please address them to the Research Ethics Team.

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HOUSEHOLD QUESTIONNAIRE

☒ Before submitting, please tick this box to confirm that you have consulted and understood the following information and guidance and that you have taken it into account when completing your application:

- The information and guidance provided on the University's ethics webpages (<https://intranet.birmingham.ac.uk/finance/accounting/Research-Support-Group/Research-Ethics/Ethical-Review-of-Research.aspx>)
- The University's Code of Practice for Research (http://www.as.bham.ac.uk/legislation/docs/COP_Research.pdf)

HOUSEHOLD QUESTIONNAIRE

UNIVERSITY OF BIRMINGHAM APPLICATION FOR ETHICAL REVIEW	<i>OFFICE USE ONLY:</i> Application No: Date Received:
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1. TITLE OF PROJECT

RESEARCHING LIVELIHOODS IN GODERICH, SIERRA LEONE

2. THIS PROJECT IS:

University of Birmingham Staff Research project ☐
 University of Birmingham Postgraduate Research (PGR) Student project ☒
 Other ☐ (Please specify):

3. INVESTIGATORS

a) PLEASE GIVE DETAILS OF THE PRINCIPAL INVESTIGATORS OR SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family name	Dr. Reginald Cline-Cole
Highest qualification & position	PhD, Senior Lecturer
School/Department	African Studies & Anthropology
Telephone:	
Email address:	

Name: Title / first name / family name	
Highest qualification & position	
School/Department	
Telephone:	
Email address:	

b) PLEASE GIVE DETAILS OF ANY CO-INVESTIGATORS OR CO-SUPERVISORS (FOR PGR STUDENT PROJECTS)

Name: Title / first name / family name	
Highest qualification & position	
School/Department	
Telephone:	
Email address:	

c) In the case of PGR student projects, please give details of the student

HOUSEHOLD QUESTIONNAIRE

Name of student:	Emerson Abraham Jackson	Student No:	
Course of study:	PhD African Studies	Email	
Principal	Dr Reginald Cline-		

Name of student:		Student No:	
Course of study:		Email	
Principal			

4. ESTIMATED START OF Date: August 2019
PROJECT

ESTIMATED END OF Date: July 2020 PROJECT
FUNDING

List the funding sources (including internal sources) and give the status of each source.

Funding Body	Approved/Pending /To be submitted
Personal finance.	

If you are requesting a quick turnaround on your application, please explain the reasons below (including funding-related deadlines). You should be aware that whilst effort will be made in cases of genuine urgency, it will not always be possible for the Ethics Committees to meet such requests.

5. SUMMARY OF PROJECT

Describe the purpose, background rationale for the proposed project, as well as the hypotheses/research aim to be examined and expected outcomes. This description should be in everyday language that is free from jargon. Please explain any technical terms or discipline-specific phrases.

This project will undertake an assessment of livelihoods in Goderich, a dormitory settlement on the western edge of the Sierra Leonean capital, Freetown. Livelihoods refer to the various ways individuals and groups earn a living. They can be either urban or rural, based on their location, and natural resource (NR) based (farming, fishing, hunting, mining, etc.) or Non NR based (trade, transport, etc.), depending on the strategies employed. All four livelihood types are found in peri-urban Goderich, where an increasingly diverse population of livelihood practitioners pursues a multiplicity of livelihood strategies, often in complex and dynamic combinations. Academic and applied interest in livelihoods coalesce around a shared desire to promote development interventions which aim to combine economic growth with poverty reduction and are informed by a detailed understanding of the strategies of livelihood practitioners. Consequently, well-established survey and participatory methods for researching the lives and logics which underpin these strategies exist, but are subject to constant review and continuous improvement, most recently in enhancing their utility in generating policy-relevant information.

The project's main aim is three-fold:

.... Based on Uprety (2004), among others, to establish for the very first time a comprehensive set of baseline survey data indicating livelihood systems, practices and dynamics in and around Goderich.

....Following de Haan and Zoomers (2006) and Sanderson and Westley (2000), to describe, analyse and account for the nature and extent of *contextualisation* (main issues affecting local households in their pursuit of livelihoods), *differentiation* (forms of socio-economic differentiation between households) and *disaggregation* (intra-household diversity in roles, status, etc.) characterising livelihoods and their practitioners in Goderich; and

....Demonstrate the significance of different livelihood strategies for individual and group existences, and highlight their implications for policy.

