Rural Livelihoods in Sierra Leone: Longitudinal Insights from Panguma and Kayima

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Abstract

‘Sustainability’ has become a buzz word in development in recent decades, particularly in relation to livelihoods approaches. ‘Sustainable development’ is commonly defined as that which meets the needs of the present without compromising the ability of future generations to meet their own needs; while in the livelihood context, sustainability is taken to mean the ability to maintain and improve livelihoods while maintaining or enhancing the local and global assets and capabilities on which livelihoods depend. In line with these conceptualisations, livelihoods research and practice tends to focus on a snapshot of livelihood systems in the present context, with the aim of enhancing their future capacity in a sustainable way. In contrast, there are relatively few examples of studies which seek to understand livelihood systems in specific rural communities over a long period of time, particularly in an African context. This research seeks to address this deficit by exploring continuity and change in rural livelihoods over a forty year period in Panguma and Kayima, two small towns in the Eastern Province of Sierra Leone. Over this time, Sierra Leone has been stalked by social, economic and environmental instability. Thirty years of often corrupt and dysfunctional governance led to a brutal civil war throughout the 1990s, which resulted in more than 50,000 deaths, and the displacement of over half the population; climate change has created uncertainty
regarding the sustainability of traditional agricultural practices; and communicable
diseases such as malaria and Lassa Fever remain constant threats, while the recent
Ebola epidemic has had a significant impact on the predominantly agricultural
population’s ability to generate a livelihood. In addition, local-scale shocks such as
the loss of crops due to pests, fire or theft, or the incapacitation of a household
member through illness, injury or death, can have an equally dramatic impact on
people’s livelihoods. Faced with this omnipresent vulnerability, the rural
communities of Panguma and Kayima have demonstrated remarkable resilience,
adapting livelihood strategies in order to mitigate the impact of each challenge over
the forty year period covered by this study, but despite such resilience, there has been
little discernible improvement in livelihood outcomes for the majority of households.
Taking a longitudinal approach, thus, not only enables this research to explore the
changes that have occurred within rural livelihood systems in Sierra Leone over time,
but also why those changes have not translated into improved livelihood outcomes.
In doing so, it identifies some of the key priorities and challenges for future
development in Panguma and Kayima which could, in turn, inform development
initiatives within those communities, as well as rural development policy in Sierra
Leone and further afield. In addition to these policy-driven implications, this thesis
also explores the potential benefits and limitations of incorporating a longitudinal
dimension within livelihoods research, and situating it within an analysis of the wider
political economy, and thus contributes to broader theoretical discussions around
livelihoods approaches to development. Moreover, given that this longitudinal
dimension spans pre-, intra- and post-conflict periods, this thesis also contributes to
the emerging nexus of conflict and development literature.
Acknowledgements

This thesis uses a participatory methodology within a livelihoods approach to understand long-term change in Panguma and Kayima, and identify some of the key priorities and challenges for future development in those communities. As will be alluded to in Chapter 1, and discussed in depth in Chapter 2, such an approach places local people, and the priorities they define, at the centre of analysis and objective setting. It is only right, therefore, that the people of Panguma and Kayima are also at the forefront when it comes to acknowledgements. I am deeply indebted to both communities for making me feel welcome and safe during my extended stays, and wholeheartedly supporting and participating in this research project. Particular thanks must go to Paramount Chief Farma of Panguma, Paramount Chief Fasuluku of Kayima, and their respective chiefdom councils, for allowing me to live and work within their communities; Father Andrew Mondeh, and his extended family, for taking such great care of me in Panguma, and S.B. and Fia Sonsiama, and their extended family, for doing likewise in Kayima; and my band of research assistants, George Mugbe, Joseph Turay, Gibrille Jah and Roda Muslimani in Panguma, and Tamba Sogbeh and Francis Turay in Kayima, who all contributed immensely to the research process, and taught me so much about life in Panguma and Kayima. Special
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Closer to home, I am bound by gratitude to many at the University of Otago. In particular, I would like to thank my supervisors - Professor Tony Binns, for encouraging me to take on a PhD, allowing me access to his research from the 1970s, and introducing me to the wonders of Sierra Leone; and Professor Etienne Nel, for his calm nature, probing questions and sound advice. Their comments on each draft of this thesis were both useful, and very much appreciated. The University of Otago Doctoral Office and Department of Geography provided generous financial and logistical support, and staff and students in the latter created a stimulating and supportive environment in which to work. Special thanks must also go to departmental cartographer Chris Garden, who converted my hand-drawn maps into the polished versions that appear in this thesis.

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Finally, I must thank my Mum and Dad. Ma, your passing 10 years ago was the catalyst for quitting my job and giving university a crack, and your memory has pushed me to be better every step of the way. Your selfless and compassionate nature, ability to always see the good in people, and willingness to take on others’ problems, regardless of your own, are qualities that I greatly admired, and ones that I have attempted to embody in undertaking research such as this. And Dad, while you didn’t quite make it to see me cross the finish line, you were with me most of the way, sometimes with a beer, other times a cheque, and always with your direct brand of common sense, and unique sense of humour. Your death in the final months of my candidature is still quite raw, and will leave an indelible mark on the completion of this thesis, but as with Ma, it is your qualities in life that I will draw upon to guide me through whatever comes next. I miss you both greatly.
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<td>ADB</td>
<td>African Development Bank</td>
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<td>ADMS</td>
<td>Alluvial Diamond Mining Scheme</td>
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<td>AFRC</td>
<td>Armed Forces Revolutionary Council</td>
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<td>APC</td>
<td>All People’s Congress</td>
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<td>BRICS</td>
<td>Brazil, Russia, India, China, South Africa</td>
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<td>Consolidated African Selection Trust</td>
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<td>CB</td>
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<td>CLGF</td>
<td>Commonwealth Local Government Forum</td>
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<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<td>DDR</td>
<td>Disarmament, Demobilisation and Reintegration</td>
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<td>DFID</td>
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<td>ECOMOG</td>
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<td>Farmer Based Organisation</td>
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<td>Focus Group</td>
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<td>Acronym</td>
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<td>WFP</td>
<td>World Food Programme</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organisation</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
</tr>
</tbody>
</table>
Introduction

1.1 Introduction

‘Development’ is a complex concept that is constantly being contested and renegotiated, and therefore can be understood in a number of different ways. Rostow (1960), for example, equated development with economic growth, whereas Seers (1969), suggested that development occurs when poverty, inequality and unemployment is reduced or eliminated within a growing economy. Building on this, the World Bank’s (1991: 4) World Development Report (WDR) stated that:

The challenge of development is to improve the quality of life. Especially in the world’s poor countries, a better quality of life generally calls for higher incomes – but it involves much more. It encompasses, as ends in themselves, better education, higher standards of health and nutrition, less poverty, a cleaner environment, more equality of opportunity, greater individual freedom, and a richer cultural life.

More recently, Potter et al. (2008: 4), have synthesised this, suggesting that development represents change that leads “to the betterment of people and places around the globe”.

While the definitions of development outlined above represent only a small sample of the magnitude and diversity that exist, central to them all is the concept of ‘change’. Thus, development in the broadest sense, can be understood as ‘change’,
or what Robert Chambers (1997) describes as ‘good change’. Numerous other words have been promoted as the fundament of development, such as Sen’s (1999) conceptualisation of development as ‘freedom’, and Hill’s (2003) notion of development as ‘empowerment’. While it is certainly not the intention of this thesis to challenge their ideas, it could be argued that each is contingent on change. Neither freedom, nor empowerment, for example, constitute development without there being a transition from a prior state of oppression or suppression. Thus, change is the very essence of development. Change, however, cannot occur in space alone, which implies an inherent temporal dimension. In assessing development, for example, we should be measuring change over time by comparing the status quo with a previous iteration, while in seeking the attainment of development, we are aiming to promote change in the future. Thus, development can be broadly defined as ‘positive change over time’.

Within the broader conceptualisation of development as ‘positive change over time’ outlined above, there has been a significant shift from top-down approaches in the 1950s and 1960s, which focused on understanding and promoting economic change at the national scale, through to bottom-up approaches in more recent times, which have sought to assess and generate change using multifaceted indicators at the local scale (Lakwo, 2006). Within the shift to the latter, livelihoods approaches, which recognise the multiple activities in which households engage to ensure survival and improve well-being, rose to prominence in the 1990s (Rakodi, 2002), and became widely applied in development research and practice by the early 2000s (Nunan, 2015). Livelihoods approaches respond to the intricacies of how resources can be accessed and benefited from, the diversity of relationships and the range of perspectives that people have about their own lives and ambitions (Nunan, 2015). In this sense people, and the priorities they define, are central to analysis and objective-setting within a livelihoods approach (Ashley and Carney, 1999). Other key concepts incorporated within livelihoods approaches include sustainability, capability, equity, vulnerability, resilience and adaptability.

Livelihoods approaches encompass a breadth of thinking that centres on the objectives, scope and priorities for development from the perspective of poor people, rather than being a single unified analytical tool (Carney, 2003), and thus form the basis of many different methodologies and frameworks (Ashley and Carney, 1999). Of those, however, the UK Department for International Development’s (DFID)
‘Sustainable Livelihood Framework’ (SLF), has been the most prevalent and enduring application of livelihoods approaches in development research and practice (Nunan, 2015). The SLF, which will be discussed in much greater depth in Chapter 2, is an analytical tool which seeks to diagrammatically represent the core principles of livelihoods approaches to development. The SLF does not attempt to represent complex realities directly, but rather to capture them in a necessarily abstract and simplified way, in order to identify the main factors affecting people’s livelihoods, and the typical relationships between them (Potter et al., 2008). These factors include the assets or capitals upon which people’s livelihoods are built; the transforming structures and processes which influence access to those assets; the vulnerability context in which people’s livelihoods exist; the strategies people employ in order to achieve their livelihood goals; and the outcomes of those strategies. In doing so, the SLF provides a mechanism to identify appropriate entry points for intervention, and allows better sequencing of interventions to support the poor (Binns et al., 2012).

One of the main critiques levelled at livelihoods approaches, and the SLF more specifically, however, has been their lack of temporal dynamism which, as argued above, is a key dimension of ‘development’ (Bryceson, 1999; O’Laughlan, 2002; Scoones, 2009; Reed et al., 2013). This is largely because livelihoods approaches tend to be policy-based and reliant on donor funding, both of which are contingent on producing tangible results in a timely manner (Eyben, 2005). Consequently, the prevailing approach to livelihoods research has been circumspective, concentrating on the empirical investigation of livelihood systems in the present context, which is typically construed as embracing six months to one year prior to the moment of investigation (Murray, 2002).

Even within the broader development literature, longitudinal studies of any sort are rare, and within a rural African context, even more so. Among the few that have attempted to assess long-term change in specific rural communities in Africa, only Audrey Richards’ (1939) long association with the Bemba tribe in Zambia; Margaret Haswell’s (1977) exploration of social and economic decline in a Gambian village; Michael Mortimore’s (1989) exploration of adaptive behaviour among rural communities in northern Nigeria during the 1970s and 1980s; Chris De Wet and Michael Whisson’s (1997) study of socio-economic change in the Keiskammahoek District of Ciskei in South Africa; Ann Whitehead’s (2002) tracking of livelihood change in Ghana; and Michael Mortimore and Mary Tiffen’s (2004) study of long-
term change in livelihood strategies in Kenya, Senegal, Niger and Northern Nigeria, stand out. Further, only Paul Richards (1986; 1992), and Tony Binns, more recently in conjunction with Roy Maconachie (Binns and Maconachie, 2005; Maconachie and Binns, 2007a, 2007b, Maconachie et al., 2007; Maconachie 2008a), have taken a long-term approach to understanding livelihoods in Sierra Leone.

The conceptualisation of development as ‘change over time’ outlined at the beginning of this chapter is, in essence, the crux of this research, while the SLF, discussed above, is the lens through which such change is examined. This thesis seeks to assess change in Panguma and Kayima, two small rural towns in the Eastern Province of Sierra Leone, over a 40 year time period and, in turn, use this form of longitudinal analysis as the basis for identifying the key priorities and challenges involved in promoting ‘good’ change, which is sustainable in the long-term, within these communities in the future. In order to achieve this, the study draws on two distinct, yet inter-related, periods of field research undertaken in Panguma and Kayima in the 1970s and 2014. The former, undertaken by Tony Binns, explored food production systems in the rural economy of Sierra Leone using Panguma and Kayima as case studies (Binns, 1980), and the latter, undertaken by myself, used the SLF to assess livelihoods more broadly in the same two communities. While the methods used to reconcile results from two different studies, undertaken by two different researchers, is covered in depth in Chapter 3, in a general sense, it was achieved through the retrospective application of the SLF to data collected by Binns in the 1970s. The significance of this research, therefore, is that it simultaneously helps to fill the deficiency in the literature outlined in the previous paragraph, and in doing so, attempts to address the perceived lack of temporal dynamism in the SLF without, it is hoped, losing its ability to inform understandings of the nuances of development and how to promote it.

This chapter will introduce Sierra Leone as the focus of this study, first drawing on the United Nations Development Programme’s (UNDP) Human Development Index (HDI) to outline the general extent of underdevelopment in Sierra Leone, then the context of the study area will be outlined through a brief discussion of the country’s historical, geographical, climatic, demographic and economic characteristics. It will then introduce Panguma and Kayima, the two small towns used as case-studies for this research, outlining their general characteristics, before describing the prevailing food production system which constitutes the
primary source of livelihood for the majority of the population in each community. Finally, it will provide an overview of the aims and objectives of this research, and outline the structure for the remainder of the thesis.

1.2 An introduction to Sierra Leone

Sierra Leone is an interesting case study for exploring long-term continuity and change for two main reasons. First, it has long been one of the world’s least developed countries, as highlighted in Table 1.1, which summarises Sierra Leone’s performance in terms of a number of key indicators from the UNDP’s HDI, in comparison to regional and global averages. Secondly, it went through a brutal civil war from 1991 until 2002, in which more than 50,000 people were killed, countless others subjected to amputation, rape and assault, and more than half of the population displaced (Bellows and Miguel, 2009). As a consequence, economic and subsistence activities were severely disrupted, much of the country’s infrastructure was destroyed or badly damaged, and poverty became widespread and deeply engrained (Binns and Maconachie, 2005). Thus, a retrospective longitudinal assessment of livelihoods in Panguma and Kayima not only has the potential to explore the extent to which the conflict has contributed to underdevelopment in rural communities, adding to our knowledge of post-conflict societies in the process, but can also help identify other potential contributing factors to such underdevelopment. This section will begin with an overview of development indicators in Sierra Leone, before outlining the historical, geographical, climatic, demographic and economic characteristics of the country.

1.2.1 Overview of development indicators in Sierra Leone

The HDI is a multidimensional tool for measuring average achievement in three key dimensions of human development: a long and healthy life, being knowledgeable, and having a decent standard of living. The HDI is the geometric mean of normalised indices for each of these dimensions, and incorporates indicators such as life expectancy, expected and mean years of schooling and Gross National Income (GNI) (UNDP, 2016a). As Table 1.1 illustrates, Sierra Leone had an HDI of 0.413 in 2016, which ranks it a lowly 181 of the 188 countries for which data exists. In terms of health indicators, life expectancy at birth in Sierra Leone is just 50.9 years, while infant mortality is 107.2 per 1000 live births. In terms of education, a child of school
entrance age can be expected to receive 8.6 years of schooling, but those aged 25 and older have, on average, only received a paltry 3.1 years of schooling, and as a consequence, less than half of the population above the age of 15 is literate. Economically, Sierra Leone has a GNI per capita of US$1,780, which is only just over half of the average for countries categorised by UNDP as having ‘Low Human Development’, while only 65.2% of the population aged over 15 are employed.

Table 1.1: Selected development indicators from the UNDP’s HDI comparing Sierra Leone with regional and global averages

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Country/Region</th>
<th>Sierra Leone</th>
<th>Sub-Saharan Africa</th>
<th>World</th>
<th>Low Human Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDI (2014)</td>
<td></td>
<td>0.413</td>
<td>0.518</td>
<td>0.711</td>
<td>0.505</td>
</tr>
<tr>
<td>Life Expectancy at Birth (years) (2014)</td>
<td></td>
<td>50.9</td>
<td>58.5</td>
<td>71.5</td>
<td>60.6</td>
</tr>
<tr>
<td>Infant Mortality Rate (per 1000 live births)</td>
<td></td>
<td>107.2</td>
<td>60.8</td>
<td>33.6</td>
<td>61.5</td>
</tr>
<tr>
<td>Expected years of schooling (2014)</td>
<td></td>
<td>8.6</td>
<td>9.6</td>
<td>12.2</td>
<td>9.0</td>
</tr>
<tr>
<td>Mean years of schooling (2014)</td>
<td></td>
<td>3.1</td>
<td>5.2</td>
<td>7.9</td>
<td>4.5</td>
</tr>
<tr>
<td>Adult Literacy Rate (% aged 15+) (2013)</td>
<td></td>
<td>44.5</td>
<td>58.4</td>
<td>81.2</td>
<td>57.1</td>
</tr>
<tr>
<td>GNI per capita PPP$ (2014)</td>
<td></td>
<td>1780</td>
<td>3363</td>
<td>14,301</td>
<td>3085</td>
</tr>
<tr>
<td>Employment to Population Ratio (% aged 15+) (2013)</td>
<td></td>
<td>65.2</td>
<td>65.7</td>
<td>59.7</td>
<td>63.9</td>
</tr>
<tr>
<td>Inequality-adjusted HDI (IHDI) (2014)</td>
<td></td>
<td>0.241</td>
<td>0.345</td>
<td>0.548</td>
<td>0.343</td>
</tr>
<tr>
<td>Gender Development Index (GDI) (2014)</td>
<td></td>
<td>0.814</td>
<td>0.872</td>
<td>0.924</td>
<td>0.830</td>
</tr>
<tr>
<td>Multidimensional Poverty Index (MPI) (2013)</td>
<td></td>
<td>0.411</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

(Source: UNDP, 2016a)

While the HDI simplifies and captures part of what human development entails, it does not incorporate other elements, such as inequality, poverty or human security, for example. Consequently, the Human Development Report Office (HDRO) offers a number of other composite indices which aim to capture some of the key issues of human development, inequality, gender disparity and human poverty (UNDP, 2016a), some of which are also included in Table 1.1. The inequality-adjusted HDI (IHDI), for example, adjusts the HDI for inequalities within the three dimensions of human development outlined in the previous paragraph. In the case of Sierra Leone, the IHDI value of 0.241 is nearly half of its HDI value, indicating significant inequality. Further illustrating this point is the Gender Development Index of 0.814, which indicates a significant disparity in the ratio of female to male HDI values. Finally, the Multidimensional Poverty Index (MPI) of
0.411, measures the proportion of the population that is multidimensionally poor, indicating that nearly half of Sierra Leone’s population is living in poverty.

In line with the conceptualisation of development as ‘positive change over time’ intimated above, these indicators mean little unless contextualised within a temporal dimension. As such, where data exist, change in the indicators over time is summarised in Figure 1.1. Sierra Leone’s HDI has exhibited steady growth since it was first measured in 1990, nearly doubling from 0.262 to its current value of 0.413. In totality, all other indicators represented in Figure 1.1 have also improved over time, albeit from a very low base. Life expectancy has increased from 40.6 in 1980, to 50.9 in 2014; infant mortality has dropped from 158.1 per 1000 live births in 1990, to 107.2 in 2013; expected years of schooling for a child of school entrance age has nearly doubled from 4.7 years in 1980, to 8.6 years in 2014, while mean years of schooling received by those older than 25 has more than tripled from 1 year in 1980, to 3.1 years in 2014; the employment to population ratio has marginally increased from 62% in 1995, to 65.2% in 2013; and finally the GNI per capita has increased from US$1153 in 1980, to US$1780 in 2014. Thus it could be argued that positive change, and therefore ‘development’, has occurred over time, although it is important to acknowledge that these statistics are nationwide and obscure serious regional and local inequalities. The other noticeable trend evident in Figure 1.1, is the dip in some of the indicators during the 1990s. Life expectancy at birth, GNI per capita, and expected years of schooling all significantly declined during this period, highlighting the impact that the brutal civil war (1991-2002) had on development.

---

1 The majority of indicators have been scaled to a range of 0-1, to enable them to all be represented on the same axis. See key at the bottom of Figure 1.2 for more detail on how each has been scaled.
1.2.2 History

Sierra Leone is thought to have been populated continuously for at least 2,500 years, and the region was organised into trade networks that connected different parts of the coast and rivers of upper Guinea with long distance trade routes in the northeast long before European contact in the 15th Century (Brooks, 1993). The name Sierra Leone is derived from ‘Serra Lyoa’, Portuguese for ‘Lion Mountain’, which was purportedly the name that Portuguese explorer Pedro da Cintra gave to the hills surrounding what is now known as Freetown Harbour, as he surreptitiously mapped the West African coastline in 1462 (Kup, 1962). Following this expedition, Portuguese traders arrived,
and were followed by the Dutch and the French, with each nation using Sierra Leone as trading point for slaves brought by African traders from interior areas (Sibthorpe, 1970). In 1562, the transatlantic slave trade was initiated, consisting of a triangular route in which European merchant ships exported goods to West Africa, including Sierra Leone, in return for enslaved Africans, gold, ivory and spices. These ships then travelled across the Atlantic to American colonies, where they sold the Africans as slaves for sugar, tobacco and other produce, which was then transported back to Europe (Shaw, 2002).