Sanderson, D. and Westley, K. (2000) *Participatory Urban Livelihoods Assessment*, Kosovo, CARE International UK, Urban Briefing Note, London. <http://www.alnap.org/resource/7182>

de Haan, L.J. and Zoomers, A. (2006). How to research the changing outlines of African Livelihood. *Africa Development*, Vol. XXXI, No. 5, pp. 121-150.

<https://www.ajol.info/index.php/ad/article/view/135810>

Uprety, D.K. (2004). *Methodologies for Conducting a Livelihoods Baseline Study*.

Livelihoods and Forestry Programme, Nepal.

<https://nishat2013.files.wordpress.com/2013/11/methodologies-for-conducting-a-baseline-survey-of-livelihoods.pdf>

6. CONDUCT OF PROJECT

Please give a description of the research methodology that will be used

HOUSEHOLD QUESTIONNAIRE

The research will be conducted via a mix of survey, participatory and interview methods.

Participatory appraisal and census/activity mapping of livelihood activities in and around the neighbourhoods/wards (or 'towns' as they are known locally) in Goderich. This involves: (i) using standard survey techniques and inspection of google and other remotely sensed images, to establish the incidence and concentration of activities and their practitioners; (ii) transferring this information on to existing base maps or, in the absence of such maps, constructing free-hand sketches for later development into comprehensive base maps; and (iii) undertaking censuses to establish population sizes and socio-economic and other characteristics of practitioners and households.

Structured, semi-structured and open-ended interviews, including focus group discussions (FGD), so-called expert interviews and (repeat) questionnaire survey visits, will be carried out with a variety of relevant individuals and groups, to include:

- Sample practitioners of different livelihood activities and their recognised (guild or other) officials/representatives.
- Relevant agents of central, local and municipal government and parastatals, as well as locally-and nationally-active NGOs.
- Cross-section of households from different wards/neighbourhoods (or 'towns' as they are known) in Goderich.

Participant Observation will involve the researcher spending time observing and, some of the time, taking the opportunity to participate directly in actual livelihood activities in a variety of livelihood zones/localities/settings, as well as attending relevant meetings/briefings and social functions/occasions, etc., related to policy and practice of any or all of the activities under study.

A variation on the standard participant observation method described above will involve Self-Recording of day-to-day livelihood activities and situations by a selection of research participants engaged in the activities in question. Participants provided with digital recording equipment will be encouraged to make audio/video/photographic recordings of themselves and their colleagues in what they consider 'typical' and 'unusual' work settings and related contexts/situations, in addition to recording individual and group reflections on the perceived problems and prospects of their respective livelihoods.

7. DOES THE PROJECT INVOLVE PARTICIPATION OF PEOPLE OTHER THAN RESEARCHERS AND SUPERVISORS?

Yes ☒ No ☐

Note: 'Participation' includes both active participation (such as when participants take part in an interview) and cases where participants take part in the study without their knowledge

HOUSEHOLD QUESTIONNAIRE

and consent at the time (for example, in crowd behaviour research).

If you have answered NO please go to Section 18. If you have answered YES to this question please complete all the following sections.

8. PARTICIPANTS AS THE SUBJECTS OF THE RESEARCH

Describe the number of participants and important characteristics (such as age, gender, location, affiliation, level of fitness, intellectual ability etc.). Specify any inclusion/exclusion criteria to be used.

As the research will concentrate on livelihood activities based in and around Goderich, it will incorporate both Goderich residents and non-resident 'outsiders' who depend wholly or partly on local resources for their livelihoods.

The aim is to interview about *250-300 participants in total*, distributed roughly as follows:

- About *120* households.
- Roughly *ten* respondents from *each of the six or so* major livelihood practitioner groups.
- *Four to five* neighbourhood Focus Groups of *5-10 members each*.
- *15-20* people from central, local and municipal government and parastatals
- *15-20* representatives from inter/national NGOs and other relevant organisations

9. RECRUITMENT

Please state clearly how the participants will be identified, approached and recruited. Include any relationship between the investigator(s) and participant(s) (e.g. instructor-student).

Note: Attach a copy of any poster(s), advertisement(s) or letter(s) to be used for recruitment.

The research will be publicised through relevant local institutions and networks, both formal and informal, as well as by word of mouth. The researcher will seek to engage municipal authority and community leaders, as well as the wider Goderich community, by making direct presentations about the research to audiences and arranging for information about the project to be disseminated via churches, alumni associations, neighbourhood groups, markets, etc. Representatives and officials of relevant national and international organisations will be contacted directly to arrange meetings, interviews and observer access to relevant deliberations.

Households for one-off surveys and repeat interviews will be selected through stratified random sampling based on official statistics where available, and using a version of Malleson et al's (2008) hierarchical sampling methodology in the absence of census data. Individual households will then be approached directly and recruited. Practitioners of the various local livelihood activities will be approached directly or via intermediaries, with subsequent recruitment being based on snowball sampling.

Malleson, Ruth; Asaha, Stella; Sunderland, Terry; Burnham, Philip; Egot, Martins; Obeng-Okrah, Kwaku; Ukpe, Imabong; and Miles, Wendy, 'A Methodology for Assessing Rural Livelihood Strategies in West/Central Africa: Lessons from the field' (2008). Ecological and Environmental Anthropology (University of Georgia). 25.
<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1026&context=icwdmee>
a

10. CONSENT

a) Describe the process that the investigator(s) will be using to obtain valid consent. If consent is not to be obtained explain why. If the participants are minors or for other reasons are not competent to consent, describe the proposed alternate source of consent, including any permission / information letter to be provided to the person(s) providing the consent.

In every case (participant observation, questionnaire administration, open-ended interview, focus group session), the researcher will introduce himself and his research, explain the purpose and proposed method of the research and seek agreement in the form of oral and/or written consent for respondent inclusion or participation in the study. The information communicated will be the same as that on the participation information sheet, and will include advice on the respondent's right to decline or refuse participation at the start or withdraw consent at any stage subsequently. Individual consent will always be sought in group situations (including during self-recording) and, where participation involves repeat encounters, ongoing consent will be confirmed at the start of each encounter. Participants in charge of audio/video (self-)recording will be reminded of the need for permission to be obtained from those featuring on any of the recordings on an ongoing basis (usually in advance), and for such content to be 'captured' or saved as part of the recording. All participants will receive copies of the participant information sheet and relevant consent forms, which will be kept constantly updated.

All communication related to the research will be conducted in Sierra Leonean Krio (the regional and national lingua franca) and/or English (the official language), with versions of the participant information sheet and consent form being made available in both languages.

HOUSEHOLD QUESTIONNAIRE

Note: Attach a copy of the Participant Information Sheet (if applicable), the Consent Form (if applicable), the content of any telephone script (if applicable) and any other material that will be used in the consent process.

- b) Will the participants be deceived in any way about the purpose of the study? Yes ☐
No ☒

If yes, please describe the nature and extent of the deception involved. Include how and when the deception will be revealed, and who will administer this feedback.

11. PARTICIPANT FEEDBACK

Explain what feedback/ information will be provided to the participants after participation in the research. (For example, a more complete description of the purpose of the research, or access to the results of the research).

Copies of summary findings of the research will be made available to those who have participated directly in the research, as well as the wider Goderich community in easy-to-read visual/graphic, as well as standard text formats in both English and Krio. The researcher will also arrange 'town hall' meetings at which he will make oral presentations of project findings directly to local audiences.

Summary reports or copies of the complete thesis will be provided to relevant government, parastatal, non-governmental and academic institutions/organisations which have contributed directly and indirectly to the research, with the researcher also indicating his willingness to make academic or policy-focussed presentations in person where this would be of interest.

12. PARTICIPANT WITHDRAWAL

- a) Describe how the participants will be informed of their right to withdraw from the project.

Participants will be informed of their right to withdraw from the research when they are first canvassed to participate in the research and their consent is being sought. They will be reminded of this right to withdraw at the end of their active association with the project, regardless of the form of association in question. This will also be included in the copies of participant information sheet and/or consent form which they will be given if/when they agree to participate in the project.

HOUSEHOLD QUESTIONNAIRE

- b) Explain any consequences for the participant of withdrawing from the study and indicate what will be done with the participant's data if they withdraw.

There will be no adverse consequences for participants who withdraw from the research at any stage. Information collected from participants who withdraw before the end of fieldwork will be destroyed, while respondents who withdraw during data analysis and thesis writing-up will be given final say on whether their information is included in the final thesis or not.

13. COMPENSATION

Will participants receive compensation for participation?

- i) Financial ☐ ☐ Yes ☐ No ☒
- ii) Non-financial ☐ Yes ☐ No ☒

If Yes to either i) or ii) above, please provide details.

Participants will not normally be compensated for taking part in the research, although small gifts in cash and/or kind will be given to those who have been particularly helpful, while others who have incurred travel or other costs/expenses related specifically to their participation in the research will have these refunded. All such 'considerations' will be made at the end of the research, and will not be made a condition of participation, which will remain entirely voluntary.

If participants choose to withdraw, how will you deal with compensation?