In 1787, following American independence and the founding of an anti-slavery movement in Britain, a settlement was established on the coast at Freetown to settle freed slaves under the auspices of the British-based Sierra Leone Company (Pham, 2005). In 1808, with the abolition of slavery, the company handed over the settlement to the British Government, and it became the Crown Colony of Sierra Leone (Clapham, 1976). During the 19th Century, traders moved inland and the boundaries of the country were fully demarcated, culminating in the declaration of a British Protectorate over the interior in 1896 (Binns, 1980). At this time, the British introduced a hierarchical system of local chieftaincies by empowering a set of Paramount Chiefs as the sole authority of local government. Under this system, chiefs are elected for life by a Tribal Authority made up of local notables, but only individuals from the designated ruling families of a chieftaincy are eligible to become Paramount Chief. This system is still in place today, and until the World Bank Sponsored formation of local councils in 2004, effectively remained the only institution of local government (Reed and Robinson, 2012). From 1886 until independence in 1961, the country was known as the Colony and Protectorate of Sierra Leone (Binns, 1980).

Post-independence, Sierra Leone quickly moved from a fledgling democracy (1961-1967) under the leadership of Sir Milton Margai and his half-brother Albert, to a one-party state (1968-1991), initially under Siaka Stevens, and then Joseph Momoh. This period was characterised by corrupt governance, economic mismanagement, and a series of military coups, and culminated in the brutal Sierra Leone Civil War which stretched from 1991 until 2002. Since the end of the war, democracy has been restored, with three peaceful, free and fair parliamentary and presidential elections held in 2002, 2007, and 2012. This post-independence period is discussed in much greater depth in Chapter 4 of this thesis, with particular emphasis
placed on the political economy before, during and after the civil war, the war itself and the impact it had on people’s livelihoods, and the ongoing reconstruction efforts since the culmination of the war.

### 1.2.3 Geography

Sierra Leone is a small country located on the coast of West Africa. It has an area of 72,335 $\text{km}^2$, and is bordered by Guinea in the north and northeast, and Liberia to the southeast (Figure 1.2). Administratively, Sierra Leone is divided into four regions: the Northern Province, the Eastern Province, the Southern Province and the Western Area. Each region is divided into districts, and each district is divided into chiefdoms. Overall, there are 14 districts and 149 chiefdoms (Statistics Sierra Leone, 2006). The topography of Sierra Leone is also divided into four main regions: the interior plateau and hill region, which has a general altitude of between 400-600m above sea level, but reaches to 1948m at its highest peak (Mount Bintumani), and covers most of the north-eastern part of the country; the interior plains, which lie to the west of the escarpment demarcating the interior plateau and hill region, and has a general altitude range of 30-220m above sea level; the narrow, low-lying and often swampy coastal plain which extends approximately 40km inland from the coast, and runs south-westward from the Freetown Peninsula; and the Freetown Peninsula itself, which consists of three roughly parallel mountain ranges rising to over 600m, and a raised beach at the northern base of these mountains, upon which Freetown is built (Binns, 1980; Larbi, 2012).

Five main rivers, Sewa (340km), Little Scarcies (260km), Rokel (260km), Jong (230km), and Moa (190km), flow from northeast to southwest, discharging into the Atlantic Ocean (Statistics Sierra Leone, 2014). The rivers are all rocky and torrential in their upper courses, but open into wide estuaries which penetrate far inland and are bordered by mangrove swamps and floodplains (Vanden Bossche and Bernacsek, 1990). In addition, six smaller basins and drainage areas, namely Great Scarcies, Lokko, Rokel Estuary, Western, Robbi/Thauka and Sherbro Water Resource Areas, complete Sierra Leone's hydrological system (Lapworth et al., 2015).

In terms of vegetation cover, Sierra Leone can be broadly classified into three zones: forest, which outside of protected forest reserves is predominantly secondary woodland, or farm bush, as a result of clearing for shifting cultivation; savanna
grassland, which predominates in the north of the country, but can also be found along the coast in the south; and swampy marshland, which is mostly found along the coast in the Southern Province, but also in inland river valleys, and generally consists of mangroves, as well as scattered patches of bushes and savannah woodland (Larbi, 2012). Soils range from strongly weathered Ferrasols with low nutrient levels on the interior and coastal plains; to Pisoplinthic Plinthosols, with accumulations of iron that hardens irreversibly when exposed to air and sunlight, and Lithic Leptosols, which are shallow soils over hard rock with a bedrock close to the surface, on the interior plateau and Freetown Peninsula (Lapworth et al., 2015). In a general sense, soils are light, lateritic, and naturally infertile, with the most fertile soils located along certain river valleys, and in some inland swamps, due to a thick deposit of alluvium (Binns, 1980).

Figure 1.2: Map of Sierra Leone, indicating the study sites, and its position on the African continent (Source: Maconachie and Binns, 2007a)
1.2.4 Climate

Sierra Leone has a tropical climate with an average annual temperature of 26.15°C, and an average annual rainfall of 2673mm, which is amongst the highest in West Africa (World Bank, 2016). As depicted in Figure 1.3, however, there are strong seasonal variations in the climate, with a distinct rainy season from April to November, and a dry season from November to April. The dry season is characterised by dry, hot weather with high humidity, although there is also a short period of dry weather with low humidity when the Harmattan, a cool, dry wind, blows from the Sahara Desert, and night-time temperatures can drop as low as 16°C (Larbi, 2012). March is the hottest month, with an average temperature of 27.6°C, but temperatures can reach as high as 40°C at any time during the dry season, and the average monthly rainfall ranges from just 5.5mm in January, to 105.2mm in April. In contrast, the rainy season is marginally cooler, with an average temperature of 24.5°C in August, but significantly wetter, with the average monthly rainfall ranging from 224.1mm in May, to 536.3mm at its height in August. There are also geographical variations in precipitation, with average annual rainfall highest on the Freetown Peninsula, and generally decreasing inland and eastwards (Merkel, 2016).

Figure 1.3: Average monthly temperature and rainfall for Sierra Leone from 1900-2012 (Source: World Bank, 2016).
1.2.5 Demography

The population of Sierra Leone at the time of the 2015 census was provisionally listed as 7,075,641, with an annual growth rate of 2.22%, and a sex ratio of 96.5 males for every 100 females (Statistics Sierra Leone, 2016). Sierra Leone’s growing and relatively youthful (see Figure 1.4) population is largely driven by its high total fertility rate of approximately 5 live births per woman, which in turn is sustained by a continued desire for large families, limited access to, and therefore use of, contraceptives, and the early start to child bearing (Statistics Sierra Leone, 2014). Notwithstanding the high total fertility rate, population growth in Sierra Leone is kept in check by extremely high infant, child and maternal mortality rates which result from widespread poverty, limited access to quality healthcare services, poor nutrition, limited access to potable water and sanitation, and the high prevalence of female genital cutting (UNICEF, 2008).

As noted above, the population of Sierra Leone is relatively youthful. Brown et al. (2005) state that Sierra Leone’s social and demographic landscape is changing, arguing that its population has never before been younger, more urban and more mobile. Yet governance at the state, district and local levels largely remains the domain of older men. This has generated the ‘crisis of youth’ thesis, which laments the inability of young people to attain social adulthood because of continuing gerontocratic and patrimonial control of resources (Peters, 2011a). While considered by many to have been a key factor in the outbreak of the civil war (Richards, 1995), it is now suggested that this intergenerational divide is experienced much more widely among youths, and continues to have a significant impact on lives and livelihoods in Sierra Leone, particularly in rural areas (Peters, 2011b).
The household module of the 2004 population census identifies eighteen major ethnic groups (See Table 1.2), with the largest being the Mende, who make up approximately 32.2% of the population, and are primarily located in the Southern and Eastern Provinces, and the Temne, who make up approximately 31.8% of the population, and are predominantly located in the Northern Province (Statistics Sierra Leone, 2006). Creoles, the descendents of freed slaves who settled in Freetown from the late 18th Century, are also of particular importance despite only contributing 1.4% of the population, as they are among the most highly educated, tend to live around Freetown, and dominate administrative posts throughout the country (Glennerster et al., 2010). Among those listed as ‘other’ include a significant Lebanese community, pockets of Liberians and Guineans, as well as some Indians and Europeans, all of whom predominantly live in the greater Freetown area (Statistics Sierra Leone, 2006).

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2 Ethnic composition statistics from the 2015 population census were unavailable at the time of writing. Glennerster et al. (2010), however, state that the national ethnic composition has remained relatively stable over a long period of time.
Table 1.2: Ethnic composition of Sierra Leone in 2004

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>% of Population</th>
<th>Predominant Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mende</td>
<td>32.2</td>
<td>Southern and Eastern Provinces</td>
</tr>
<tr>
<td>Temne</td>
<td>31.8</td>
<td>Northern Province</td>
</tr>
<tr>
<td>Limba</td>
<td>8.3</td>
<td>Northern Province</td>
</tr>
<tr>
<td>Kono</td>
<td>4.4</td>
<td>Eastern Province</td>
</tr>
<tr>
<td>Kuranko</td>
<td>4.1</td>
<td>Northern Province</td>
</tr>
<tr>
<td>Sherbro</td>
<td>2.3</td>
<td>Southern Province</td>
</tr>
<tr>
<td>Fullah</td>
<td>3.7</td>
<td>Northeast and Western Area</td>
</tr>
<tr>
<td>Susu</td>
<td>2.9</td>
<td>Northern Province</td>
</tr>
<tr>
<td>Loko</td>
<td>2.6</td>
<td>Northern Province</td>
</tr>
<tr>
<td>Kissi</td>
<td>2.5</td>
<td>Eastern and Southern Province</td>
</tr>
<tr>
<td>Madingo</td>
<td>2.4</td>
<td>Northern and Eastern Provinces</td>
</tr>
<tr>
<td>Krio</td>
<td>1.4</td>
<td>Freetown and Western Area</td>
</tr>
<tr>
<td>Yalunka</td>
<td>0.7</td>
<td>Northern Province</td>
</tr>
<tr>
<td>Krim</td>
<td>0.2</td>
<td>Southern Province</td>
</tr>
<tr>
<td>Kru</td>
<td>0.2</td>
<td>Eastern Province and Freetown</td>
</tr>
<tr>
<td>Vai</td>
<td>0.1</td>
<td>Eastern Province</td>
</tr>
<tr>
<td>Other</td>
<td>0.6</td>
<td>NA</td>
</tr>
</tbody>
</table>

(Source: Statistics Sierra Leone, 2006)

Sierra Leone is a multilingual country with upwards of 20 languages. While English is the official language, its use is largely restricted to government administration, schools and the media. Rather, Sierra Leonean Krio, a contact language developed among different groups of resettled emancipated slaves and other indigenous inhabitants of the Freetown area, has become the *lingua franca*, spoken by up to 95% of the population, despite the relatively small size and limited geographic spread of the Creole people (Oyetade and Fashole-Luke, 2008). In addition, each of the different ethnic groups mentioned above speaks a different language belonging to the Niger-Congo family of African Languages. In line with the ethnic composition of Sierra Leone discussed above, the Mende and Temne languages are each spoken by approximately 30% of the population, while Limba, Kono, Susu, Sherbro, Fullah, Yalunka, Krim, Vai, Kissi, Kru, Koranko, Loko and Madingo are all still spoken to some extent (Oyetade and Fashole-Luke, 2005).

Statistical information on religion in Sierra Leone is highly variable. The World Food Programme (WFP) (2011), for example, states that 60% of the population are Muslim, 30% Christian, with the remaining 10% belonging to indigenous religions. In contrast, The *Sierra Leone Demographic and Health Survey*
2013, published by Statistics Sierra Leone (2014), states that Muslims make up 78.2% of the total population, Christians 21.2%, with the remaining 0.6% categorised as other, none or missing data. Despite this variability, it is clear that Islam is the predominant religion, but that a significant Christian minority also exists. A strong sense of religious harmony between Muslims and Christians is evident in Sierra Leone, with inter-faith marriages common, and a growing proportion of the population identifying as both Muslim and Christian (The Economist, 2014).

1.2.6 Economy

The economy of Sierra Leone is primarily based on agriculture, which accounted for approximately 41% of the country’s gross domestic product (GDP) in 2013 (Statistics Sierra Leone, 2014). This, however, represents a sharp decline in the share of GDP attributable to agriculture, which was as high as 58% as recently as 2007, largely due to an upturn in mining activities during this period (ADB and OECD, 2009; Statistics Sierra Leone, 2014). This shift notwithstanding, a disproportionate 80% of the working population were employed within the agricultural sector in 2007 (ABD and OECD, 2009), and more than two thirds of the population are directly involved in subsistence agriculture (Konig, 2008). Within the agricultural sector, rice is the most important crop, and is grown by virtually all farmers. In 2007, an estimated 637,983 tons were produced, which equates to more than 100kg per capita (Coalition for African Rice Development, 2009). Other important domestic food crops include cassava, maize, millet, sorghum, sweet potato and groundnut (Larbi, 2012). In addition to these staple food crops, coffee, cocoa, kola nut, palm oil and fish constitute the major agricultural exports of Sierra Leone (Statistics Sierra Leone, 2014).

Beyond agriculture, services, which include wholesale and retail trade, tourism, transport, and government; financial, professional and personal services such as education, healthcare, and real estate, are the next biggest contributors to GDP in Sierra Leone at approximately 34% in 2013 (Statistics Sierra Leone, 2014). The mining sector, upon which Sierra Leone’s economy has historically relied, declined significantly over the latter quarter of the 20th century, accounting for less than 6% of GDP between 2001 and 2011 (Statistics Sierra Leone, 2014). As noted above, however, there has been an upturn in mining activities in recent years, primarily as a result of the discovery, and subsequent mining, of iron ore in the
Northern Province in 2011, while mining of Sierra Leone’s other primary mineral resources including diamonds, rutile, bauxite and gold has remained relatively steady (Statistics Sierra Leone, 2014). Consequently, the proportion of GDP attributable to the mining industry doubled to 12% in 2012 (Statistics Sierra Leone, 2014). In contrast, the manufacturing sector, which mainly consists of import-substituting industries such as furniture making, wood and metal working, tailoring and footwear production, and the manufacturing of concrete blocks for construction, accounted for only 2% of the GDP in 2013 (Statistics Sierra Leone, 2014; Sesay, 2014).

1.3 Field sites
This section provides a short description of Panguma and Kayima, the two small towns selected for this research. The information presented is intended to contextualise each place and its people, whereas the rationale for their selection will be elaborated upon in Chapter 3, and a detailed analysis of livelihoods and development within each will constitute Chapters 4, 5 and 6. In a general sense, both Panguma and Kayima are located in the Eastern Province, and both lie on the interior plateau. Otherwise numerous differences exist between the two, and thus the geographical, climatic and demographic characteristics of each will now be discussed in turn.

1.3.1 Panguma
Panguma is situated on the eastern foot slopes of the Kambui Hills at a height of approximately 305m, and is approximately 42km, some two hours travel time, north of Kenema, the provincial capital (see Figure 1.2 and Figure 1.5). The topography of the area is characterised by steep-sided hills, many of which have bare rock surfaces and well forested foot slopes, separated by low lying and often swampy areas. The vegetation in the area is predominantly secondary forest, with primary forest restricted to small pockets within what is left of the protected forest reserves. In terms of climate, Panguma has an annual rainfall of 2720mm, largely falling between April and November, and a mean annual temperature of 26.5°C, with minimal seasonal and diurnal fluctuations (World Bank, 2016).

Panguma is the headquarter town of Lower Bambara Chiefdom, which is located in the Kenema District. The population of Panguma at the time of fieldwork was estimated at 7,965, though obtaining accurate town-level population statistics
was extremely difficult. The majority of people from Panguma and surrounding area are from the Mende tribe, who are thought to have emanated from a small group of hunters who migrated from Guinea to the southeast of Sierra Leone some 450 years ago (Little, 1967). The Mende, along with the Temne, are now the largest ethnic group in Sierra Leone (Statistics Sierra Leone, 2006). Mende is the main language spoken in Panguma, but a wide array of other tribal languages are also evident, and the use of Krio is widespread, and English is relatively common.

Figure 1.5: Aerial photograph of Panguma in 2014 (Source: Google Maps, 2014a)

1.3.2 Kayima
Kayima is more isolated than Panguma, located 40km, some 3 hours travel time, northwest of Koidu, the second largest city in the Eastern Province (see Figure 1.2
and Figure 1.6). It is situated at an altitude of 366m on a highly dissected plateau, punctuated by large isolated hills (Binns, 1980). The vegetation in the area is primarily savanna interspersed with secondary forest. In terms of climate, Kayima receives slightly less rainfall over a marginally shorter rainy season than Panguma, with a mean average rainfall of 2540mm primarily falling between May and October (World Bank, 2016). Mean annual temperatures are similar to those in Panguma, though there are greater diurnal and seasonal variations due to the effects of the Harmattan wind being more pronounced further north.

Kayima is the headquarter town of Sandor Chiefdom, which is the largest chiefdom in Kono District. Kayima is significantly smaller than Panguma, with the population at the time of fieldwork estimated at 1,881, though as with Panguma, accurate town-level population statistics are difficult to obtain. The majority of the population in Kayima and the surrounding area are from the Kono tribe, who are thought to have migrated to this part of Sierra Leone from what is now Guinea, sometime during the 17th Century (Parsons, 1964). Kono is the primary language spoken in Kayima, and the use of Krio is also widespread, but English is not as commonly used as in Panguma, and is largely restricted to use in the main primary school and secondary school.
1.4 The upland rice farm

Subsistence agriculture, as stated earlier, is practiced by more than two thirds of the entire population in Sierra Leone, but an even higher proportion of the rural population is engaged, and thus it constitutes the primary source of livelihood for most rural households. The upland rice farm is the most commonly practiced form of subsistence agriculture in Panguma and Kayima, though, as will be discussed in Chapter 6, the use of swampland for agriculture has become more widespread in recent decades. In addition, many rural households complement their subsistence needs with cash crops such as coffee, cocoa, palm oil, pineapple, orange, banana and kola nut. This section will outline the annual cycle of the upland rice farm so as to provide context to the prevailing livelihood for the majority of households in Panguma and Kayima.
The upland rice farm is entirely rain-fed, with no irrigation or water control, and is thus closely aligned with the climatic regime, making maximum use of the rainy season between April and November (Binns, 1980). That being said, a number of steps must be taken during the dry season in order to prepare the farm for production in the rainy season. Figure 1.7 summarises the annual farming cycle in Sierra Leone, illustrating the chronology of tasks and labour intensity required for each.

![Figure 1.7: The farming year in Sierra Leone (Source: Binns et al., 2012)](image)

During the dry season, usually in December or early January, farmers select their farm using natural indicators of fertility, with a particular emphasis on the quality of the soil. The preference is for a friable soil, with good drainage, a dark colour which gives an indication of organic content, and presence of worm casts which suggests that the soil is well aerated (Binns, 1980). Farmers also take note of the vegetation, with an abundance of certain species of tree indicating that rice will grow especially well (Richards, 1986). ‘Brushing’ (clearing) of the farm, which is usually undertaken by men and boys, commences in January, and can last from two weeks to three months depending on the size of the farm, and the size of the family labour force available. First, the undergrowth is cleared with a machete, before larger, non-economic trees are felled using an axe (Binns, 1980). Stumps of around one
metre are left because farmers generally do not possess the technology or labour to remove their often deep and complex root systems, but also because they help to prevent erosion, and encourage more immediate fallow regrowth when the farm is abandoned at the end of the cycle (Binns et al., 2012).

Figure 1.8: A brushed farm near Panguma (Source: Author’s Field Research)

Once the farm has been ‘brushed’ (cleared), the debris is left on the surface to dry, at which time burning can commence (see Figure 1.8 for example). A good burn is crucial to the success of the upland farm as the ash, rich in phosphates, fertilises the soil (Richards, 1986). To this end, the timing of the burn is of critical importance, as if it is attempted too early it may be unsuccessful because the debris are not thoroughly dry, but if left too late it may be disrupted by the rain, resulting in the time-consuming task of regathering and re-burning the remaining debris in both instances (Binns et al., 2012). In addition, a badly burnt farm is often weed infested, which can reduce production as rice is less competitive with weeds in conditions of reduced fertility (Richards, 1986). Most rural communities have well-established farmers who are considered experts at choosing the best time for burning, and so other farmers follow their lead, but it generally takes place toward the end of March.
or early April (Binns, 1980). The final tasks before the rains set in are to gather and burn any unburnt material in preparation for planting; build the farmhouse, which is used for shelter, cooking, storage, and sometimes sleeping, when work is being undertaken on the farm; and plant certain crops such as cassava, maize and yams (Richards, 1986; Binns et al., 2012).

Figure 1.9: The burning of a farm near Kayima (Source: Author’s Field Research)

Once the rain becomes consistent in late-April or early-May, the seeds are sown using a technique known as ‘intercropping’ (Binns et al., 2012). Rice seed is mixed with numerous other seeds such as okra, benni, pumpkin, cucumber and tomato, and then broadcast over the surface of the farm, before being covered up by men using large hoes in an operation referred to as ‘ploughing’ (Binns, 1980). From late-May, rainfall increases, causing crops to grow quickly and weeding is undertaken regularly by women using short-handled hoes (Richards, 1986). From late-June or early-July, the maturing crops need to be protected from pests, most notably the ‘cutting grass’ or cane rat, a large beaver-like rodent, but also rats, deer and birds

3 The cutting grass is the colloquial name for the greater cane rat, *Thryonomys swinderianus*, a large rodent that lives by reed-beds and river banks in much of sub-Saharan Africa (Child, 2016).
(Binns et al., 2012). The men spend this time building fences and making traps, while it is the job of the children to keep the birds away from the crops (Binns, 1980).

As rainfall decreases in September, the rice crop swells and ripens, and the harvest, which involves the entire household, begins by the end of the month and stretches through to November or even early-December (Binns, 1980; Richards, 1986). Rice is cut stem by stem using a small knife, after which it is dried in the sun and then stored in a barn or carried to the town (Binns et al., 2012). Once the rice harvest is complete, the women continue to visit the farm to gather the other crops, while the men generally engage in work away from the farm, such as housebuilding and repairs, nursing cash crops and diamond mining (Binns, 1980). As the dry season progresses, attention increasingly turns to the next farming cycle. Traditionally, the old farm was abandoned, and left to fallow for a minimum of eight years (Binns, 1980), but as will be discussed in Chapter 6, it is becoming more common for portions of the previous year’s farm to be planted in cassava or groundnuts the following year, and the length of the fallow period is steadily decreasing.

1.5 Research aims and objectives
As intimated earlier, this research seeks to use a livelihoods approach to assess continuity and change in the rural livelihoods of Panguma and Kayima, two small towns in the Eastern Province of Sierra Leone, over a 40 year period, in order to
identify some of the key challenges and priorities for future rural development in Sierra Leone. In doing so, it also aims to address the perceived lack of temporal dynamism in livelihoods approaches to development, and more specifically the SLF, by exploring the potential benefits and limitations of using it within retrospective longitudinal research. In light of these aims, the key objectives of this research are to expand on the understanding of rural livelihoods in Sierra Leone, and in post-conflict societies in a more general sense; to inform policy on rural development in Sierra Leone, particularly that which pertains to the improvement of livelihood outcomes in rural areas; and contribute to the broader debates around the use of livelihoods approaches within development research and practice.

In order to address the aims and objectives outlined above, the following research questions were posed:

1) What have been the main transforming structures and processes operating within the political economy of Sierra Leone since independence in 1961?
2) What impact did the civil war have on livelihoods, and to what extent is it responsible for the current state of vulnerability in Panguma and Kayima?
3) How has the availability of, and access to, livelihood assets changed in Panguma and Kayima over the forty year period of this research?
4) How have households in Panguma and Kayima adapted their livelihood strategies to cope with the transforming structures and processes, vulnerability context, and change in access to assets, addressed in the previous three questions?
5) Have the changes detected in answering the previous four questions led to improved livelihood outcomes in Panguma and Kayima over the 40 year period of this research? If so, why? And if not, why not?
6) Given the answer to question 5, what are the key priorities and challenges for improving livelihood outcomes in Panguma and Kayima in the future?
7) What are the benefits and limitations of adding a longitudinal dimension to livelihoods research?
8) Given the answer to question 7, is there any value in doing so?
1.6 Conclusion

This chapter has introduced the background to this thesis. It began by outlining the scope of the study, articulating the conceptualisation of development as ‘positive change over time’ as its key premise, and arguing that temporality is inherent within such a conceptualisation, and therefore of critical importance to our understanding of development. This led into a discussion around the retrospective application of a livelihoods approach as a method for assessing change at the local level over a long period of time, and the potential of such an approach to identify key priorities and challenges for sustainable long-term development in the future. In doing so, it highlighted the potential significance of this research in that there is very little precedence for such an approach within the corpus of livelihoods research, nor within development literature in general, and even less framed in an African context. To this end, this chapter then introduced Sierra Leone as the focus of this study, first drawing on the UNDP’s HDI to outline the general extent of underdevelopment in Sierra Leone, then providing context through a brief discussion of the country’s historical, geographical, climatic, demographic and economic characteristics. It then introduced Panguma and Kayima, the two small towns used as case-studies for this research, outlining their general characteristics, before describing the prevailing food production system which constitutes the primary source of livelihood for the majority of the population in each community. Finally, this chapter gave an overview of the aims and objectives of this research, and defined the specific questions that it attempts to answer. In lieu of a conclusion, this section will now outline the structure for the remainder of the thesis.

1.6.1 Outline of thesis structure

Chapter 2 presents a conceptual framework for understanding processes of development in rural areas impacted by conflict through the exploration of livelihoods over an extended period of time. It begins with a broad overview of the different conceptualisations of development to emerge since World War Two, with a particular focus on rural development approaches, before exploring the emerging nexus of conflict and development thinking. It then discusses livelihoods approaches within development in a general sense, and the SLF more specifically, considering a number of the criticisms that have been levelled at it in recent years, and how these criticisms will be addressed within this research, arguing that the SLF is an
appropriate model to explore continuity and change in rural Sierra Leone. Finally, Chapter 2 discusses the relatively small number of studies which have sought to understand livelihoods in specific places in Africa over a long period of time, highlighting the potential significance of this research to not only improve our understanding of continuity and change in Panguma and Kayima, but also rural areas in Africa more generally.

Chapter 3 discusses the methodology adopted in order to apply the conceptual framework presented in Chapter 2. It puts forward a pragmatic ontological and epistemological paradigm, incorporating an ethnographic, mixed-methods and participatory methodology, as an appropriate methodological framework for exploring continuity and change in Panguma and Kayima using a livelihoods approach, arguing that such a framework is compatible with livelihoods research, and allows for the reconciliation of data collected via different methods, by different researchers, at different times. The specific methods used, and how the data they generated is analysed and reported, are also covered within this discussion, as is a reflective account of my positionality within the research, associated ethical considerations, and the potential limitations of the methodology adopted.

Chapters 4, 5 and 6 present and discuss the findings of this research, drawing heavily on the SLF for their organisation. Chapter 4 explores the nexus between the ‘vulnerability context’ and ‘transforming structures and processes’, in order to outline the external context in which livelihoods exist in rural Sierra Leone. Weaving its way through the political economy of Sierra Leone, from independence in 1961, until the time of this fieldwork in 2014, it purposively alternates between national and local narratives so as to contextualise scale across time. In doing so, it illustrates quite dramatic political and economic change over the initial part of this period, which culminated in Sierra Leone’s brutal civil war; the impact the war had on livelihoods; and the ongoing processes of change in the post-conflict period. Ultimately, though, Chapter 4 highlights that despite such transformation, the magnitude and source of vulnerability in Panguma and Kayima is much the same now as it was in the 1970s, which suggests that ongoing vulnerability is largely a consequence of what has not changed, rather than what has.

Chapter 5 provides a foundation for a more detailed discussion of livelihoods at the household level in Panguma and Kayima, by exploring the assets upon which people’s livelihoods are constructed. It assesses continuity and change to the structure
of the ‘asset pentagon’ at the centre of the SLF, which incorporates human, social, financial, physical and natural capitals, arguing that while there clearly has been some change over the 40 year period of this research in terms of access to, and the influence of, the various capitals, these changes reflect a fluidity, rather than growth, in the overall asset base.

Chapter 6 encapsulates the final two components of the SLF, ‘the livelihood strategies’ employed by households in Panguma and Kayima, which include agricultural intensification, extensification, and diversification, as well as non-agricultural diversification, and the ‘livelihood outcomes’ of those strategies, with a particular focus on income, food security, well-being, vulnerability, and the sustainable use of the natural resource base. It argues that while changes in the structure of ‘livelihood assets’, and in the ‘transforming structures and processes’ that influence access to them, have led to some change in the ‘livelihood strategies’ employed, there has ultimately been little change in the ‘livelihood outcomes’ that these strategies have facilitated.

Finally, Chapter 7 summarises the arguments presented in Chapters 4, 5 and 6, before exploring some of the reasons that the changes that have occurred in each of the dimensions of the SLF, have failed to translate into improved livelihood outcomes in Panguma and Kayima. In doing so, it identifies some of the key priorities for uplifting livelihoods in these communities in the future, some of the challenges that will need to be overcome if these are to be achieved, and the role different agents, including government, non-government organisations (NGO), civil society and the households themselves, have to play in these processes. Chapter 7 then sums up the theoretical and methodological contributions this research makes to the broader themes discussed in Chapters 2 and 3, with particular consideration given to the retrospective longitudinal application of the SLF, and its ability to improve our understanding of long-term change, before highlighting the potential for further research.
2 Conceptual Framework

2.1 Introduction
As stated in Chapter 1, the term ‘development’ is highly contested, and therefore slippery to define. Many scholars consider the modern era of development to have started in in the aftermath of World War Two, and more specifically, link it to Harry Truman’s inaugural presidential address in 1949, in which he used the term ‘underdeveloped areas’, and discussed the duty of the West to bring ‘development’ to such areas (Potter et al., 2008). Since then, development has embodied numerous different meanings, and been approached in numerous different ways, ranging from top-down modernisation approaches with an emphasis on economic growth in the 1950s and 1960s, through to bottom-up participatory approaches incorporating multifaceted indicators in more recent times. Within the shift to the latter, livelihoods approaches, which recognise the multiple activities in which households engage to ensure survival and improve well-being, rose to prominence in the 1990s (Rakodi, 2002), and had become widely applied in development research and practice by the early 2000s (Nunan, 2015). While the use of livelihoods approaches has continued to grow in development research and practice, there have been a number of critiques, and debates around the approach itself have remained relatively static since the flurry of activity in the late 1990s and early 2000s. Recently however, Scoones (2015),
among others, has begun to re-engage with the discussion in order to address some of the critiques, and thus help move forward debates about livelihoods, rural development, and agrarian change.

The above trajectory provides the framework for this chapter, which in turn provides the conceptual framework for the subsequent chapters in this thesis. Given that this research explores change at the local level over a similar period, it will begin with a broad overview of the different conceptualisations of development since World War Two, situate rural development approaches therein, and explore the emerging nexus of conflict and development thinking. It will then discuss livelihoods approaches in general, and the Sustainable Livelihoods Framework (SLF) more specifically, before acknowledging the critiques mentioned in the previous paragraph, and discussing how they have been addressed, and/or how they could be addressed. In doing so, it will argue that the SLF is an appropriate model to explore continuity and change in rural Sierra Leone, while also indicating the potential implications this research could have for future iterations of the SLF. Finally, this chapter will discuss the relatively small corpus of studies which have sought to understand long-term processes of development in specific places in Africa, highlighting the potential of this research to not only understand continuity and change in Panguma and Kayima, but also rural areas in Africa in a more general sense.

2.2 Approaches to development

As mentioned above, the modern era of development is widely purported to have begun at the end of World War Two. The Bretton Woods Conference in 1944 saw the formation of the World Bank, the International Monetary Fund (IMF), and the General Agreement on Tariffs and Trade (GATT), which would be replaced by the World Trade Organisation (WTO) in 1995, all of which contributed to the running and stabilising of the world economy; and the United Nations (UN), which was formed in 1945, and sought to pursue peace, and protect human rights (McGregor, 2008). While traditional colonial empires began to collapse, Truman’s speech (referred to above) effectively outlined a neo-colonial agenda, in which newly independent, ‘underdeveloped’ countries were encouraged to turn to the west for long-term economic assistance (Potter et al., 2008). Consequently, initial manifestations of development focused on generating economic growth, as countries
with strong economies were seen as being more developed than those with weak economies, and so ‘to develop’ was to enhance a state’s economic output (McGregor, 2008). In terms of rural development, the rural poor were conceptualised during this period as ‘lazy peasants’, and the subsistence agricultural sector upon which their livelihoods were primarily based, were considered backward, with only negligible prospects for rising productivity, and therefore stimulating economic growth (Ellis and Biggs, 2001).

Growth theory evolved into modernisation theory in the 1960s with Rostow’s (1960) *Stages of Economic Growth* model, which argued that all countries must pass through five predetermined stages in the development process. At the same time, John Friedmann promoted the ‘core-periphery’ framework, in which he argued that growth could disperse from a series of growth points to their peripheries, and thus raise overall levels of development (Binns *et al.*, 2012). These manifestations of modernisation largely facilitated top-down approaches, based on industrialisation, and continued to promote economic growth as the core-requisite for development (Barratt Brown, 1995; Potter *et al.*, 2008). There was, however, a shift in rural development thinking during this period, with the likes of Ted Schultz (1964), Michael Lipton (1968) and Polly Hill (1970) conceptualising subsistence agriculturalists as rational peasants with an ability to make efficient economic decisions. Consequently, small-scale agriculture started to be recognised as an engine for growth and development by providing labour, capital, food, foreign exchange, and a market for consumer goods for the emerging industrial sector in a low-income country (Ellis and Biggs, 2001). One of the key features of this shift was the promotion of technology in small-scale farming, including high-yield crop varieties and mechanisation, in order to increase yields, which was the antecedent to the Green Revolution (Lakwo, 2006).

Approaches to development to this point were largely ‘top-down’, and had drawn a number of criticisms, most notably that they were situated in US and Western European history and experience, and thus represented Eurocentric development thinking (Slater, 1992; Hettne, 1995; Mehmet, 1999). Other critiques of these approaches include, but are not limited to, their assumption that development is a linear process that all nations can follow in an unconstrained manner (Potter *et al.*, 2008); the assumption that development has an endpoint which suggests that, once achieved, a country is ‘developed’ (Stohr, 1981); their strong focus on economic
growth, with little consideration for the social and cultural implications (Hettne, 1995); their inherent urban bias (Lipton, 1977), and their focus on the entire state, rather than the needs of individual communities (Preston, 1996). Further, Hettne (1995) argued that rather than ‘trickling down’ to help the poorest, the benefits of economic development were being accrued by the richer countries, and wealthier groups within developing countries.

In light of the above critiques, dependency theorists argued that states in the developing world needed to escape their historical dependence on the west and pursue what they termed ‘self-reliant development’, which encouraged a shift toward state-led approaches to development (Willis, 2011). It also fostered the emergence of the ‘basic needs’ approach in the 1970s, which promoted the idea that basic needs such as food, clothing and housing; access to essential services such as clean water, sanitation, and healthcare; and access to paid employment; must be the first priority for development (Hunt, 1989). Proponents of this approach argued that creating employment, becoming more reliant on local resources, and resisting outside forces of change, were more appropriate drivers of development than economic growth (Potter et al., 2008). ‘Women in Development’ also emerged during this period which recognised the role women play in development, and the different ways in which development impacts upon men and women (Willis, 2011). Esther Boserup’s (1970) book *Women’s Role in Development*, in which she emphasised the inequality between men and women in the development process, was seminal to this movement. In terms of rural development, these new approaches saw an increase in state agricultural policies, with an emphasis on continued small-farm growth within integrated rural development, state-led credit and rural growth linkage (Ellis and Biggs, 2001).

The emergence of the ‘New Right’ in the 1980s saw a return to a market-driven approach, referred to as ‘neo-liberalism’, which became entrenched in the policies of international development agencies such as the World Bank and the IMF (Power, 2003). Many governments found themselves increasingly unable to service the debt they had accrued from these multilateral organisations (Willis, 2011). In order to avoid a collapse of the Western banking system, these institutions introduced a system that allowed a rescheduling of debts in return for acceptance of a structural adjustment programme (SAP), which obligated recipient countries to formally accept neo-liberal prescriptions, including the withdrawal of the state from much of the economy, rationalisation of the civil service, support for the private sector, market
liberalisation, encouragement of investment and currency revaluation (Barratt Brown, 1995; Bond, 2007; Binns et al., 2012). In political terms, decentralisation transferred decision making to a local level, and ‘good governance’ became a key element of development policies and interventions (Willis, 2011). Decentralisation also influenced rural development policy, in that it saw a shift away from large-scale agricultural projects such as the Green Revolution and integrated rural development that had characterised the previous few decades, to more locally situated agricultural development (Ellis and Biggs, 2001). The importance of local indigenous knowledge and local participation to the process of change were acknowledged, with Paul Richards’ (1985) Indigenous Agricultural Revolution, in which he illustrated the ability of the rural poor to contribute to solutions to the problems they face, and Robert Chambers’ (1981, 1983, 1992) suite of work including the introduction of participatory methods such as Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA), being seminal to this shift.

During the 1990s, authors such as Schuurman (1993), Escobar (1995), and Pieterse (1998) were highly critical of western conceptualisations of development, and urged practitioners to seek more situationally relevant approaches to development (Binns, et al., 2012). In light of these critiques, a number of alternative and populist stances to development emerged, including Anti-Development, Post-Development and Reflexive Development (McGregor, 2008). This led to the materialisation of ‘development from below’, or ‘bottom-up development’, which argues the need for developing countries to reduce their involvement in processes of unequal exchange, and thus increase self-sufficiency and self-reliance (Potter et al., 2008). Some of the key elements of this form of development, according to Brohman (1996), include a focus on basic needs and human resources; a focus on small-scale projects linked to community-based development programmes; the shift from growth-based to human-orientated definitions of development; a focus on local and community participation in the design and implementation of projects; and a focus on poverty alleviation and capacity building. In addition, Desai (2002) and Mercer (2002) argued that Non-Government Organisations (NGOs) had developed an increasingly important role in local and community-based development projects. Rural Development continued to build on the principles of participation and empowerment that emerged in the 1980s, and saw the emergence of livelihoods
approaches (Ellis and Biggs, 2001), which will be discussed in greater depth later in the chapter.

In the twenty-first century, the contested nature of development has never been more apparent, with neo-liberalism, participatory approaches, post-development perspectives and sustainable development all competing to define contemporary development theory and practice (Hopper, 2012). The early 2000s saw livelihoods approaches continue to develop, and become widely applied in development research and practice (Nunan, 2015). This period also saw greater prominence given to the United Nations Development Programme’s (UNDP) Human Development Index (HDI), and Millennium Development Goals (MDG), both of which contribute to a more holistic understanding of development. The HDI, developed by Pakistani economist Mahbub ul Haq in 1990, converts a number of social and economic indicators to a single index, which is then used to categorise the countries of the world as having very high, high, middle, and low human development (UN, 2001); whereas the MDGs are a set of 8 goals, incorporating 15 targets, which were adopted by the UN in 2000, and signified a unified statement by the international community about the direction of development in the proceeding 15 years (McGregor, 2008). While the MDGs went on to be widely used by multilateral agencies, governments and NGOs, to frame development policies, they have also drawn criticism for prioritising the end point, rather than the means by which the goals are achieved (Willis, 2011). Nonetheless, in 2015, the slated endpoint of the MDGs, the UN argued that the MDGs had “saved the lives of millions and improved conditions for many more”, while acknowledging “uneven achievements and shortfalls in many areas” (UN, 2015a: 3). In their place, the UNDP have adopted the Sustainable Development Goals (SDGs), a new set of 17 goals aimed at ending poverty, fighting inequality and injustice, and tackling climate change by 2030 (UNDP, 2016b). The other key shift in development since the turn of the century has been the emergence of development actors from the south, facilitated in part by the economic growth experienced in BRICS countries (Brazil, Russia, India, China and South Africa) and other emerging economies such as Mexico and Indonesia, which has manifested in an increasing number of countries actively engaged in South-South cooperation, and the significant scaling up of South-South initiatives by individual countries (Puri, 2010).
Table 2.1: Overview of development policies and practices from 1950s-2010s

<table>
<thead>
<tr>
<th>Period</th>
<th>Core development policies and practices</th>
<th>Operational Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-60s</td>
<td>Modernisation; dual economy model; Backward agriculture; Community development; and lazy peasants.</td>
<td>Do development to the people</td>
</tr>
<tr>
<td>1960-70s</td>
<td>Transformation approach; Technology transfer; Mechanisation; Agricultural Extension; Green Revolution; and Rational Peasants.</td>
<td>Do Development for the people</td>
</tr>
<tr>
<td>1970-80s</td>
<td>Redistribution with growth; Basic needs; Integrated Rural Development; State led credit; Urban Bias; Rural growth linkage, and Women in development.</td>
<td>Do development through the people</td>
</tr>
<tr>
<td>1980-90s</td>
<td>Structural adjustment; Free market; Retreat of state; NGOism; Participation; Gender and Development; and Poverty Eradication.</td>
<td>Do development with the people</td>
</tr>
<tr>
<td>1990s-2000s</td>
<td>Microcredit; Rural Safety nets; Sustainable Livelihood; Good governance; Decentralisation; Capacity Building; Poverty Alleviation; gender main-streaming; Engendering development; MDGs.</td>
<td>Empower the people for Development</td>
</tr>
<tr>
<td>2010s+</td>
<td>South-South co-operation, SDGs, livelihoods.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Lakwo (2006)

2.3 Defining development

The preceding section in no way constitutes a definitive delineation of the ‘development’ discourse, but rather provides a brief overview of some of the debates that have shaped it over time. In doing so, it has become clear that ‘development’ is a complex concept that is constantly being contested and renegotiated, and therefore can be understood in a number of different ways. While it is beyond the scope of this thesis to offer an authoritative definition of development, the nature of this research necessitates a working definition to “act as a lens to interact with and interpret the subjects” being examined (McGregor, 2008: 6). Thus, for the purposes of this thesis, ‘development’ can be understood broadly as ‘change over time that improves people’s quality of life’, drawing on Chambers’ (1997) description of development as ‘good change’ that was outlined in Chapter 1. In adopting this definition, this thesis will draw on a livelihoods approach, which was alluded to in the previous section, and will be discussed in greater depth later in the chapter, to explore such change.
2.4 Conflict, peace and development

Given the brutal civil war that occurred in Sierra Leone from 1991-2002, conceptualisations of conflict and peace, and their implications for development are vital to this research. Mac Ginty and Williams (2009) suggest that one of the peculiarities of social science research is that theories of development and theories of conflict have largely evolved separately from one another. They found this particularly surprising given that, as discussed earlier in this chapter, the modern era of development is widely considered to have emerged in a post-world war two context defined by violent conflict. Development theorists, however, traditionally considered conflict to be an interruption to development, with conflict cessation required for development to re-commence (Thomas, 2006). Likewise, those interested in peace and conflict studies largely overlooked the potential of development to contribute to both war and peace (Mac Ginty and Williams, 2009).