Participants who choose to withdraw will not be compensated, although serious consideration will be given to refunding research-related expenses as explained above.

14. CONFIDENTIALITY

- a) Will all participants be anonymous? Yes ☐ No ☒
- b) Will all data be treated as confidential? Yes ☒ No ☐

Note: Participants' identity/data will be confidential if an assigned ID code or number is used, but it will not be anonymous. Anonymous data cannot be traced back to an individual participant.

Describe the procedures to be used to ensure anonymity of participants and/or confidentiality of data both during the conduct of the research and in the release of its findings.

As the research will involve data collection during Focus Group Discussion and participant observation, on the one hand, and digital audio/video recording, on the other, all of which are forms of ‘audience participation’, it will be impossible to guarantee anonymity of participants in these instances. Nor can the anonymity of households selected for the questionnaire survey be guaranteed either, as the researcher’s presence will not go unnoticed by neighbours and passers-by even if the actual interview takes place in private. Consequently, all information, including questionnaire data and audio recordings, will be treated as confidential (with codes rather than personal information being used to identify questionnaires, recordings, etc.). And, except where express permission to dispense with anonymity has been given by participants, data will only be disseminated in formats designed to conceal their exact origins (eg, use of pseudonyms, aggregating data, etc). Participants will be encouraged to treat all research information in strict confidence at all times, and no sensitive information (eg, unauthorised participation in a controlled or banned activity) will be shared with anyone outside the research team.

If participant anonymity or confidentiality is not appropriate to this research project, explain, providing details of how all participants will be advised of the fact that data will not be anonymous or confidential.

Participants will be informed of the limits of anonymity when consent is sought, and will be reminded of this at appropriate points, for eg at the start of FGDs/digital recordings, and offered the opportunity to discuss sensitive information in private. They will also be assured that all information they provide will be both considered and treated as confidential, regardless of whether it is collected in private or not, and will be encouraged in turn to treat project-related information from and about other people as confidential.

15. STORAGE, ACCESS AND DISPOSAL OF DATA

Describe what research data will be stored, where, for what period of time, the measures that will be put in place to ensure security of the data, who will have access to the data, and the method and timing of disposal of the data.

Data handling, storage and disposal will be guided by the UoB Code of Practice for Research (www.as.bham.ac.uk/legislation/docs/COP_Research.pdf). All data will be coded and digitized, with raw and processed data being stored separately from the codes linking it to individuals, households and groups who provided the information. Both sets of data will be kept securely under lock and key, with access being restricted to the researcher and any assistants. And, as the data will be stored mostly on external storage devices in Sierra Leone, it will be encrypted and password protected. Similar precaution will be taken to safeguard data integrity and security in Birmingham, where secure UoB servers will be used to store encrypted and password-protected data as backup that only the researcher will be able to access. Research data will be stored securely for 10 years following the submission of the thesis, after which it will be destroyed.

HOUSEHOLD QUESTIONNAIRE

16. OTHER APPROVALS REQUIRED? e.g. Criminal Records Bureau (CRB) checks or NHS R&D approvals.

YES X NO ☐ NOT APPLICABLE
☐

If yes, please specify.

No formal permission will be required from any state organisation for the research as a whole to be carried out. Nonetheless, official communication from UoB introducing the researcher and his research, and confirming the purely academic nature of the research, will facilitate access to, and acceptance by, central and local government officials and relevant non-state and community representatives, whose support will be invaluable in securing acceptance of the project among prospective participants and the wider Goderich community.

17. SIGNIFICANCE/BENEFITS

Outline the potential significance and/or benefits of the research

By providing the first comprehensive set of baseline livelihood survey data anywhere in the country, the research should encourage academic and policy interest in a holistic and multi-disciplinary approach to livelihoods. Where livelihoods have been studied in the past, they have tended to be considered ‘separate’ or ‘autonomous’ activities, with inadequate attention being paid to the interconnected and sometimes mutually reinforcing nature of the activities in question. Nor indeed has enough attention been paid to the frequently multi-local nature and multi-scalar characteristics of livelihoods which are much in evidence in an area like peri-urban Goderich. Also, by adopting a people-centred approach, the research should not only allow Goderich-based livelihoods to be situated within wider processes of regional and peri-urban change and transformation, but also contribute to a much better understanding of the role (sustainable) livelihoods might play in the pursuit of poverty reduction. Ultimately, the research will highlight both the practical value and policy significance of comprehensive baseline data, in addition to demonstrating how such information might be effectively and reliably acquired.

18. RISKS

a) Outline any potential risks to INDIVIDUALS, including research staff, research participants, other individuals not involved in the research and the measures that will be taken to minimise any risks and the procedures to be adopted in the event of mishap

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There are no particular safety/travel concerns in relation to research staff and participants or individuals not involved in the research. Where participants divulge sensitive information about their activities which might, were it to become public knowledge or be brought to the attention of the environmental and natural resource management services, threaten the security and sustainability of their livelihoods, or those of others, every effort will be made to minimise the risk of such confidentiality being breached in the manner described previously.

At the same time, the possibility of both small(er) meetings involving rival craft guilds or competing livelihood groups and/or (sometimes much) larger neighbourhood and town hall meetings occasionally developing into tense, confrontational affairs is one that cannot be completely discounted. Thus these will need to be preceded by wide consultation, in addition to being meticulously planned, carefully orchestrated and skilfully run on the day. However, as these confrontations have thus far never descended into physical violence, this is no more than a carefully considered and eminently manageable risk. Furthermore, should the need arise, local dispute resolution and community conflict prevention mechanisms which are now both well established and widely used in post-civil war Sierra Leone will be used.

The researcher, who will conduct most of the research himself, is from Goderich and standard safety precautions will be observed at all times.

HOUSEHOLD QUESTIONNAIRE

- b) Outline any potential risks to THE ENVIRONMENT and/or SOCIETY and the measures that will be taken to minimise any risks and the procedures to be adopted in the event of mishap.

The various livelihood activities in evidence in and around Goderich all have identifiable if varied, complex and contradictory socio-ecological impacts, which will come under close scrutiny as part of the research. However, the research itself should not pose any risk to either society or environment. Measures taken to minimise risk here will thus be broadly the same as those taken for potential risks to individuals listed above.

19. ARE THERE ANY OTHER ETHICAL ISSUES RAISED BY THE RESEARCH?

Yes ☐ No ☒

If yes, please specify

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20. EXPERT REVIEWER/OPINION

You may be asked to nominate an expert reviewer for certain types of projects, including those of an interventional nature or those involving significant risks. If you anticipate that this may apply to your work and you would like to nominate an expert reviewer at this stage, please provide details below.

Name
Contact details (including email address)
Brief explanation of reasons for nominating and/or nominee's suitability

21. CHECKLIST

Please mark if the study involves any of the following:

- Vulnerable groups, such as children and young people aged under 18 years, those with learning disability, or cognitive impairments ☐

HOUSEHOLD QUESTIONNAIRE

- Research that induces or results in or causes anxiety, stress, pain or physical discomfort, or poses a risk of harm to participants (which is more than is expected from everyday life) ☐
- Risk to the personal safety of the researcher ☐
- Deception or research that is conducted without full and informed consent of the participants at time study is carried out ☐
- Administration of a chemical agent or vaccines or other substances (including vitamins or food substances) to human participants. ☐
- Production and/or use of genetically modified plants or microbes ☐
- Results that may have an adverse impact on the environment or food safety ☐
- Results that may be used to develop chemical or biological weapons ☐

Please check that the following documents are attached to your application.

	ATTACHED	NOT APPLICABLE
Recruitment advertisement	☐	X
Participant information sheet	x ☐	☐
Consent form	x ☐	☐
Questionnaire	x ☐	☐
Interview Schedule	☐	☒

22. DECLARATION BY APPLICANTS

I submit this application on the basis that the information it contains is confidential and will be used by the University of Birmingham for the purposes of ethical review and monitoring of the research project described herein, and to satisfy reporting requirements to regulatory bodies. The information will not be used for any other purpose without my prior consent.

I declare that:

HOUSEHOLD QUESTIONNAIRE

- The information in this form together with any accompanying information is complete and correct to the best of my knowledge and belief and I take full responsibility for it.
- I undertake to abide by University Code of Practice for Research (http://www.as.bham.ac.uk/legislation/docs/COP_Research.pdf) alongside any other relevant professional bodies' codes of conduct and/or ethical guidelines.
- I will report any changes affecting the ethical aspects of the project to the University of Birmingham Research Ethics Officer.
- I will report any adverse or unforeseen events which occur to the relevant Ethics Committee via the University of Birmingham Research Ethics Officer.

Name of principal investigator/project supervisor:

Reginald Cline-Cole

Date:

16 July 2019

Please now save your completed form, print a copy for your records, and then email a copy to the Research Ethics Officer, at aer-ethics@contacts.bham.ac.uk. As noted above, please do not submit a paper copy.