In recent times, a number of writers have sought to fill this vacuum in order to better understand the relationship between conflict, peace and development. This section will briefly chart the evolution of peace and conflict theory, before considering the emerging nexus of conflict and development theory outlined above.

Theorists and practitioners from a wide range of disciplines have for centuries attempted to understand conflict and peace, but it was not until the 1950s and 1960s that peace and conflict studies began to emerge as an academic discipline in its own right (Harris, et al., 1998). The initial focus of this emerging discipline largely revolved around interstate war and the interplay between military and political leaders in different states, but this changed when the end of the Cold War saw an initial upsurge in civil conflict (Mac Ginty and Williams, 2009). The end of the Cold War also saw a shift in the way peace was conceptualised, from negative peace, which considers peace to be present in the absence of violence, to positive peace, which only considers peace to be present in the absence of indirect and structural violence, as well as direct violence (Galtung and Jacobsen, 2000). This shift also translated into post-conflict theory, with ‘conflict resolution’ criticised for being overly definitive, and usurped by the more transitional ‘conflict management’; and the prescriptive act of maintaining separation between antagonists known as ‘peacekeeping’, overtaken by the more active and mediating processes of ‘peacebuilding’ and ‘peacemaking’ (Richmond, 2002).
In a more tangible sense, the end of the Cold War saw substantial national, regional and international resources devoted to conflict and post-conflict situations, as numerous opportunities for intervention arose due to the upsurge in civil conflict (Collier et al., 2008). In this context, there was a rush to explain the occurrence of civil war among academics, practitioners and journalists alike (Mac Ginty and Williams, 2009). One of the key learnings of this period, however, was that there were large differences among the many examples of conflict in terms of causation, cessation, and post-conflict peacebuilding and reconstruction, and therefore any generalisation was dangerous (Collier et al., 2008). But while there is no unilateral cause of conflict, and indeed more often than not civil conflict is fuelled by multiple factors simultaneously, common explanations include the contestation of resources (Westing, 1986; Le Billon, 2001), religion (Appleby, 2000), ethnicity (Connor, 1994; Young, 2003), identity (Sen, 2006), nationalism, ideology, historical grievances, and manipulative leadership (Brown, 1997), and political and economic corruption, cronyism and patronage (Tilly, 1985). Despite the multifarious nature of conflict causation, it is often theorised in a binary sense, with a distinction made between greed, an acquisitive desire, and grievance, a motivation based on a sense of injustice (Murshed, 2002). Collier and Hoeffler (2007), however, suggest that the one defining characteristic of civil war is the emergence and durability of a private rebel army, and they argue, therefore, that the feasibility, both financially and militarily, of such a rebellion, are of far greater importance than the conditions that influence its motivation. That being said, if the conditions motivating conflict are not present in the first place, the feasibility of rebellion becomes redundant.

As with the causation of war, the implications of prolonged conflict can be markedly different in different contexts, but some of the common characteristics include weak or non-existent public institutions; the contested legitimacy of the state, both internally and externally; a strong extra-legal economy; the existence of, or high susceptibility to, violence; forced displacement, both internally and externally; the deliberate exclusion of sections of the population from their basic rights; the high vulnerability of livelihoods to external shocks; the existence of serious poverty; and increased rates of mortality and morbidity (Schafer, 2002). Further, Collier et al. (2003) discuss the economic costs of civil war, stating that the diversion of resources from productive activities to destructive ones causes a double economic loss, the loss from what the resources were previously contributing, and the loss from the damage
they then inflict. They also suggest that the impacts of war are disproportionately accrued by non-combatants, who have little say in either the initiation or settlement of war. Similarly, factors leading to the cessation of civil war are many and varied, and can include conflict settlement, where (generally) external force is used to nullify one or both sides; conflict management, which aims to minimise rather than eliminate violence; and conflict resolution, which seeks to resolve the underlying root causes of the conflict (Mac Ginty and Williams, 2009).

Post-conflict literature generally focuses on the challenges faced in places where prolonged conflict has occurred. Collier et al., (2008) state that post-conflict societies face two distinct challenges: reducing the risk of a recurring conflict, and economic recovery. Similarly, Addison (2003: 3) promotes the importance of veritable peace, though argues the need for a “broad-based recovery that improves the incomes and human development indicators of the majority of people, especially the poor”, rather than a narrow economic focus. In order to address these challenges, the initial focus is on disarmament, demobilisation and reintegration (DDR), which refers to the process of demilitarising armed groups, both official and unofficial, through the control and reduction of possession and use of arms; the disbandment of non-state armed forces, and rightsizing of state security services; and assisting ex-combatants to reintegrate into civilian life, both socially and economically (Ball and van de Goor, 2006). DDR programmes have become integral to post-conflict peace consolidation, and have featured prominently in the mandates of peacekeeping operations over the last two decades (UNDDR, 2010). More long-term, the focus shifts towards ensuring the factors that led to the conflict are minimised or eliminated, and conditions conducive to economic growth and social progress are promoted. Numerous actors are involved in these processes, including states, intergovernmental organisations (IGOs), international financial institutions (IFIs), NGOs) and the press (Mac Ginty and Williams, 2009).

The increased interest in civil conflict emerging in the post-Cold War era, also saw growth in the quantity of academic and policy-based literature exploring the relationship between conflict and development (Mac Ginty and Williams, 2009). As mentioned earlier, conflict was generally seen as an interruption to development, but Collier et al. (2003) frame conflict as development in reverse, indicating that conflict does not simply stagnate development, but is its antithesis, and therefore constitutes processes of negative change. As Stewart and O'Sullivan (1998) argue, the presence
of civil conflict appears to be one of the major causes of underdevelopment. While this negative relationship between conflict and development may seem inherent, Thomas (2006) for example, argues that wars can have some positive outcomes and can bring about the conditions for development. He suggests that even the most brutal of wars, such as Sierra Leone, are seen by at least some of the protagonists as necessary in order to remove people, structures and processes that block change, and hence achieve development. There was also a growing acknowledgement of the role that development could play in conflict cessation, peacebuilding, and post-conflict reconstruction, a belief that spread quickly as exemplified by its promotion in the UN’s (1992) *Agenda for Peace* (Mac Ginty and Williams, 2009).

Perhaps of greater note was the growing realisation of the links between the outbreak of violent conflict and underdevelopment and uneven development (Collier, 2000a). Azar (1985), for example, argues that the source of protracted social conflict is the denial of the elements required in the development of all people and societies, including security, distinctive identity, social recognition of identity, and effective participation in the processes that determine conditions of security and identity. Similarly, a lack of economic and employment opportunities as a result of underdevelopment or uneven development can also be a trigger for rebellion, and ultimately conflict (Collier and Hoeffler, 2004). For example some, such as Richards (1995), have argued that such grievances were central to the Sierra Leone civil war, suggesting the conflict was triggered by a large corpus of socially marginalised youth in a desperate search for empowerment and development. While this point has been debated, a theme which will be covered in greater depth in Chapter 4, it is worth referring to it here to illustrate that underdevelopment and uneven development can be a cause, not just a consequence, of conflict. The growing consensus of this has led many academics, policymakers and political leaders to view development as a key to conflict prevention (Mac Ginty and Williams, 2009).

### 2.5 Livelihoods approaches to development

As discussed earlier, livelihoods approaches to development emerged in the 1990s with the growing understanding of the importance of local-level empowerment and participation in the development process (Carney, 2003). Its roots are deeply entrenched in the work of Robert Chambers and Gordon Conway at the Institute of Development Studies (IDS), who identified defects in conventional development
thinking, and argued that livelihoods link together sustainability, capability and equity to present a paradigm for development thinking which is both normative and practical (Chambers and Conway, 1991). Building on this, a number of organisations, including CARE, OXFAM and UNDP began to develop their own livelihood perspectives and methodologies, and livelihoods approaches rose to prominence in the Department for International Development (DFID) in the late 1990s (Ashley and Carney, 1999). Since then, livelihoods approaches have spread well beyond these organisations, and have been applied in many different ways, by a wide and diverse set of actors (Hussein 2002).

As with development, the term ‘livelihood’ can be defined in numerous different ways. In its simplest form, a livelihood can be defined as a means of securing a living, but as Chambers and Conway (1991) argue, complexities emerge “as its parts are found and named, and its structure unravelled” (Chambers and Conway, 1991: 6). Consequently, they state that a livelihood encompasses “the capabilities, assets (stores, resources, claims and access) and activities required for a means of living” (Chambers and Conway, 1991: 6). Building on this, Ellis (2000) placed greater emphasis on access, and the influence of institutional and social relations, in stating that:

A livelihood comprises the assets (natural, physical, human, financial and social capital), the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by the individual or household (Ellis, 2000: 10).

A livelihoods approach to development, thus, draws on this conceptualisation as a basis for analysing, understanding and managing the complexity of livelihoods, providing a foundation for identifying policy objectives and interventions at a range of scales in order to achieve development outcomes (Carney, 1998). It encourages a more holistic understanding of the multifarious activities in which households engage to ensure their survival and improve their well-being (Rakodi, 2002), and responds to the intricacy of how resources can be accessed and benefitted from, the diversity of relationships and the range of perspectives that people have about their own lives and ambitions (Nunan, 2015). In this sense people, and the priorities they define, are central to analysis and objective-setting within a livelihoods approach (Ashley and Carney, 1999). A number of other key concepts are incorporated within livelihoods approaches, including sustainability, capability, and equity, which as mentioned
above, were promoted by Chambers and Conway (1991), while vulnerability, resilience and adaptability have since emerged as being of equal importance. Each of these concepts will now be addressed in turn.

Sustainability has become a buzz word in recent decades, such that some argue it is overused, and often misunderstood (Mawhinney, 2002). Sustainability is interpreted in many different ways, with different disciplines “each making different assumptions about the relation between environment and the human subject” (Lee et al., 2000: 9). Ecologists, for example, frame sustainability in terms of the future productivity of biomass, whereas economists discuss it in terms of capital and natural environmental stocks (Elliott, 2006). In development literature, sustainable development is commonly defined as that which “meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987: 43). In the livelihood context, sustainability is taken to mean the ability to maintain and improve livelihoods while maintaining or enhancing the local and global assets and capabilities on which livelihoods depend (Chambers and Conway, 1991). Thus, building on Ellis’ (2010) definition above, a livelihood is sustainable when:

…it can cope with and recover from stresses and shocks and maintain or enhance its capabilities and assets both now and the future, while not undermining the natural resource base (Ellis, 2000: 10).

The incorporation of capability within livelihoods approaches to development draws on Sen’s (1984) reference to what people can do, or be, with what they have. In doing so, livelihoods approaches consider the “strategic use of a variety of ‘capitals’ (economic, natural, social, human, political) in securing a livelihood over time” (Wisner, 2009: 178). Livelihoods approaches also acknowledge people’s capability to cope with stresses and shocks both reactively, through responses to adverse changes in conditions, or proactively, through gaining access to and using services and information, exercising foresight, experimenting and innovating, competing and collaborating with others, and exploiting new conditions and resources (Chambers and Conway, 1991). In this sense, livelihoods approaches are distinctive from conventional development thinking and practice, in that they emphasise assets and capabilities, rather than deficiencies (Rakodi, 2006). As Smart (2015) argues, this shift of focus from needs to capacity attempts to reframe
normative conceptualisations of poverty that portray the poor as passive victims of deprivation.

Equity generally refers to relative income distribution, but as Henwood et al. (2000) argue, inequity connotes an unjust difference, and thus equity is synonymous with social justice. In this sense, the term equity indicates that the choices of one individual should not negatively impact on the choices of another (Parkinson and Ramirez, 2006). Consequently, equity incorporates human rights, intergenerational and gender equity, rural-urban equity, and equity in community participation, and is promoted through the empowerment of those who are marginalised to express their realities and make them count (Chambers, 1997a). In the context of livelihoods approaches, equity implies a more equal distribution of assets, capabilities and opportunities, and an end to discrimination against those most deprived (Chambers and Conway, 1991).

Another key concept within livelihoods approaches is vulnerability. Vulnerability has its roots in the study of natural hazards and poverty, and has more recently been applied to discussions on the impact of climate change (Janssen and Ostrom, 2006). While defined in different ways, in a general sense, “to be vulnerable is to exist with a likelihood that some kind of crisis may occur that will damage one’s health, life, or the property and resources upon which health and life depend” (Anderson, 1995: 41). In the context of livelihoods approaches, the livelihoods of individuals, households and communities in poverty are inherently vulnerable to stresses, which are pressures typically characterised as continuous, cumulative, predictable and distressing, such as seasonal shortages, rising populations or declining resources; and shocks, which in contrast are generally sudden, unpredictable, and traumatic, such as fires, floods, conflict and epidemics (Chambers and Conway, 1991).

Where vulnerability is the likelihood and impact of stresses and shocks within a livelihood system, ‘resilience’ is the capacity of a system to experience such stresses and shocks “while retaining essentially the same function, structure, feedbacks, and therefore identity”, and ‘adaptability’ is “the capacity of the actors in a system to manage resilience” (Walker et al., 2006: 2). In this sense, vulnerability is generally external, whereas resilience and adaptability are internal (Chambers, 1989; Fussel, 2007). While these concepts of resilience and adaptability both emerged from, and are well established within, ecological literature, they have increasingly been applied
to interactions between ecological and social systems across various scales (Berkes et al., 1998). Scoones (2009) argues that the extension of resilience concepts to ‘social-economic-cultural-political systems’ is principally concerned with “sustaining ‘life support systems’, and the capacity of natural systems to provide for livelihoods into the future, given likely stresses and shocks” (Scoones, 2009: 190). Thus, the integration of resilience and adaptation into understanding livelihoods can contribute a temporal scale to analysis, enabling an informed understanding of the adaptation of livelihood strategies to circumstances that move households towards achieving more resilient livelihood outcomes over time (Sallu et al., 2010).

Given the diversity and change in human conditions, values and aspirations, the concepts outlined above are not free of top-down generalisation or prescription, nor are they necessarily mutually supporting (Chambers and Conway, 1991). Equity in access to resources, for example, does not necessarily assure their sustainable use without appropriate and effective institutions for resource management, while resilience often comes at the expense of long-term sustainability (Chambers and Conway, 1991; Chelleri et al., 2014). They are, however, all interrelated. Sustainability is a function of the intrinsic capabilities within a livelihood system, the nature and strength of the vulnerability to which it is subject, and the resilience and adaptability of people and the environment to avoid, withstand, or bounce back from such vulnerability; while equity infers that these functions are not discriminatory (Conway and Barbier, 1988). The benefit of livelihoods approaches, therefore, is that they integrate these key concepts to provide a holistic understanding of poverty which, in turn, can contribute to more effective development policy and planning (Potter et al., 2008; Wisner, 2009).

The use of the word ‘approaches’, rather than ‘approach’, within this section has been a deliberate attempt to convey that livelihoods approaches encompass a breadth of thinking that centres on the objectives, scope and priorities for development from the perspective of poor people, rather than a unified analytical tool (Carney, 2003). Indeed, livelihoods approaches have been operationalised by a number of different organisations, and thus form the basis of many different methodologies and frameworks (Ashley and Carney, 1999). Of those, however, DFID’s Sustainable Livelihood Framework (SLF) has been the most prevalent and enduring application of livelihoods approaches in development research and practice.
(Nunan, 2015). As such, this Chapter will now turn its attention to a detailed discussion of the SLF.

2.6 The ‘Sustainable Livelihoods Framework’ (SLF)

The SLF is an analytical tool developed by DFID, which seeks to diagrammatically represent the core principles of livelihoods approaches to development (see Figure 2.1). As Potter et al. (2008) argue, the SLF does not attempt to represent complex realities directly, but rather capture them in a necessarily abstract and simplified way, in order to identify the main factors affecting people’s livelihoods, and the typical relationships between them. In doing so, it provides a mechanism to identify appropriate entry points for intervention, and allows better sequencing of interventions to support the poor (Binns et al., 2012). As depicted in Figure 2.1, the SLF consists of five distinct parts, namely the vulnerability context, livelihood assets, transforming structures and processes, livelihood strategies, and livelihood outcomes, with arrows representing how the various parts interact with, and influence each other. This section will explore each of these parts, and the linkages between them.

![Figure 2.1: The Sustainable Livelihoods Framework (Source: DFID, 1999)](image)

People’s livelihoods are influenced by the context in which they live, which according to Rakodi (2002) has two broad dimensions: factors that influence their vulnerability, and transforming policies, institutions and processes. These two dimensions are represented within the SLF as the ‘vulnerability context’ and
‘transforming structures and processes’. The ‘vulnerability context’ frames the external environment in which people exist, in that people’s livelihoods, and the wider availability of assets, are fundamentally affected by critical trends, shocks and seasonality, over which they have limited or no control. Whereas ‘transforming structures and processes’ refers to the multi-scalar institutions, organisations, policies and legislation that shape livelihoods by influencing access to livelihood assets, livelihood strategies, and ultimately, livelihood outcomes (DFID, 1999). ‘Transforming structures and processes’ encompass a complex range of issues associated with participation, power, authority, governance, laws, policies, public service delivery, social relations, institutions and organisations, and contains the macro-micro linkages and the relationships between the state, private sector, civil society and citizens (Cochrane, 2007). There is direct feedback between the ‘vulnerability context’ and ‘transforming structures and processes’, in that processes, established and implemented through structures, affect trends both directly and indirectly, and can cushion the impact of external shocks (DFID, 1999). Fiscal policy implemented by central government, for example, can influence the price of commodities at local markets which, in turn, can impact on the income of farmers. Equally, structures and processes can contribute to shocks and trends, with civil conflict as a consequence of declining democracy being a prime example.

‘Livelihood assets’ are at the core of the SLF, and are segregated into five core categories of assets or capitals, upon which livelihoods are built, namely ‘human capital’, ‘social capital’, ‘financial capital’, ‘physical capital’ and ‘natural capital’. ‘Human capital’ refers to the labour resources available to households, and includes not only the number of household members available to engage in livelihood activities, but also the education, skills, and health status of those household members (Rakodi, 2002). The importance of human capital in livelihood diversification is widely established, with education, both formal (academic) education and the skills and knowledge acquired in the workplace, considered particularly significant in terms of improving livelihood prospects (Ellis, 1999). As well as this inherent value, human capital is also required to make use of the four other types of livelihood assets. Access to fertile land (natural capital), for example, is worthless in terms of livelihood generation without some form of labour. Human capital is thus necessary, though not in itself sufficient, for the attainment of positive livelihood outcomes (de Gruchy, 2003).
‘Social capital’ is a highly contested concept, which is rooted in the idea of social relations between individuals and groups (Willis, 2011). Narayan (1997) defines social capital as “the rules, norms, obligations, reciprocity, and trust embedded in social relations, social structures, and society’s institutional arrangements, which enable its members to achieve their individual and community objectives” (Narayan, 1997: 50). Social capital can consist of vertical networks, for example between benefactor and client, and horizontal networks, for example between people with shared interests, that increase peoples trust and ability to work together and expand their access to wider institutions such as political or civic bodies; membership of more formalised groups, which often entails adherence to mutually accepted rules, norms and sanctions; and relationships of trust, reciprocity and exchanges that facilitate cooperation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor (Calhoun, 2010). In terms of livelihoods, social capital also refers to the ways in which these networks, formal memberships, and relationships, relate to the accessibility of the other livelihood assets, and contribute to livelihood strategies that ultimately lead to livelihood outcomes.

‘Financial capital’ refers to the financial resources available, including income, savings, credit, remittances and pensions (Rakodi, 2002), as well as liquid assets such as livestock and jewellery (Arun et al., 2004), which provide different livelihood options. Financial capital tends to be the most versatile of the livelihoods assets because it can be transferred into each of the other types of capital, and can lead to the direct achievement of livelihood outcomes, such as purchasing food or paying for training (Shivakoti and Shrestha, 2005). Despite this versatility, Serrat (2008) argues that financial capital tends to be the least available livelihood asset of the poor, particularly in rural areas, which places greater importance on the other livelihood assets represented by the sustainable livelihoods framework. Thus, the advantages of its versatility, are largely negated by its scarcity, a duality only serving to reinforce the importance of assessing its influence, or lack thereof, on the ground.

‘Physical capital’ refers to the basic infrastructure and producer goods needed to enable people to meet their basic needs and function more productively (Potter et al., 2008). Basic infrastructure, generally includes transport networks, shelter and buildings, water supply and sanitation, energy, and communication; and producer goods incorporates tools and equipment used to pursue livelihood strategies (Booth
et al., 2000). Given its tangible nature, it is perhaps the simplest of the livelihood assets to assess on the ground, but also one of the more crucial in terms of day to day activity, and indeed survival.

‘Natural capital’ refers to the natural resource base from which resource flows and services useful for livelihoods are derived (Scoones, 1998). There is a wide variation in the resources that make up natural capital, from intangible public goods such as the atmosphere and biodiversity, to divisible assets used directly for production, such as trees and land (Cochrane, 2007). In recent times, ecological economists have sought to stratify natural capital to better incorporate the concept of sustainability, and thus they differentiate between three categories of natural capital. Critical natural capital, which is required for survival, and comprises assets that cannot be recreated, and can therefore be lost forever if degraded; constant natural capital, which must be maintained, but can be adapted or replaced; and tradable natural capital, which is not scarce or highly valued, and can be replaced (Elliott, 2013).

‘Livelihood Strategies’ refers to the range and combination of activities that people undertake, and choices that they make, in order to achieve their livelihood goals (Potter et al., 2008). This term recognises that survival in developing countries often requires reliance on multiple livelihood strategies, and thus the concepts of livelihood intensification, livelihood extensification, livelihood diversification, multi-livelihoods, and multi-functionalism, are often incorporated within discussions of livelihood strategies (Swift and Hamilton, 2001; Binns et al., 2008). Other livelihood strategies are more reactionary, aimed at coping with stresses and shocks, and can include reducing consumption and/or shifting to lower quality foods; depleting stores of food; pledging or selling assets; making claims on relatives, neighbours, patrons, the community, NGOs, the government, and the international community by calling in debts, appealing to reciprocity and good will, begging or political action; and migration (Chambers and Conway, 1991). Livelihood strategies are influenced by the assets which an individual or household has available to them, their vulnerability to stresses and shocks, and the transforming processes and structures, or lack thereof, that they are exposed to.

‘Livelihood Outcomes’ are the achievements or outputs of the livelihood strategies outlined above (Scoones, 1998). Within the SLF, livelihood outcomes are categorised as generating more income, improving food security, increasing well-
being, reducing vulnerability, and using the natural resource base in a more sustainable manner, all of which if achieved are considered to contribute to the expansion of the livelihood assets base. The people-centred focus of the SLF, means that these categories are not necessarily of equal importance in any given place, but they provide a sense of what motivates people to behave as they do, can help agencies understand how likely people are to respond to new initiatives, and can be used to identify performance indicators in project monitoring (Potter et al., 2008). While the concept of income is relatively straightforward, and vulnerability and sustainability have been addressed earlier in this chapter, food security and well-being require further unpacking.

Nobel Laureate Amartya Sen wrote in his seminal book *Poverty and Famines: An Essay on Entitlement and Deprivation* that “starvation is the characteristic of some people not having enough food to eat. It is not the characteristic of there being not enough food to eat. While the latter can be a cause of the former, it is but one of many possible causes” (Sen, 1983:1). These sentiments touch on the complexity of food security, indicating that access to food, and not simply the availability of food, is the key barrier to obtaining food security. Others have since argued that qualitative dimensions to food security, such as nutritional value and cultural preference, also need to be considered when measuring the extent to which food is secure. In order to encapsulate these complexities, the World Food Summit in 2009 built on its earlier manifestations to define food security as existing “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life” (FAO, 2009:1).

The term ‘well-being’ is synonymous with quality of life, and in its broadest sense, can be defined as the state of being comfortable, healthy, or happy (Castree et al., 2013). In the context of the SLF, White and Ellison (2007: 158-159) argue that well-being builds on established critiques of myopic approaches to poverty, development and health, and offers a “rounded, positive focus which includes not only material resources and social relationships, but also the psychological states and subjective perceptions of people themselves”. As such, well-being is not simply concerned with people’s mental and physical health, but can also consist of physical, social, economic, political, environmental, emotional and spiritual dimensions. As MacKain (2009) argues, however, well-being is not necessarily contingent on
prosperity in all dimensions at the same time, as an individual can experience a profound sense of well-being without, for example, being economically prosperous, and thus she suggests that well-being defies easy definition as it varies in time and space.

If defining the concept of well-being is challenging, MacKain (2009) describes assessing well-being as measuring the immeasurable. McGillivray (2007), however, suggests that the conceptualisation of well-being as multi-dimensional described above, has led to the development of a wide range of models aimed at capturing these various dimensions. The HDI, developed in 1990, is perhaps the most well-known and commonly used among them, but others such as the Capabilities Approach, Genuine Progress Indicators, Gross National Happiness, and the Happy Planet Index, have also been used with varying degrees of success (MacKain, 2009).

While these models are useful tools for understanding well-being at the national level, they lack the local and temporal scales required to assess well-being within the parameters of this research. Scoones (1998), in introducing the SLF, argued that the notion of well-being provides a wider definitional scope for the livelihoods concept. Drawing on Chambers’ (1997a) discussion on ‘responsible well-being’, he suggests that the SLF allows people themselves to define the criteria for well-being that are important, which can result in a wide range of livelihood outcome criteria. As such, the definition of well-being as a livelihood outcome in the context of this research is guided by the communities themselves, and as will be discussed in Chapter 6, incorporates income, food security, health, happiness, social capital, and political agency.

2.7 Critiques of the SLF

As discussed in the previous two sections, livelihoods approaches in general, and the SLF in particular, became widely used by a diverse set of development actors in the late 1990s and early 2000s, and have been praised for being people-centred; focusing on capabilities and assets rather than deficiencies; providing a more holistic conceptualisation of poverty; and unravelling the complexity of rural livelihoods. But they have also drawn a number of critiques. This section will explore some of those critiques, and how they have been addressed, or could be addressed, highlighting the potential contribution of this research in regard to this along the way.
One of the key critiques of the SLF specifically, and livelihoods approaches more generally, is that they focus on short-term adaptation, rather than “systematic transformation due to “long-run secular changes” (Scoones, 2009: 189). O’Laughlin (2002), for example, has argued that livelihoods approaches are ahistorical in that they tend to take the current situation as given, rather than identifying the events or forces that led to the existing social institutions, while Bryceson (1999) has argued that the narrow focus on household welfare within livelihoods approaches, and the continued centrality of agriculture to them, means that long-term processes outside of this focus can be missed. Further Reed et al. (2013) discuss the inability of livelihoods approaches to capture the dynamism in capital assets over time, and argue that the SLF pays insufficient attention to the often complex long-term ecological consequences of livelihood adaptations. This research can be considered a response to these critiques in that it attempts to apply the SLF to a specific context over a forty year interval in order to understand long-term change in capital assets, structures and processes, livelihood strategies and livelihood outcomes. In doing so, it will explore ways in which temporal dynamism can be better emphasised within the model.

Another critique of the sustainable livelihoods framework is that it implicitly romanticises poverty and inequality. Butler and Greenstein (1999), for example, argue that by emphasising capabilities and assets rather than deficiencies, the SLF implies that the poor should simply use what they have more effectively to escape poverty, and thus conveys an acceptance of the status quo. They suggest that such an interpretation runs the risk of cordonning off poverty as if it, and its solution, is somehow separate from life and development of the broader community. To this end, Johnson (2009) argues that the SLF fails to deal with processes of economic globalization [sic], power and politics, changing environmental conditions and the lack of long-term vision for rural economies. Further, Small (2007) argues that the SLF’s focus on the poor means that wealthier ‘players’ in the field are only peripherally represented as part of the transforming structures and processes, while Moser and Norton (2001) suggest that specific conceptualisations of social structure, power relations and politics are absent.

Another concern is the applicability of the SLF to conflict situations. Pain and Lautze (2002), for example, argue that the SLF fails to address the issue of vulnerability under conditions of chronic conflict, where questions of power are paramount, and the capacity of households or communities to build resilience can be
severely inhibited. Similarly, Longley and Maxwell (2003) argue that the vulnerability context within the SLF underplays the implications of conflict. They suggest that there are a number of features associated with conflict, such as displacement and changing household composition, as well as the broader underlying causes of conflict, that do not necessarily occur in politically stable contexts, and therefore need to be incorporated more centrally when applying the SLF to conflict situations.

Ian Scoones’ (2015) recent book Sustainable Livelihoods and Rural Development addresses the critiques outlined in the previous paragraphs. In it he states that while he is now more convinced of the importance of livelihoods approaches than he was when he wrote his framework paper in 1998 (Scoones, 1998), he is “also more convinced of the need to firmly embrace a political perspective that sees local and wider structural change as part of the same analysis” (Scoones, 2015: xvi). To do this, he argues that livelihoods approaches need to be situated in a better understanding of the political economy. A political economy analysis also enables greater understanding of the political dynamics and economic forces (i.e. both ‘grievance’ and ‘greed’) associated with conflict, which are combined in changing patterns of power and vulnerability (Le Billon, 2000; Collinson et al., 2002). Further, Longley and Maxwell (2003) argue that an understanding of livelihoods and the broader political economy prior to conflict is essential to understanding livelihoods in conflict and post-conflict situations.

In light of these arguments, this research attempts to use a political economy analysis, which refers to an exploration of the symbiotic link between the economy and the dominant political and institutional structures, at a range of scales, and in turn, considers how this influences livelihoods. In the context of the SLF, a political economy analysis is used as a lens for exploring transforming processes and structures and the vulnerability context over time. It does this by briefly situating Sierra Leone within the global political economy, before considering the national and local political economy, with an emphasis on the causation and implications of conflict, and the role of local-political institutions, such as customary rule and patron-client relationships, in the distribution of livelihood resources. In doing so, it hopes to draw out processes of power and politics more explicitly, and provide a more in-depth understanding of the impact of the civil war in Sierra Leone on rural livelihoods.
Swift and Hamilton (2001) highlight a number of other weaknesses with livelihoods approaches, including that some of their less tangible aspects, such as livelihood security and well-being, are difficult to define and measure; and that while good at identifying problems, they have had less success in identifying solutions. Further, Reed et al. (2013) argue that it requires high levels of resourcing and skills to implement it on the ground. These general criticisms are symptomatic of a broader critique arguing that the SLF tends to be adopted in its entirety, rigidly and uncritically, but as Hinshelwood (2003) suggests, this is perhaps more a reflection of the people using the SLF, rather than the SLF itself. Indeed, Scoones (2015) argues that livelihoods approaches were never intended to offer a new meta-theory for development, but rather start at an appropriate local level, and focus on particular problems. While the presentation of data in this thesis is closely, some would say rigidly, aligned to the SLF, this was not done so uncritically. As will be discussed in Chapter 3, the information sought, and methods used, went beyond simply trying to collect enough data to fill each section of the SLF, but rather attempted to understand local problems, as defined by local people, over a long period of time. In this sense, it is hoped that this research is not only an application of the SLF to a particular setting, but can also contribute to moving forward debates around the SLF specifically, and livelihoods approaches more generally.

2.8 Longitudinal studies
As discussed in the previous section, this research attempts to address the perceived lack of temporal dynamism in the SLF, by applying it to a specific context over a forty year period in order to explore long-term continuity and change in Sierra Leone. This simultaneously fills one of the key deficiencies in the literature on Sierra Leone, and indeed Africa in a more general sense, in that there are very few examples of studies that take such a long-term perspective on development in specific rural communities. This section will briefly explore those that have, and in doing so, highlight the significant contribution this research can make in terms of understanding long-term processes of continuity and change in rural areas.

Longitudinal research has its roots in anthropology, as the time and expense involved are justified by the belief that a greater depth of understanding of the whole spectrum of culture can be better achieved through observations over time (Foster et al., 1979). While other social science disciplines, including, for example, sociology,
psychology, education and geography, have employed longitudinal research methods in more recent times, it still remains largely the preserve of anthropologists (Holland et al., 2006). This, as will become clearer, is evident in the context of this research, in that the longitudinal studies that will be discussed were either undertaken by anthropologists, or heavily influenced by the discipline.

The work of British anthropologist, Audrey Richards, who had a long-term association with the Bemba tribe in Northern Rhodesia (now Zambia) from 1930-1957, was considered pioneering at the time (Herskovits, 1940). Of particular relevance to this research, is the fieldwork she undertook in 1930-31 and 1933-34 culminating in her 1939 book *Land, Labour and Diet in Northern Rhodesia: An Economic Study of the Bemba Tribe*, which provides long term perspectives on the processes of production, distribution and consumption of food (Richards, 1939). Richards’ work was the antecedent to what, as mentioned earlier, has been relatively few attempts to study long-term processes of socio-economic change in rural Africa. Also, in the context of Southern Africa, Chris De Wet and Michael Whisson, both anthropologists from Rhodes University in Grahamstown, explored long-term (1950-1990) socio-economic change in the Keiskammahoek District of Ciskei, South Africa (De Wet and Whisson, 1997); while in East Africa, Mary Tiffen, a development expert, Michael Mortimore, a cultural ecologist and geographer, and Frances Gichuki, an agricultural engineer, explored the relationship between increasing population density, productivity and environmental degradation in Machakos District, Kenya, over the period 1930-1990 (Tiffen et al., 1994).

In the context of West Africa, longitudinal studies pertaining to socio-economic development have been slightly more common. The work of Margaret Haswell (1977), an agronomist who studied social and economic decline in a Gambian village from 1947-1973, is seminal in this regard; while another anthropologist, Ann Whitehead, explored livelihood change through the livelihood strategies of individually traced households in Ghana that have been studied at two separate points in time (1975 and 1989). Also of significance is Mortimore’s (1989) exploration of adaptive behaviour among Hausa, Ful’be and Manga communities of northern Nigeria in response to recurrent drought in the 1970s and 1980s; as well as his collaboration with Mary Tiffen (Mortimore and Tiffen, 2004), in which they coordinated collaborative studies of long-term change in natural resource management and livelihood strategies in dryland areas of Kenya, Senegal, Niger and Northern
Nigeria, in order to test the Machakos hypothesis that emerged from their work referred to in the previous paragraph, by applying it to areas of varying population density and environmental conditions. In the context of Sierra Leone, Paul Richards, another anthropologist, has had a long association with Mogbuama, a medium-sized village in the central part of the country, which has encapsulated a longitudinal study of farming practices and social organisation beginning in 1983 (Richards 1986; Richards, 1992). Prior to that, Tony Binns (1980) evaluated change and development in the rural economies of Panguma and Kayima between 1974 and 1978. Building on this, Binns and Roy Maconachie, explored the reconstruction of livelihoods in the same two communities in the immediate aftermath of the war (Binns and Maconachie, 2005; Maconachie and Binns, 2007a, 2007b, Maconachie et al., 2007; Maconachie 2008a). This research seeks to continue building on the work of Binns, and more latterly Maconachie, and extend the longitudinal exploration of Panguma and Kayima to 40 years.

The significance of a long-term approach with respect to the application of the SLF was discussed in the previous section, but the longitudinal nature of this research is significant in a number of other ways as well. It adds to the very small pool of studies which explore livelihoods in rural African communities over a long period of time, and by extension, an even smaller pool of the same in rural Sierra Leone. This research, therefore, has the potential to aid our understanding of long-term processes of continuity and change not only in Panguma and Kayima, but also rural areas in the rest of Sierra Leone, West Africa, and possibly even Africa in a more general sense. The limited number of antecedents also means that this research could help advance longitudinal methodologies in the context of development, particularly where multiple generations of researchers are involved. Methodological considerations to emerge from previous longitudinal studies will be discussed in Chapter 3. Further, the comparison of data collected in 1974 and 1978 (post-independence/pre-war), 2004 (immediately post-war), and 2014 (more than a decade post-war/pre-Ebola) enables continuity and change to be assessed in a range of contexts. The intervals outlined above, incorporated within an analysis of long-term political economy, enable continuity and change to be situated within the emerging nexus of conflict and development literature discussed earlier. Consequently, a greater understanding of the true impact of the war can be gained, as well as the
influence of development on the causation and cessation of the conflict, and reconstruction after it.

2.9 Sierra Leone literature

Thus far, this chapter has presented a framework for understanding processes of development through the exploration of livelihoods over a long period of time. In doing so it has discussed a number of concepts incorporated within this framework, including conflict, vulnerability, resilience, capabilities, capacity, sustainability, equity, participation, empowerment, intensification, extensification, diversification, food security and well-being. Attention will now turn to the context in which this conceptual framework will be applied, by exploring development in Sierra Leone in a general sense, leading to a discussion of the specific problems this research is attempting to address.

Much has been written about development in Sierra Leone in recent years, with the brutal civil war spanning 1991-2002, subsequent post-conflict reconstruction efforts, and the Ebola epidemic of 2014-2015, providing ample fodder for research. Prior to the 1990s, however, Sierra Leone aroused much less interest, and development was predominantly framed in discussions of agriculture and mining, with much of the period characterised by retrospective examinations of the post-colonial/pre-conflict political economy. As discussed in the previous chapter, this research attempts to situate vulnerability and transforming structures and processes within the broader political economy of Sierra Leone, and thus much of the literature on Sierra Leone is woven into Chapter 4, which facilitates this discussion. As such, this section will briefly summarise literature on Sierra Leone within the context of the broader debates discussed earlier in this chapter, in order to identify the gaps this research seeks to fill.

Given that Binns (1980) provided the baseline for this research, his work is the logical place to start. He examined the interactions between the mining and agricultural sectors in Sierra Leone, concluding that local food production and marketing systems were changing in response to the demands of an increasing non-farm population. He contextualised his research within two emerging bodies of literature, one which explored the role of government in promoting agricultural change in Sierra Leone, and one which looked at the changing impact of diamond mining in Sierra Leone since diamonds were discovered in the 1930s.
Within the former body of literature, key themes to emerge included the peripheral nature of agriculture in the economic policy of both colonial and post-independence governments (Saylor, 1964; Levi, 1974; Havinden and Levi; 1976), and consequent lack of government intervention in the agricultural sector (Davis, 1964); the focus on self-sufficiency in rice production that emerged in the 1970s (Spencer, 1973); the integrated agricultural development project (IADP) implemented in the Eastern Province in 1972, which aimed to improve agricultural income (Binns, 1977; Baird, 1978; Airey et al., 1979); and the role of credit extension facilities (Moinuddin, 1969; Deen, 1973). Also of note were improved transportation networks, particularly feeder roads (Williams and Hayward, 1973; Airey, 1979), agricultural mechanisation (Gilbert; 1970; Gleave, 1976), and the introduction of swamp farming (Hobby, 1968), in promoting agricultural change in rural Sierra Leone.

Key themes to emerge from the latter body of literature included the discovery of diamonds in the Kono District in 1930, and subsequent discovery of substantial diamond deposits in the Bafi-Sewa river system, primarily in the Kono and Kenema Districts (Saylor, 1967; Hall, 1974); the granting of exclusive prospecting rights to the Consolidated African Selection Trust (CAST) in 1931, and its subsidiary the Sierra Leone Selection Trust (SLST) in the 1934, the establishment of the Alluvial Diamond Mining Scheme (ADMS) in 1955, and the emergence of the National Diamond Mining Company (NDMC) in 1970 following its acquisition of 51% of SLST’s assets (Saylor; 1967). Related themes include the rapid growth of illicit mining in the mid-1950s (Van der Laan, 1965); widespread labour migration as a result of the diamond rush, and the consequent population growth and decline in diamond mining areas and non-diamond mining areas respectively (Gamble, 1964; Swindell, 1973; Swindell, 1974; King, 1975); the mechanisation of the mining industry in the 1950s, and the increased demand for skilled labour that resulted (Saylor, 1967); the improvement in infrastructure, particularly transport networks, in diamond mining areas as a result of the diamond rush (Swindell, 1967; Riddell, 1970; Blair, 1972; Blair, 1973; Killick, 1974); and its centrality to development planning post-independence (Government of Sierra Leone, 1974).

As mentioned above, Binns (1980) explored the nexus between the two bodies of literature outlined in the previous two paragraphs, or what he labelled the ‘dovetailing’ of agriculture and mining. The most obvious manifestation of this was
farmers participating in mining activities during the dry season, but other links between the two sectors were also evident in the literature. Local and periodic markets within mining areas, for example, grew rapidly as the mining population increased (Riddell, 1974; Binns, 1975). Mutti et al. (1968) found that the price of basic foodstuffs such as rice, palm oil and ground nuts, was significantly higher in these markets than elsewhere, including Freetown, which Rosen (1974) argued had seen these crops increasingly cultivated as market crops, rather than simply for subsistence. Improved transport networks, while a product of increased mining production, also aided agriculture as it enabled farmers better access to the more competitive markets in mining areas (Blair, 1975). The relationship between agriculture and mining was not only framed in positive terms, however, with Saylor (1967), for example, arguing that mining had had a detrimental effect on agricultural output, not least because it lured young men away from farming. Further, Blair (1972) suggested that improved transport networks expedited this transition as improved mobility made it easier for farmers to engage in illicit mining. There was also significant attention paid to the degradation of agricultural land caused by diamond mining, with compensation for farmers and grants to chiefdoms made by NDMC considered an inadequate solution (Njala University, 1972; Dunba, 1977).

Between Binns’ (1980) thesis, and the outbreak of war in the early 1990s, agriculture and mining remained dominant themes in academic literature on Sierra Leone. In terms of agriculture, the work of Paul Richards was prominent. Of particular relevance to this research are his two books *Indigenous Agricultural Revolution* (Richards, 1985) and *Coping with Hunger* (Richards, 1986), both of which discussed the importance of local farmers knowledge of the environment, and their ability to adapt their agricultural practices to any changes within said environment. He argued that many of the most successful innovations in food crop production in the fifty years previous, had had their roots in indigenous adaptation. A related theme during this period was the contestation between the government’s drive for self-sufficiency in rice production through the expansion of swampland cultivation, and the rationality of farmers, who preferred upland cultivation because of its greater efficiency of labour use, and versatility in terms of supplementary crops (Johnny et al., 1981; Binns, 1982; Dries, 1991). Others, such as White et al. (1982), discussed the impact of intensified swamp cultivation on the health of farmers, with
particular reference to the increased incidence of schistosomiasis (bilharzia) and onchocerciasis (river blindness).

Other themes to emerge in the literature on agriculture in Sierra Leone during this period included the commercialisation of subsistence agriculture (Byerlee et al., 1983; Chuta and Liedholm, 1985; Von Braun and Kennedy, 1986), largely through the marketing of surplus crops (Strauss, 1984), and diffusion of marketing and credit co-operatives (Brown et al., 1979); the lack of correlation between the extent to which women are involved in agricultural production, and their relative access to, and control over, resources and the products of their labour (Safilios-Rothschild, 1985; Beoku-Betts, 1990); determinants of food consumption (Strauss, 1982) and the adoption of agricultural technology (Adesina and Zinnah, 1993) in rural households; and rotational farming and the impact that the length of the fallow period has on yields (Nyoka, 1982; Nyerges, 1988).

In terms of mining in Sierra Leone, the characteristics of this period are largely framed within retrospective discussions of the political economy, which will be explored in greater depth in Chapter 4. Literature that did emerge on mining during this time, however, tended to focus on the progressive decline of diamond production, particularly from alluvial mining (Airey et al., 1979; Binns, 1982; Hollaway, 1986; Weeks 1992); and the government’s failure to capitalise on the country’s mineral wealth to promote development, and indeed the contribution of diamond mining to under-development in Sierra Leone (Zack-Williams, 1990a; Kandeh, 1992). Following on from Binns (1980), the interrelationships between mining and agriculture also continued to be a strong theme. Binns (1982), for example, discussed the potentially serious impact that the decline in diamond production outlined above could have on the agricultural sector, while Zack-Williams (1990b) was even more pessimistic, arguing that earlier growth in the mining industry had already led to the demise of agriculture.

Academic interest in Sierra Leone expanded in the 1990s, largely due to the brutal civil war which broke out in 1991, and continued beyond the turn of the century. Again, the conflict and post-conflict period will be discussed in greater depth in Chapter 4, but the key themes will be synthesised here. The root causes of the war have been widely debated, with ethnicity (Ellis, 1995), political factors (Rashid, 1997; Kandeh, 1999; Macauley, 2012); economic decline (Keen, 1998; Zack-Williams, 1999); a crisis of youth (Richards 1996; Keen, 2003); and greed (Kaplan,
1994; Collier, 2000a; Collier and Hoeffler, 2002) among the key theories put forward. The main protagonists in the war, including the Revolutionary United Front (RUF) (Abdullah, 1998, 2005; Zack-Williams, 1999; Ndumbe, 2001; Gberie, 2005), the Sierra Leone Army (SLA) (Rashid, 1997; Richards, 2004; Silberfein, 2004), the local militia known as the Kamajors (Riley, 1997; Zack-Williams, 1997, Keen, 2005), the Sobels (soldiers by day, rebels by night) (Zack-Williams, 1997; Alao, 1999; Feldman and Arrous, 2013), foreign armies (particularly the British) (Williams, 2001; Kargbo, 2006), foreign mercenary groups such as Executive Outcomes (EO) from South Africa (Riley, 1997; Reno, 2003; Humphreys and Weinstein, 2008), and peacekeeping forces, particularly UNAMSIL (the United Nations Mission in Sierra Leone) (Davies, 2002; Malan, 2003; Keen, 2003; Reno, 2003) were also discussed widely; as were various subsections of the population who were drawn into the conflict, particularly youth (Richards, 1995; 1996; Peters and Richards, 1998; Keen, 2003; Abdullah, 2005), women (Denov, 2006; Coulter, 2008) and the elite (Kandeh, 1999; Keen, 2003; Archibald and Richards, 2002a; Silberfein, 2004).

The political economy of the war was also discussed in depth, with significant contributions from Reno (1997; 2003), Zack-Williams (1999), Chege (2002), Richards (2003), Ogunmola (2009), Erbrick (2012) and Gerdes (2013). In particular, many, including Keen (1998; 2003; 2005), Alao (1999), Smillie et al. (2000), Berdal and Malone (2000), Hirsch (2001a), Ndumbe (2001), Richards (2003), Orogun (2004), Ross (2004), Silberfein (2004) and Maconachie (2012), among others, discussed the role of diamonds in causing, financing, and prolonging the war, the impact of the war on the mining industry, and the political machinations within these processes and impacts. In contrast, there was little discussion of the role of the agricultural sector in the war, nor the impact of the war on the agricultural sector. Some exceptions include Zack-Williams’ (1999) discussion of the RUF’s use of agricultural decline as a consequence of mining and corruption, as justification for rebellion; Silberfein’s (2004) discussion of combatants commandeering food and cash crops in order to diversify their resource base, and using forced labour to cultivate them; Richards’ (2005) discussion of agrarian dimensions of the war; and Richards and Ruivenkamp’s (1997) exploration of the impact that the war had on crop plant genetics conserved by small-scale agriculturalists. In a more general sense, the impact of the war on agricultural production, processing, storage and distribution systems in Sierra Leone was uncovered by the Sierra Leone Truth and Reconciliation
Commission (2004), while the FAO (2010) discussed the role that agricultural policy played in the lead up to the war, the absence of agricultural policy during the war, and the impact that the war had on agricultural policy.

Interest in Sierra Leone has remained strong within academic literature in the post-conflict period. In a general sense, many have summarised the violent nature of the war, focusing particularly on loss of life, amputations, sexual violence, and forced displacement (Francis 2000, Kline and Mone, 2003; Gberie, 2003; Bellows and Miguel, 2006; Denov, 2006; Coulter, 2008), and the physical damage caused by the war (Baker and May, 2004; Binns and Maconachie, 2005; Macauley, 2012). The transition from war to peace has been widely discussed, particularly the factors that contributed to ending the conflict (Williams, 2001; Davies, 2002; Keen, 2003; Malan, 2003; Kargbo, 2006; Zack-Williams, 2012), the DDR process (Comninos et al., 2002; Reno, 2003; Molloy, 2004; Solomon and Ginifer, 2008; Humphreys and Weinstein, 2009; Kargbo, 2012a; Harris, 2012), and the restoration of democratic rule (Kandeh, 2003; Richards et al., 2004; Ohman, 2008; Fridy and M’Cormack-Hale, 2011; Kandeh, 2012).

The other major thread in post-conflict literature regarding Sierra Leone is progress toward reconstruction and rehabilitation. As mentioned above, democracy has been restored, but some have argued that many of the factors that contributed to the war, such as autocratic leadership, pervasive corruption, patronage and cronyism, weak health and education sectors, and high youth unemployment, either remain or have been recreated in the post-conflict period (Hanlon, 2005; Boersch-Supan, 2012; Mitton, 2013; Acemoglu et al., 2014; DePinto, 2016; Mustapha, 2016). Others, however, suggest that a growing civil society, improved local institutions, and greater NGO presence, indicates that significant progress has been made (Keen, 2005; Bellows and Miguel, 2006; Fanthorpe and Maconachie, 2010). Other key themes within this thread of literature include the role of foreign governments and NGOs in reconstruction and rehabilitation (Riley, 2006; Gbala, 2006; Horn et al., 2006); the role of the state and local government (Jackson, 2005; Fanthorpe, 2006); the role of, and implications on, gender (Maclure and Denov, 2009; MacKenzie, 2009, 2012; Abdullah et al., 2010); and youth (McIntyre et al., 2003; Peeters et al., 2009); the rehabilitation of the security sector (Ebo, 2006; Mugah, 2008; Jackson and Albrecht, 2010); the return of internally displaced persons to their homes (Maconachie et al., 2007); and food security (FAO, 2010, Lynch et al., 2013).
Mining and agriculture, and the nexus between the two, are again prominent within this body of literature. On all three counts, Roy Maconachie has been particularly visible, while others including Tony Binns, Richard Fanthorpe and Paul Richards have also made notable contributions. In terms of agriculture, the rehabilitation of the agricultural sector post-conflict has been a strong theme (Archibald and Richards, 2002b; Binns and Maconachie, 2005); as has the utilisation and management of wetlands in both rural and urban settings (Maconachie, 2008a; Maconachie et al., 2009; Forkuor and Cofie, 2011; Lynch et al., 2013); while Peters and Richards (2011), and White (2012), discuss the perpetuation of longstanding tensions within the agricultural sector in post-conflict Sierra Leone. In terms of mining, key themes to emerge include the role of mining in post-conflict reconstruction (Grant, 2005; Maconachie and Binns, 2007b); governance of artisanal and small-scale mining in the post-conflict context (Levin, 2005; Maconachie, 2008b; Maconachie, 2009); the interrelationships between diamond mining and foreign aid in post-conflict Sierra Leone (Grant, 2005; Le Billon and Levin, 2009); corporate social responsibility (CSR) within the extractive industry, and how they are influenced by the perceptions of youth (Maconachie, 2014); the social and economic implications of decreasing production and falling prices within the artisanal diamond mining sector (Pijpers, 2011); and the potential of small-scale gold mining to ameliorate this (Maconachie and Hilson, 2011; Cartier and Burge, 2011). In terms of the intersection between agriculture and mining in the post-conflict period, Binns and Maconachie (2005), Maconachie and Binns (2007a) and Maconachie (2011) have argued that meaningful rural development in post-conflict Sierra Leone is contingent on a detailed understanding of the nature of inter-locking livelihoods in the agricultural and mining sectors. Similarly, Cartier and Bruge (2011) argue that small-scale agriculture and artisanal gold mining should be considered as complimentary livelihood activities, rather than alternatives to one another. In addition, Fanthorpe and Maconachie (2010) discuss the role that artisanal mining and small-scale agriculture have played in the resurgence of civil society, and restoration of democracy in rural Sierra Leone.

This section has explored development literature on Sierra Leone since independence in three distinct temporal contexts, pre-conflict, conflict, and post-conflict, with particular attention paid to the mining and agricultural sectors. A noticeable thread throughout the post-conflict literature on Sierra Leone summarised
in the previous paragraph is the growing reference to livelihoods in discussions around agriculture and mining, while others have talked about livelihoods in Sierra Leone in a more general sense (see, for example, Gale, 2006; Peters, 2007a; Peeters et al., 2009). Despite the emergence of the use of the word ‘livelihoods’ within these discussions over the past decade, very few have specifically used a livelihoods approach in which to frame them. Consequently, much of the literature explores particular types of livelihoods, for example, farming or mining, or the livelihoods of particular subsets of people, for example women, youth or ex-combatants, rather than livelihoods in a more general sense. As discussed earlier in this chapter, one of the key advantages of livelihoods approaches is that they provide a holistic understanding of poverty which, in turn, can contribute to more effective development policy and planning. As such, building on the work of Tony Binns (1980), and his more recent collaboration with Roy Maconachie (Binns and Maconachie, 2005; Maconachie and Binns 2007a, 2007b), this research seeks to use a livelihoods approach to assess continuity and change in rural livelihoods in Panguma and Kayima over a forty year period and, in doing so, to identify some of the key challenges and priorities for future rural development in Sierra Leone.

Finally, the recent Ebola epidemic in West Africa has gained a lot of academic attention in the past two years. While the fieldwork for this research coincided with the early evolution of the epidemic, the full extent of the crisis did not become evident until the fieldwork programme had been completed. As such, other than acknowledging the existence of a burgeoning body of literature pertaining to Ebola in Sierra Leone (see, for example, Wilkinson and Leach, 2014; Leach, 2015; Anderson and Beresford, 2016), this theme will not be covered within this thesis. As will be discussed in Chapter 7, however, the timing of this fieldwork in relation to the Ebola epidemic, coupled with the longitudinal nature of this research, opens a plethora of potential opportunities for future research.

2.10 Conclusion: a conceptual framework, and a context in which to apply it…

This Chapter has presented a framework for understanding processes of development in rural areas impacted by conflict, political upheaval, and economic change, through the exploration of livelihoods over a long period of time. Beginning with a broad overview of the evolution of development theory since World War Two, it has highlighted the shift toward bottom-up participatory approaches to development in
the latter part of the twentieth century, and in doing so identified ‘change that improves people’s quality of life’ as a working definition of development for this thesis. Two key components of the aforementioned shift, in the context of this research, were the growing awareness of the relationship between development and conflict, and the emergence of livelihoods approaches to development. Discussion of the former went beyond the accepted notion that conflict simply impacts upon development, suggesting that underdevelopment and uneven processes of development can also contribute to the causation of conflict, and therefore effective development can be used as a tool for conflict prevention. It also considered the role of development in conflict cessation, peacebuilding, and reconstruction in post-conflict situations. Discussion of the latter focused on the centrality of people’s livelihoods to development, arguing that livelihoods approaches to development are people-centred and holistic. In doing so, it also identified and defined a number of concepts incorporated within livelihoods approaches, including sustainability, capability, capacity, equity, vulnerability and resilience, each of which is fundamental to this research.

Having charted the broader concepts and debates underpinning the research, this chapter zoomed in on the SLF, the most prevalent and enduring application of livelihoods approaches in development research and practice. It broke the SLF down into its five distinct parts, exploring each individually, and the influence and interaction between them. It then went on to discuss some of the main critiques of the SLF, including its lack of temporal dynamism, its limited conceptualisation of politics and power relations, and questions around its applicability to conflict situations, as well as more general criticisms relating to its application on the ground, before synthesising responses to them in recent literature, and suggesting ways in which this research has the potential to address and/or account for them. This chapter then explored the limited number of studies that have looked at rural livelihoods in Africa over a long-period of time, and in doing so, justified the long-term perspective adopted by this research.

The sections summarised in the previous paragraph narrow down the focus of this research. The discussion of the SLF not only illustrates how livelihoods will be conceptualised and understood within this research, but also provides a framework for how the data collected will be ordered and discussed within this thesis. Further, while the primary purpose of this research is to explore continuity and change in
Panguma and Kayima over a forty year period in order to identify the key challenges and priorities for development in the future, it also seeks to contribute to broader discussions around development, conflict, and the nexus that is emerging between the two. In particular, it aims to help move forward debates about livelihoods approaches to development in general, and the SLF more specifically, by applying the SLF in a way that enables greater temporal dynamism, incorporates a political economy approach, and pays greater attention to vulnerability in situations of long-term conflict. Similarly, in taking a longitudinal approach, this research has the potential to contribute to understanding long-term processes of continuity and change in rural areas, and help advance longitudinal methodologies in the context of development. The final section of this chapter summarised development literature on Sierra Leone, in order to identify the specific problem which this research seeks to address, and justify the use of a longitudinal livelihoods approach to do so. The following chapter will discuss the methodology employed to achieve this.
3 Methodology

3.1 Introduction

The previous chapter presented a framework for understanding processes of development through the exploration of livelihoods over a long period of time, and identified rural Sierra Leone as an interesting and timely context in which to apply it. This chapter will discuss the methodology adopted in order to apply this conceptual framework in Panguma and Kayima, and thereby assess continuity and change over a forty year period within these communities. In undertaking longitudinal research retrospectively, it would be easy to simply adopt the methodology of the original study, replicate its methods, and be done with it. Such an approach, however, would fail to consider the significant changes that have occurred in methodological debates in the ensuing years and, moreover, would assume that the two principal researchers’ embody the same epistemological, ontological and positional space. That being said, it would be equally foolish to ignore the original methodology that underpins the research upon which this research is based. The data it spawned is, after all, the baseline for the current research, and therefore the adoption of any new methodology must retain some comparable properties. This challenge of trying to generate knowledge that is comparable to that generated in the 1970s, enabling a rigorous understanding of change over time, whilst moving away from the positivist
epistemology in which it is rooted, ultimately guides the discussion in this chapter. First, it will briefly discuss ontology and epistemology, situating this research within a pragmatic paradigm. Then, drawing on the methodology of Binns (1980), it will outline why the primarily quantitative approach he took is no longer apposite; arguing that an ethnographic, mixed-method and participatory methodology is the most appropriate way of contextualising this research within the livelihood framework, before examining the specific methods used, and how the data they generated is analysed and reported. Adopting a primarily qualitative approach, however, raises questions regarding the positionality of the researcher within the research process, particularly given the cross-cultural and longitudinal elements of the research, thus an in-depth discussion of positionality and reflexivity will follow. Finally, this chapter will discuss the ethical considerations associated with this methodology, and outline some of its potential limitations.

3.2 Ontology and epistemology: a pragmatic approach

In research methodology, ontology refers to the nature of what is being studied, and epistemology refers to how to best understand this object of study (Whitehead, 2004). Prowse (2010) suggests that the majority of poverty and development research fails to engage with ontological, epistemological and methodological debates tending, rather, to present a neat, post-hoc account of research methods. He argues that while such an approach has some advantages, adhering to a clear methodology and being explicit about an epistemological standpoint when conducting and reporting primary research can help to explain how research findings are generated, how robust findings are, and how findings can or cannot be extrapolated. Further, Chambers (2014: 15) states that development studies needs self-critical epistemological awareness, which he describes as:

Being critically aware of how knowledge is formed by the interplay of what is outside, and what is inside, ourselves. Outside ourselves, this concerns being aware not just of methodology but also of the external processes of observation and interaction which inform us; and inside ourselves, this concerns trying to be aware of our own predispositions to select, interpret and frame.

Tincani (2015) applies a similar argument to the Sustainable Livelihoods Framework (SLF), suggesting that it should be used as the conceptual framework it was designed to be, and not an analytical framework. In doing so, she stresses the importance of
epistemology in the selection of research methods, the sampling period and unit of analysis chosen, the choice of data collected, and the angle of analysis selected.

While Chambers (2014), as intimated above, advocates for epistemological awareness, he also acknowledges that in practice, it is difficult to achieve due to the element of ‘exploration’ associated with development research. While a myriad of ontological and epistemological positions are possible, Blaxter et al. (2006) argues that all of the different philosophical foundations for research are essentially based on the same basic characteristics, in that they aim to be planned, cautious, systematic and reliable ways of finding out or deepening knowledge. In line with this, Scoones (2015) suggests that a livelihoods approach captures diverse forms of knowledge involving different epistemological frames, and can therefore shift our perspectives and challenge our assumptions, in relation to both epistemological and ontological understandings. Further, he suggests that the rigour and validity alluded to by Prowse (2010) above, is a myth supported by particular forms of knowledge politics. As such, he argues that a narrow ontological and epistemological approach is infinitely poorer and less effective than the opening up of diverse forms of knowledge emerging from different perspectives, and that the triangulation of the latter can in fact enhance rigour and expand insight.

Given Scoones’ (2015) argument outlined above, this research adopts a pragmatic ontological and epistemological position to exploring rural livelihoods in Sierra Leone. Pragmatism, in its simplest sense refers to being practical, while in a philosophical sense, relates to a paradigm pioneered by Charles Sanders Peirce, William James and John Dewey in the 1870s, and revived more recently by Richard Rorty (1982), Hilary Putnam (1995) and Nicholas Rescher (2000), and offers epistemological justification and logic for mixing approaches and methods (Johnson et al., 2007). Davis (2009: 2) argues that ontological and epistemological debates about poverty and development should “be conducted while solving practical research problems, and not in detached hypothetical or abstract terms”. As such, he suggests that a pragmatic approach to ontological and epistemological differences in studies of poverty and development encourages a shift beyond ideological differences in research methodology, to choosing a mix of methods, which can help in understanding causes of poverty and potential solutions, and generate policy relevant knowledge. Scoones (2015) states that livelihoods assessment must be rooted in local contexts and build understandings from this base and, as such, argues that a mixed-
method approach, which pragmatism enables, is the most robust for livelihoods analysis. The other key advantage of a pragmatic ontological and epistemological standpoint is that it enables data collected within a largely positivist methodological framework 40 years previous, to be incorporated within the mixed-method approach outlined above. As Olsen (2004) argues, if the theory of knowledge being employed perceives only one type of data as valid, then it would be incoherent to employ multiple types of data. Thus pragmatism is appropriate for this research as it recognises multiple forms of data as being valid.

3.3 Methodology
At this juncture it is important to distinguish between the terms ‘method’ and ‘methodology’. Numerous complex definitions exist for each (see for example Kothari, 2004; McGregor and Murname, 2010), but perhaps Robert Chambers sums up the difference most succinctly in stating that a method is a “way of doing something”, whereas a methodology is “a system of methods and principles” (Chambers, 2005: xxvi). Further, Sarantakos (2005: 30) describes methodology as “a research strategy that translates ontological and epistemological principles into guidelines that show how research is conducted”. Adhering to this distinction, this section will focus on the methodology underpinning this research, seeking to justify the longitudinal approach outlined in the previous chapter, and the ethnographic, mixed methods and participatory approaches advocated within the pragmatic standpoint outlined in the previous section. In doing so, it finds a number of similarities with the methodology employed by Binns (1980), but also illuminates a number of discrepancies, largely resulting from the positivist approach favoured at the time his research was undertaken. While reference may be made to specific methods within this discussion, a more explicit delineation of those used within this research will be made in the following section.

The significance of the longitudinal nature of this research was discussed in Chapter 2, in which it was argued that it would add to the very small pool of studies which explore livelihoods in rural African communities over a long period of time. The methodological implications of such an approach, however, present a number of challenges, not least of which is the constraint of time. Given that livelihoods research, and development research more broadly, seek to actively promote change, assessing livelihoods over such a long period of time is at best impractical, and at
worst unethical. Consequently, most livelihoods research concentrates on the empirical investigation of livelihoods at a specific moment in time, in order to develop policy which facilitates future improvement. Murray (2002), though, argues that this circumspective/prospective approach needs to be complimented by a longitudinal approach, which seeks to understand changes which have occurred over a much longer timescale. Buck et al. (1996) suggests that the most effective method of doing this is a series of repeated cross-sectional surveys of the same population over time, but as Murray (2002) counters the institutional and social conditions of control over studies of this kind rarely exists in developing countries. Thus, he suggests that a longitudinal dimension can be achieved through a retrospective reconstruction of change over time, which involves the approximate comparison of different surveys, carried out at different points in time for different purposes, complimented by the use of intersecting life histories. It is this retrospective longitudinal methodology upon which this research is based, in that the methods used in the 2014 fieldwork sought to collect data that was not only comparable to that collected by Tony Binns in the 1970s (Binns, 1980), and to a lesser extent the work of Binns and Roy Maconachie in the mid-2000s (Binns and Maconachie, 2005; Maconachie and Binns, 2007a; 2007b), but also to draw out perceptions of long-term continuity and change among the current population. This section will now discuss some of the methodological considerations to emerge from this retrospective longitudinal approach.

When discussing the methodology of his original study of Panguma and Kayima, Binns (1980) promoted a mixed-methods approach, stating that:

In undertaking a study such as this, one is faced with something of a dilemma between, on the one hand, acquiring useful, quantifiable data from a representative sample of the total population, and on the other, achieving some considerable depth in the study, supported by a wealth of qualitative information obtained from interviews and general observations (Binns, 1980: 268).

In his analysis of results, however, a strong emphasis on quantitative data is clearly evident, with no fewer than 43 statistical tables, most complete with ill-explained Chi-square and probability values, generated from the ‘sample survey’ that he described as “the most useful method of collecting detailed information on food production and marketing systems” (Binns, 1980: 260). In contrast, qualitative evidence from these surveys was largely only drawn upon to provide generic
explanation of the numerical results, with little prominence given to the detailed perceptions of the respondents. Further, while discussing qualitative methodologies, Binns (1980: 270) states “…Anthropologists, in particular, have long been associated with this style of research. Although they must be afforded respect since in many cases they were the pioneers of the study of relationships within Third World rural societies, much of their writing is highly specific and even anecdotal, and it is frequently difficult to determine the extent to which their findings are more widely applicable or representative of the ‘whole’”. Thus, despite the stated commitment to a mixed methodology, there is a clear inclination toward a quantitative methodology in his research.

While there is certainly a place for quantitative methodologies within contemporary development and livelihoods research, such a strong emphasis on them is at odds with the livelihoods conceptual framework, and pragmatic ontology and epistemology, adopted within this research which, as discussed in the previous section, promotes the use of a mixed-methods approach. This research seeks to understand not simply ‘if’ change has occurred in Panguma and Kayima, a question Ellis (2000) suggests is best captured by quantitative methods, but perhaps more importantly ‘how’ and ‘why’ such change, or lack thereof as the case may be, has occurred, for which qualitative methods offer greater depth (Woodhouse, 1998). Similarly, Murray (2002: 497), argues that quantitative data provide the basis for showing what and emphasising what is representative, while qualitative data are able to reveal the how and why, and illuminate differences and variety within the range of human experiences in the areas studied – “experiences that could help explain, problematize, and contextualise differences and changes in average values of variables from the quantitative survey”. Further, Laws et al. (2003: 273) argue that there is no singular answer to such social research questions, and that “the researched are actively engaged in constructing their world, as is the researcher”, while Leeds-Hurwitz (2009) posits language as the most important medium through which to do so (Leeds-Hurwitz, 2009). Consequently, a predominantly qualitative methodology, which Sarantakos (2005: 36-37) describes as diverse, pluralistic, and stemming from a “relativist orientation, a constructivist ontology and an interpretivist epistemology”, complimented by a number of quantitative techniques, was adopted. This follows Bryman’s (2008) approach to mixed-methods research, which suggests that for
practical reasons one methodology is likely to be more dominant, but that all research is enriched by the addition of very different techniques from the other.

Despite Binns’ (1980) quantitative focus, and the contrasting qualitative bent within a mixed-methods approach in this research, both periods of fieldwork were ethnographic in nature, in that both involved the researcher living within Panguma and Kayima for months at a time, recording field notes and observations, participating in activities, and carrying out ethnographic interviews. In this sense, the above critique of Binns’ (1980) methodology is aimed more at what data he chose to report, and how he chose to report it, rather than the actual methodology he employed in the field. Further, Whitehead (2004) argues that while ethnography has traditionally been oriented towards qualitative methods, the ethnographer should employ any and all means necessary to create the most holistic understanding of the cultural system or group being studied, and therefore can incorporate both qualitative and quantitative methods. As such, the mixed-methods approach outlined above is entirely appropriate for ethnographic research.

Another critique of Binns’ (1980) methodology relates to whose voices he sought within his research, and subsequently whose voices he promoted within his narrative. Despite, for example, discussing the important contribution women make to livelihood generation in rural Sierra Leone, his primary method of data collection exclusively focused on male ‘farmers’. Indeed his entire narrative is largely devoid of the female voice, perhaps symptomatic of what Chambers (2005) has labelled the ‘male-biased syntax’ of the 1960s and 1970s. Further, direct quotes from primary data sources presented in his work are limited to those collected in informal interviews with government officials, local chiefs and ‘big men’, thus perpetuating traditional notions of power by privileging certain voices, while marginalising others. Consequently, this research seeks to be more holistic by incorporating participatory methods within the collection and analysis of data, thus not only enabling the community to actively contribute to the generation of knowledge, but also empowering them to help decide what, and whose, knowledge is valuable. In addition, the voices of women, youth and other traditionally marginalised groups are incorporated within the narrative of this thesis.
3.4 Methods
Shurmer-Smith (2002: 95) states that “when one adopts a particular theoretical position, some methods will suggest themselves and others become inappropriate, for both theoretical and practical reasons”. The methods used for this research are, therefore, predicated on the adoption of the ethnographic, mixed-method, and participatory methodology outlined in the previous section, which in turn, stems from the pragmatic ontological and epistemological standpoint discussed earlier, and the livelihoods approach conceptualised in Chapter 2. Returning to Chambers’ (2005: xxvi) distinction between the terms ‘methodology’ and ‘methods’, this section will address the specific tools that form this broader “system of methods and principles”. The following sub-sections will define each of the methods used within this research; discuss which element(s) of the research it seeks to inform, and its ability to do so; and how the information collected through each method is analysed, and reported. A series of anonymised tables summarising the participants involved in each of the methods outlined below is in Appendix A.

3.4.1 In-depth, open-ended household survey
Given that much of the previous section was based on a critique of Binns’ (1980) methodology as being overly quantitative, it may be somewhat surprising that this research also employs a questionnaire survey as one of its primary forms of data collection. Further, the current questionnaire survey is guided by the one administered by Binns back in 1974. This ‘replication’ is driven in part by the previously mentioned need to produce comparable data, but mostly by the realisation that the data Binns collected was not, in itself, overly quantitative, rather his analysis and reporting of it was. Careful examination of the raw data his survey produced has uncovered a wealth of qualitative information, thus providing the coveted baseline, and enabling a similar survey to be undertaken within this research.

Other than the methodological emphasis of the questionnaire survey, the other key difference was the type of respondents sought between the two samples. As discussed in the methodology section of this chapter, Binns’ survey focused exclusively on male ‘farmers’, despite discussing the important role which women, and to a lesser extent children, play in agriculture in Sierra Leone. In order to counter this bias, the approach to this questionnaire survey is more holistic, with ‘agricultural households’ rather than ‘farmers’ being the ‘sampling unit’. The main reason for
taking this approach is that in a patriarchal society, such as Sierra Leone, household ‘heads’ are predominantly male and often underemphasise the livelihood activities of other household members, and underestimate the contribution of female livelihood activity to household income (Sharp, 2007). Such an approach, however, is not unproblematic, in that households are not homogenous groups, requiring flexibility in the definition of household membership (Adato et al., 2007). Consequently, the household surveys were administered as a group interview, with all available household members encouraged to participate (see Figure 3.1 for an example of typical household survey setting). An added advantage of undertaking the questionnaire surveys in this way is that it enables discussion amongst the household, and therefore a more considered response to the questions being asked (Sharp, 2007). That being said, given the aforementioned patriarchal nature of society in Sierra Leone, male household ‘heads’ often dominated these discussions regardless of the intention.

Figure 3.1: Example of a typical household survey setting in Panguma (Source: Author’s Field Research).

As mentioned above, the design of the questionnaire survey was guided by that administered by Binns (1980) during his initial fieldwork period in 1974, but was
by no means identical. A number of the original questions were intuitively deemed irrelevant in the current context, while others, in discussion with Binns regarding his fieldwork experience, as well as other colleagues with fieldwork experience in rural Sierra Leone, were considered impracticable. In contrast, the addition of new questions was also required in order to situate the survey in the present, most notably the post-conflict context, while others, still, required the use of different techniques to elicit information that was previously considered unobtainable (see discussion on proportional piling below). The questionnaire survey was then further refined once in the field following a test-run in Wiema, a village between Panguma and Kayima, both in terms of size and location, which also enabled the training and calibration of the research assistants (see discussion of research assistants in section 3.4.8). The corollary being that the final questionnaire survey was made up of 61 questions, as opposed to the 104 from Binns’ 1974 survey, with the questions being predominantly open-ended to enable the respondents to elaborate, but focused enough for their responses to be coded and quantified where necessary (see Appendix B for a copy of the questionnaire survey).

Proportional piling, which is an interactive method of employing ‘visuals and tangibles’ to help estimate quantities and proportions, whether literate or not (Chambers, 2008), was also used within the questionnaire survey. As the name implies, “the method involves participants making piles (of stones, beans, dung pellets or whatever else is handy for counting) proportional in size to the relative number or importance under discussion” (Sharp, 2007: 275), and has numerous applications including the prioritisation of problems within a community (Mariner, 2000), and estimating the proportion of household income derived from different livelihood activities, and how it is spent (Dimoulas et al., 2008). In the context of this survey, proportional piling was used to help understand crop distributions, and sources of income and expenditure. For example, respondents were given a pile of one hundred stones, told that they represented their entire annual expenditure, and then asked to divide the stones into piles based on what they spent that money on (see Figure 3.2 for an example of proportional piling). Once the households had discussed, reapportioned, and then agreed upon, the distribution of the piles, the stones in each pile were counted and recorded to provide an estimate of the percentage of income spent on certain items.
In terms of sampling, Binns (1980: 263) surveyed 50 ‘farmers’ in each of Panguma and Kayima in 1974, as he considered this “a reasonable proportion of the farming population and a manageable number in terms of time and personnel available”. While a relatively arbitrary sample size, it was decided to set 50 respondents in each town as a ‘shifting’ target for this survey as well, dependent on constraints encountered in the field, and whether or not ‘saturation’, which is the point at which no new or relevant information emerges within the themes of the questionnaire (Saumure and Given, 2008), was achieved within that number of respondents. As it transpired, 50 households were surveyed in each town. In order to select the participating households, a map of each town was drawn up (see section 3.4.6 for details), with each residence allocated a number (001-476 in Panguma, and 001-259 in Kayima). Sixty households were then selected from each town using a random numbers chart, with the first fifty households selected constituting the sample, and the remaining ten held in reserve in case any of the initial sample were unavailable, unwilling or inappropriate (i.e. non-agricultural households).
3.4.2 Semi-structured key informant interviews

Semi-structured interviews typically refer to a context in which the interviewer has a series of questions that are in the general form of an interview schedule, but is able to vary the sequence of questions (Bryman, 2008). This enables some structure, but emphasises how the interviewee frames and understands issues and events, and thus allows them to pursue topics of particular interest (Leidner, 1993). The key advantage of semi-structured interviews, as opposed to structured interviews, is that they can elicit rich information about a range of topics, which, while relevant to the researcher, may not have been expressed in a more structured setting (Seezink and Poell, 2010).

In the context of this research, semi-structured interviews were used to glean information from key informants, a subset of the population defined by Payne and Payne (2004: 135) as “those whose social positions in a research setting give them specialist knowledge about other people, processes or happenings that is more extensive, detailed or privileged than ordinary people”. In addition, non-agricultural livelihoods exist in rural Sierra Leone that, while not engaging sufficient numbers to warrant a unique questionnaire survey, are nevertheless of importance to this research. Some of these alternative forms of livelihood were captured through focus group discussions (discussed below), but others still either lacked the necessary participants to form a focus group, or possessed unique qualities heterogeneous to others engaged in a similar field, and thus required individual attention. As such, a number of short semi-structured interviews were also held with entrepreneurs involved in niche activities, such as baking, electronics charging and film showing, as well as with people involved in more mainstream activities such as carpentry, mechanical repairs and trade. For simplicity, all people interviewed using a semi-structured technique within this research will be henceforth referred to as ‘key informants’.

In all, 79 key informants were selected (see Appendix A for a full list of key informants, and Appendix C for a list of themes covered) through a mix of purposive sampling which, as Bryman (2012: 714) describes, is where the researcher aims to select participants “in a strategic way, so that those sampled are relevant to the research questions that are being posed”; and snowball sampling, whereby those selected via purposive sampling are asked if they know of others who may be able to provide further insight on the themes of the research (Overton and Van Dierman, 2014). Initial meetings were held with key gatekeepers in each community, including
the respective Paramount Chiefs, as well as representatives of the native administration, local and district councils, local law enforcement, and other community groups, where a full briefing on the nature and scope of the research was given. While the primary objective of these meetings was to obtain permission to conduct the research within Panguma and Kayima, they also provided an opportunity to identify additional potential informants for the research, and thus were ‘included’ within the purposive ‘sample’. Others, such as the agricultural extension officer and bank manager in each community, as well as national and international scale informants, including representatives from NGOs and government departments, were identified intuitively, and also included within the purposive ‘sample’. In the process of conducting semi-structured interviews, each key informant was asked if they could identify other potential key informants, with their recommendations forming the basis of the snowball ‘sample’.

3.4.3 Focus groups

Focus groups are a “form of group interview in which there are several participants (in addition to the moderator facilitator), there is an emphasis in the questioning on a particular fairly tightly defined topic, and the emphasis is placed upon interaction within the group and the joint construction of meaning” (Bryman, 2012: 710). In the context of this research, focus groups were used in a number of different ways. While rural Sierra Leone is predominantly agricultural, other means of livelihood exist outside of agriculture which, while relevant to this research, lacked sufficient numbers to warrant a survey of their own. As such, focus groups were used to enable groups of people engaged in alternative means of livelihood generation to jointly construct an understanding of their livelihood activity, and how it had changed over time. In addition to livelihoods, focus groups were also used to achieve a construction of specialist knowledge about the community and/or community services and facilities, and to help understand the efficacy of such services and facilities from their users. Finally, to compliment the questionnaire survey, a focus group made up of farmers was conducted in each town in an attempt to (re)construct the calendar of farming activity presented in Chapter 1. In total, 9 focus groups were held in Panguma, 8 in Kayima, and 1 in Dodo, a small village 6km southwest of Panguma, with each consisting of between 4-19 participants (see Appendix A for a full list of focus groups, and Appendix C for a list of themes covered).
3.4.4 Guided field walks

Guided field walks were also used within this research, a technique which like proportional piling, is directly derived from the stable of participatory methods, although one which is more commonly referred to as a ‘transect walk’. Both ‘guided field walks’ and ‘transect walks’ can broadly be defined as a method in which the researcher is guided by local informants “through areas of interest to observe, to listen, to identify different zones or conditions, and to ask questions to identify problems and possible solutions” (Grenier, 1998: 58-59). The reason for the distinction between the two terms here, however, is that ‘transect walks’ are generally described within the participatory development literature as ‘systematic’, and as ‘following a defined path’ (Chambers, 1997b). Indeed the word, transect, itself, connotes a straight line dissection, whereas in the context of this research, a more laissez faire approach was taken to the method, and thus a less restrictive designation was required. Consequently, the method will henceforth be referred to as a ‘guided field walk’ within this thesis.

Guided field walks were used within this research in two distinct ways. In the first instance, five of the households surveyed in each of the towns were selected at random, and asked to guide me from their home to their farm, identifying and explaining anything that they felt was significant to themselves, their family, and the community along the way (see Figure 3.3 for an example of guided field walk). In the second instance, groups were composed of participants with specific characteristics, for example a group of women, or a group of school students, and asked to guide me through the town and its surrounds to sites that they, as a group, identified as being significant. In both instances, the route was entirely at the discretion of the guide(s), and discussion was based around their observations, with my main roles being to facilitate this discussion once the guide(s) had identified something as significant, and to record extensive field notes from each such interaction. In total, there were 10 guided field walks in Panguma, and 8 in Kayima, with the number of participants in each ranging from 1-9 people (see Appendix A for a full list of guided field walks).

Using guided field walks in this way stimulated the exposition of indigenous knowledge by giving participants a more tangible medium of doing so (Mukherjee, 2002). This was particularly useful for learning about the farming system in Sierra Leone, and identifying constraints and problems specific to Panguma and Kayima,
but also identifying potential local solutions and available resources (Nabasa et al., 1995). Other strengths of using guided field walks in this way were that they enabled the identification of significant resources, both physical and social, from the perspective of different groups within the community (Mukherjee, 2002); provided a platform for participatory mapping exercises (see section 3.4.6); and helped overcome the ‘roadside bias’ often associated with field visits, by empowering the participants to define the route (McCracken, Pretty and Conway, 1988).

Figure 3.3: Two members of an agricultural household discussing their pineapple garden during a guided field walk (Source: Author’s Field Research).

3.4.5 Participant observation
Participant observation is difficult to define as a research method because, in a sense, all social research is a form of participant observation. We cannot, after all, study the social world without being part of it (Hammersley and Atkinson, 1983). But as DeWalt et al. (2000: 259) argue, “while much of what we call fieldwork includes participating and observing the people and communities with whom we are working, the method of participant observation includes the explicit use in behavioural analysis
and recording of the information gained from participating and observing”. Thus, in the context of this research, participant observation can be considered as “a method in which an observer takes part in daily activities, rituals, interactions, and events of the people being studied as one of the means of learning the explicit and tacit aspects of their culture” (Dewalt et al., 2000). As alluded to above, it is more than just observing the community in which one is participating, but systematically recording and analysing observations made for scientific purposes. By observing what people do in ‘everyday life’, as opposed to recording what they say they do through more formal techniques, participant observation can supply detailed, authentic information that no other research methods can (Homan, 1980; Gans, 1999).

Within this research, participant observation was used both actively, where the researcher would participate in an activity or event (see Figure 3.4 for example), and passively, where observations would be made from participation in more routine activities (for example, conversations held over a meal). In both cases, detailed field notes were written-up as soon as was practicable, so that the essence of the observation was recorded as accurately as possible.

![Figure 3.4: Example of participant observation - planting groundnuts on a respondent’s farm (Source: Author's Field Research)](image)

3.4.6 Mapping
Maps can be considered as a “highly communicative forms of spatial representation” (Rambaldi, 2005: 6). They have an ability to diagrammatically convey complex
physical and/or cultural features of an area, but as Warren (2004, cited in Rambaldi, 2005: 2) argues, they “are more than pieces of paper. They are stories, conversations, lives and songs lived out in a place and are inseparable from the political and cultural contexts in which they are used”. As such, countless examples exist of “authoritarian, simplistic, erroneous and coercive acts of mapping, with reductive effects on both individuals and environments” (Corner, 1999: 213). Maps produced by European explorers, for example, “were an exemplar expression of cartographic power: by ignoring indigenous names, and barely alluding to the presence of local settlements, in effect they declared the land to be empty and available” (Poole, 1998: 34). As Cosgrove (1999) notes, the acknowledgment of the complexities and uncertainties of mapping is nothing new, but the epistemological and interpretative challenges that they present are still very much relevant for those engaged in making and using maps. Thus, such complexities and uncertainties have implications for the ways in which maps are made and used for this research, so particular emphasis has been placed on community participation in the production and analysis of maps.

First, a scale map of each community was drawn by the principal researcher, showing the location of all households, as well as places of significance such as sites of commerce, education, religion and community. Utilising satellite imagery from Google Earth, and with reference to hand drawn maps from Binns (1980) and Maconachie et al. (2007), a scale street plan indicating the position of buildings was drawn up. Each community was then covered on foot by the researcher, with the assistance of two research assistants, with each building classified, and additional features, such as infrastructure, added in. The research assistants were generally able to clarify the use and occupancy of buildings where such was not immediately clear, but where this was not possible, residents in the immediate vicinity were sought to fill in the gaps. The purpose of this mapping exercise was three fold. First, as mentioned previously, the map was used as the sampling frame for the questionnaire survey of households. Second, comparing the maps to those produced in Binns (1980) enables an assessment of infrastructural and housing growth within the community since 1974. And third, comparing the maps to those produced in Maconachie et al. (2007), which highlight the impact the war had on each community’s built environment, enables an assessment of reconstruction following the end of the civil war. Ultimately, the mapping exercise provides pictorial evidence of physical continuity and change in each town, with reference to three particular points in time.
(1974, 2004, 2014). Once the current maps were completed, the three maps of each town were shown to informants within their respective community in order to promote discussion around changes between each edition, and the reasons why that change, or lack thereof, has occurred.

While the maps described above incorporate certain participatory methods within a relatively conventional mapping technique, a second form of mapping stems explicitly from the participatory methodology employed within this research, and involved individuals and groups producing their own maps of their town. Following on from verbal and/or experiential methods, such as focus groups and guided field walks, participants were supplied with paper and pencils, and asked to produce a map of the town as they saw fit. As with the previous maps, once the participants were happy with what they had produced, they would sit with the researcher and explain their map. Although these maps are difficult to incorporate within the thesis, they have value in that they add layers to the researchers understanding of the communities by helping to clarify ideas expressed verbally, and identify patterns and trends in the way that the community perceives itself, and prioritises its future. As Corbett (2009) argues:

participatory maps provide a valuable visual representation of what a community perceives as its place and the significant features within it, including depictions of natural physical features and socio-cultural features known by the community (Corbett, 2009: 4).

3.4.7 Content analysis of secondary data

Secondary data sources, such as government and NGO reports or census data, can be vital in terms of assessing development progress; making comparisons over time and between places; and triangulating primary research data (Findlay, 2006). Even when not directly related, secondary data can also be useful for understanding the context of a more narrowly defined research topic (Overton and Van Dierman, 2014). Consequently, secondary data was actively sought throughout the fieldwork process, particularly during semi-structured interviews with informants from government departments, local council, and NGOs, while measures aimed at the procurement of future data, such as the planned 2014 census\(^4\), were also put in place. Overall, 71

\(^4\) At the time of fieldwork (January-June 2014) planning was underway for a national census to be held toward the end of 2014, and thus processes to obtain results for the purposes of this research were put in place with representatives from Statistics Sierra Leone. Sadly, the Ebola outbreak in West Africa led to the census being postponed until December 2015. As a consequence, obtaining in-depth and up-to-date census figures before the completion of this thesis was not possible. Some
documents, from numerous sources, were obtained during the fieldwork component of this research. They were predominantly transferred electronically, either onto a USB hard drive or via email, or photocopied where electronic transfer was not possible. Some of the ‘grey literature’ obtained in Panguma and Kayima, however, only existed as single hard copies, and in the absence of copying facilities, were ‘photocopied’ in the most literal sense, with each page captured individually using a digital camera.

The plethora of secondary data collected during fieldwork necessitated a summative content analysis, which involved systematically summarising the content, and interpreting its underlying context (Hsieh and Shannon, 2005). Each source was carefully examined in order to quantify key themes and statistics relevant to the broad context of the research, as well as to identify specific information relating to development projects and government policies operating within Panguma and Kayima, and even, on occasion, specific information about the communities themselves. The results from this content analysis not only helped to triangulate the findings from the primary methods applied within this research, but also added layers to the information obtained from such means, as the secondary data generally provided greater technical depth, or contextual breadth, than could be gleaned in an interview or focus group.

3.4.8 Use of research assistants

While English is the official language of Sierra Leone, tribal languages predominate in rural areas, and Sierra Leonean Krio, the Lingua Franca spoken by 97% of the population, is commonly used to facilitate communication between different ethnic groups. In the context of this research, the two communities at its centre are in different tribal areas, with Mende and Kono being the primary language spoken in Panguma and Kayima respectively, but Krio, and to a lesser extent English, were also spoken. Given this linguistic diversity, the use of translators was frequently required throughout the fieldwork process. The use of translators engenders numerous issues, including the creation of distance between the researcher and participants, and the disadvantage of receiving responses second hand, which can result in the translation being edited, sanitised, or representative of the views of the translator, rather than

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basic provisional results, however, were released in December 2016, some of which are referred to within this thesis.
those of the participant (Laws et al., 2003; McLennan et al., 2014). Turner (2010), however, argues that translators are an integral part of knowledge production in cross-cultural settings, and that their influence over relationships in the field, negotiations and differential access to interviewees and resources can, in fact, enrich the research. As such, she suggests that they should be labelled research assistants, rather than simply translators or interpreters. She does, however, acknowledge the layers of complexity that their positionality and subjectivity add to the research process, and therefore argues that we should be obliged to write them into our understandings of our field experiences, and the results that we produce.

In the context of this research, all of the semi-structured interviews, and the majority of focus groups and guided field walks were able to be conducted in English, though the responses of some of the participants in the group-based methods were, at times, relayed through more competent English speakers within the group. The majority of the household surveys, however, were conducted in a combination of Krio and Mende in Panguma, and Krio and Kono in Kayima, and therefore required translation. The linguistic diversity mentioned above, combined with the length of time spent in the field, and limited financial resources, meant that multiple local research assistants needed to be sourced in each community, rather than employing a single research assistant for the entire fieldwork process. In Panguma, four research assistants were used – a youth co-ordinator, a secondary school teacher, and two senior secondary school students recommended by the teacher; whereas in Kayima two were used – both of whom were employed by the chieftaincy as youth co-ordinators. While none of the research assistants used had much experience, each spoke English fluently, and they were all extensively briefed on the purpose of the survey, the processes of consent required, and the need to convey the responses of participants as accurately as possible. In return, I paid each a small hourly wage for their contribution, and provided meals for them on the days they worked with me. Where possible, I also helped each of them work towards specific goals, including contributions to school fees and materials, the provision of seed and tools, and in some instances, reciprocal labour.

The use of multiple research assistants, in one sense, adds further complexity to the issues described by Turner (2010) above, a discussion of which will be incorporated within the sections on positionality and reflexivity below. But in another sense, it enabled some of the issues associated with translation outlined above to be
mitigated, as major discrepancies in the way questions were being answered from one research assistant to another can be identified, and then controlled for, which will be discussed in the section on the analysis and reporting of data that follows.

3.4.9 Analysis and reporting of data

As noted earlier, Chambers (2014) likens the development researcher to an explorer, venturing into unknown territory in order to discover something about it. Further, he suggests that writing, too, is an exploration, stating “I realize [sic] and discover things through writing that I would never discover otherwise” (Chambers, 2014: x). This conceptualisation of research and writing as ‘exploration’, in conjunction with the wide suite of methods used, and the length of time spent in the field due to the ethnographic nature of the research, resulted in the collection of an abundance of data. In sum, this research consists of 100 household surveys, in which multiple members of the household contributed; 79 semi-structured, and often in-depth interviews; 17 focus groups incorporating 113 participants, and 18 guided field walks incorporating 80 participants, some of which resulted in participatory mapping exercises; numerous participant observations, and near daily field diary entries; and the collection of 71 documents from secondary sources. The predicament, therefore, was deciding what data to present in writing up the research, and how to present it, in order to find meaning in the information collected, and translate it into something that is communicable to others (Minichiello, 1990; Sarantakos, 2005). This section will briefly outline how the data collected were analysed, and subsequently reported within this thesis.

All forms of data collected, with the clear exception of the mapping exercises, participant observation and secondary data, were recorded in two ways. With the permission of participants, all surveys, interviews, focus groups and guided field walks were digitally recorded, while detailed notes were also kept. The reasons for the dual recording of data was three-fold. First, both of the field sites are remote and have very limited electricity supply, making the back up of digital data extremely challenging, and thus the written notes took on this function. As it transpired, my computer suffered a terminal fault in the field, and so any attempts to back-up electronically would have been fruitless anyway. Second, the amount of data collected made full transcription of digital recordings impractical, thus the analysis of data was focused around the written notes, with the digital recordings used to
ensure the veracity of direct quotes incorporated within this thesis. And third, the digital recordings enabled translations to be cross-checked by members of the Geography faculty at Fourah Bay College during my trips back to Freetown, which enabled discrepancies between the research styles of the different research assistants to be identified, corrected and controlled for in subsequent field visits. While only minor discrepancies emerged, the digital recordings were a useful safety net, and helped to ensure the veracity of the findings. In addition, as mentioned above, notes on participant observation were either written up as observations were being made, or as soon after as possible, and all forms of data collection, and the data collected, were reflected upon and synthesised in daily field diary entries.

The analysis of data begins with its deconstruction which, within qualitative research, typically involves applying conceptual or thematic order to it through coding (Stewart-Withers et al., 2014). In the context of this research, analysis began with the household surveys, with responses coded thematically, and where possible quantified using Microsoft Excel. Key themes identified from these surveys were then used as the basis for coding other forms of data collection, while other key themes also emerged. Notes from all sources that were salient to the key themes identified were grouped together in separate electronic documents, and then sub-coded within. Pertinent direct quotes from the digital recordings, which were identified from cues in the written notes, as well as excerpts from the content analysis of secondary data, were then added to each document in order to support the key themes and sub-themes that had emerged. All responses relating to mining, for example, were placed in a document, sub-categorised in terms of the key themes and positions to emerge within the broader subset, and were strengthened by direct quotes supporting those themes and positions.

The second part of the analysis is the reconstruction of the data collected, which involves building comparisons and contrasts between the key themes; assessing the probable causes of trends, and seeking alternative explanations; examining the fit between the data, relevant literature and theoretical perspectives; and relating this fit back to the research questions in order to formulate the arguments that the thesis will make (Stewart-Withers et al., 2014). In the context of this research, the coded data was predominantly reconstructed in relation to the various components of the SLF outlined in Chapter 2, which in turn informed the structure of Chapters 4, 5 and 6. Within this reconstruction process, some of the data collected was identified
as being particularly relevant to the core arguments of the thesis, some was explanatory without being exemplary, and some emerged as being superfluous. Consequently, not all sources of data are explicitly referred to in the subsequent chapters. For example, 17 focus groups were held, but only 5 are specifically discussed within the results of this thesis. That is not to say that the other 12 focus groups were irrelevant, indeed each informed my understanding of the processes underpinning continuity and change in Panguma and Kayima, but that they contributed to the explanation of such in a cumulative sense, rather than being exemplary in their own right.

In terms of data that is explicitly referred to in the subsequent chapters of this thesis, each primary source is labelled in relation to the method used and the chronology of the fieldwork (see Table 3.1), while secondary data is referred to using standard referencing conventions. Where multiple voices contribute to a source, such as focus groups and guided field walks, individual participants within that source were further demarcated as a participant, and assigned a number based on the chronology of their contribution to the discussion. The third speaker in focus group 6, for example, would be referred to as Participant 3 in Focus Group 6.

<table>
<thead>
<tr>
<th>Method</th>
<th>Label</th>
<th>Abbr.</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Survey (Panguma)</td>
<td>Panguma Respondent</td>
<td>PR</td>
<td>01-50</td>
</tr>
<tr>
<td>Household Survey (Kayima)</td>
<td>Kayima Respondent</td>
<td>KR</td>
<td>01-50</td>
</tr>
<tr>
<td>Interview</td>
<td>Key Informant</td>
<td>KI</td>
<td>01-79</td>
</tr>
<tr>
<td>Focus Group</td>
<td>Focus Group</td>
<td>FG</td>
<td>01-18</td>
</tr>
<tr>
<td>Guided Field Walk</td>
<td>Guided Field Walk</td>
<td>GFW</td>
<td>1-16</td>
</tr>
<tr>
<td>Participant Observation/Reflections</td>
<td>Field Diary</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research)

3.5 Positionality and reflexivity
Positionality refers to the idea that a person’s position within the social world influences the way in which they see it (Temple and Young, 2004), and therefore “…determines how social and professional relationships are framed in the field, with consequent effects on research content, analysis and results” (Wesche et al., 2010: 59). Whereas reflexivity relates to finding strategies to question our own attitudes, thought processes, values, assumptions, prejudices and habitual actions, to strive to
understand our positionality in relation to others, and therefore in relation to our research (Cunliffe, 2009). Consideration of positionality in the research process is vital because it “forces us to acknowledge our own power, privilege and biases just as we are denouncing the power structures that surround our subjects” (Madison, 2012: 7). Rooted in humanist, feminist and post-structuralist movements, positionality has received increased attention in academic literature in recent decades, resulting in a number of valuable texts concerning the impact that a researcher’s gender, class, ethnicity, religion, age and politics can have on the research process, and the subsequent need for reflexivity when undertaking qualitative research (Dear, 1988; Moser, 2008; Turner, 2010). While this has led many of those engaged in social research to reflect upon who they are, and how this impacts on the research they conduct and disseminate, positionality is still often de-prioritised within research methodologies.

In the context of this research, positionality takes on additional layers given its cross-cultural context, longitudinal nature, and use of multiple research assistants. Not only is it important to acknowledge the effect that my own positionality has on the research being undertaken, but also the positionality of Tony Binns, whose fieldwork in the same communities in the 1970s provided the baseline for this research, as well as local perceptions of our shared identity as outside researchers. While we both come from very different cultural, religious, generational and epistemological contexts, my experience in the field detected a strong sense of homogeneity in the way we were perceived by local people by virtue of the fact that we are both white researchers from elsewhere. So, while who I am is not necessarily bound up in the fact that I am white, who I am perceived to be in a cross-cultural context, and therefore my positionality, very much is. This became evident in the way people discussed issues with me, exemplified by a conversation about corruption that I had with an informant in Panguma, who stated:

This country is corrupt, but it means nothing for me to say that! We need you people coming from over there to come and say it. White people are trustworthy, if they say it is corrupt, people will listen (Key informant 03, Panguma, 17 February 2014, emphasis added by author).

His use of the term ‘white people’ infers his meaning of ‘you people’, and when asked to qualify where ‘over there’ was, he said “America and Europe”. His statement then, quite apart from asserting that it takes a white voice to validate claims of corruption, indicates the extent to which my positionality is constructed as much in his own
reality as it is in mine. His perception is of me as a white man, and he was thus influenced by previous interaction and exposure to white men which, in his case, is largely limited to NGO employees, and Christian missionaries, from America or Europe, neither of which am I.

Other elements of my perceived positionality stem from these overt manifestations. In terms of religion, for example, being white is equated with Christianity in Panguma and Kayima, both heavily religious communities, yet I come from a secular society, and identify somewhere between atheist and agnostic on the religious continuum. Similarly, because I am white, I was considered wealthy, which in a relative sense may contain an element of truth, though in real terms was at odds with my personal financial situation during the fieldwork period. Yet I felt that some participants perhaps overplayed the extent of their hardship in the belief that I had the capacity to immediately extricate them from it. My position as a male also takes on quite different meanings for those living in a patriarchal country such as Sierra Leone, than the meanings I attach to being a male based on my experiences of growing up in New Zealand, a more egalitarian society. Household surveys, for example, tended to be dominated by male household heads, despite my attempts to make them more inclusive, and I could not help but feel that a female researcher would have elicited a different response, even if we shared identical gender values.

Pointing out these discrepancies between my actual positionality, and the way it was perceived in the field, is in no way intended to denounce the influence my positionality has on the research process, but rather seeks to communicate the layers of complexity involved. My position as a white, male outsider has clearly influenced the way I have approached, conducted, analysed and reported this research, as have my age, life experience, and social, cultural and religious viewpoints. But equally, the way my positionality was perceived by those who participated in the research, in relation to their own, influenced the way in which they interacted with me, regardless of the veracity of their perceptions. Therefore, while acknowledging the importance of positionality in the formulation of fieldwork, and analysis of results, is of vital importance, I contend that it is too simplistic to only consider our own positionality in undertaking fieldwork of this nature. If we are trying to break down hegemonic stereotypes, then we need to consider them from the perspective of both the researcher, and their participants.
As mentioned in the methods section, the engagement of research assistants added further layers of complexity to the research process, and therefore we also need to consider their positionality. This, however, is challenging to do as, like in the reporting of research findings, “representing others is always going to be a complicated and contentious undertaking” (Madison, 2012: 4). As such, some of the key components of their positionality are summarised in Table 3.2, from which two clear trends are evident. First, all research assistants were male, mimicking Sierra Leone’s patriarchal society, and potentially contributed to the gender biases in the household surveys alluded to above. And second, all but one identified as Christian, which may have influenced interactions with non-Christian participants, particularly Muslims, who constitute the majority of the population in both Panguma and Kayima. Further, on the subject of religion, two of the research assistants identified as lay preachers of specific Christian congregations, which may have further influenced the way they interacted with participants. Two others exhibited a high level of political awareness and activism, and one was the son of a local chief, and thus their political opinions and agendas may have permeated their translations of participants’ responses.

Table 3.2: List of research assistants\(^5\) and components of their positionality

<table>
<thead>
<tr>
<th>Name</th>
<th>Age</th>
<th>Gender</th>
<th>Religion</th>
<th>Employment</th>
<th>Other notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>George</td>
<td>19</td>
<td>Male</td>
<td>Christian</td>
<td>Student</td>
<td>Son of a chief</td>
</tr>
<tr>
<td>Joseph</td>
<td>19</td>
<td>Male</td>
<td>Christian</td>
<td>Student</td>
<td>Ag. Household</td>
</tr>
<tr>
<td>Roda</td>
<td>29</td>
<td>Male</td>
<td>Christian</td>
<td>Youth Co-ordinator</td>
<td>Lay Preacher</td>
</tr>
<tr>
<td>Gibrille</td>
<td>31</td>
<td>Male</td>
<td>Muslim</td>
<td>Teacher/Okada driver</td>
<td>Political awareness</td>
</tr>
<tr>
<td>Tamba</td>
<td>37</td>
<td>Male</td>
<td>Christian</td>
<td>Youth Co-ordinator</td>
<td>Political awareness</td>
</tr>
<tr>
<td>Francis</td>
<td>34</td>
<td>Male</td>
<td>Christian</td>
<td>Youth Co-ordinator</td>
<td>Lay Preacher</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research)

The layers of complexity discussed in this section seemingly question the validity of the research process. While I can acknowledge my position, and how I believe it impacts on the research I conduct, and to a lesser extent, the positionality of other researchers and research assistants involved, and how our positionalities are perceived by participants, and the wider community, such acknowledgements do not

\(^5\) Real names of research assistants used with their consent.
necessarily alter the objectivity of the research as they are, in themselves, rooted in
the bias of my positionality. But acute awareness and discussion of the multiple
positionalities entwined within the research process enables critical reflexivity to the
way the research is approached, conducted, analysed and reported, and the knowledge
it subsequently produces, and gives the reader insight as to the viewpoint of the
researcher, enabling them to draw their own conclusions as to the validity of the
argument.

3.6 Ethical considerations
The shift toward greater reflexivity in social research discussed in the previous
section has led to “a questioning of the on-going ethical dimensions of the research
process” (Miller and Bell, 2012: 61-62). This is of particular importance when
undertaking cross-cultural fieldwork in developing countries and/or with
marginalised people as a non-indigenous researcher, where complex ethical
dilemmas relating to power gradients between the researcher and the researched, and
knowledge generation, ownership and exploitation, are evident (Tuhiwai-Smith,
1999; Banks and Scheyvens, 2014). In addition, Lewis (2003) suggests that ethical
considerations have a particular resonance in qualitative research studies, due to the
in-depth and often unstructured nature of such; while Gibbs (1997) and Pain (2004),
discuss the heightened importance of ethics when using focus groups and
participatory methods respectively, both of which were used within this research. As
such, Homan (1991) suggests that in the process of selecting and involving
participants in qualitative research, full disclosure regarding the purpose and uses of
participants’ contributions is required. He goes on to say that being honest, keeping
participants informed about the expectations of the topic, and not pressuring
participation from any informant is best practice.

Given the above arguments, ethical approval was sought from, and granted
by, the University of Otago Human Ethics Committee prior to the fieldwork stage of
this research, a process which involved a comprehensive description of the planned
methodology, and a discussion of how it was to be employed in an ethical way (see
Appendix D for information regarding ethical approval and information provided to
participants). As Miller and Bell (2012: 62) suggest, however, the process of
obtaining approval from a university ethics committee, while providing useful initial
guidance on ethical issues, can often obscure the need for on-going reflection “on the
ethical implications of researching people’s lives”. Others, such as Casey (2001), Haggerty (2004), Dingwall (2006), Richardson and McMullan (2007), and Hammersley (2009) have been more vehement in their critique of the increased regulation of ethics in social research, strongly contesting the extent to which ethics committees are able to ensure that research is conducted in an ethical manner. Hammersley (2009) goes on to suggest that formal ethics committee approval does not necessarily guarantee ethical research, and thus argues that ethical issues should not simply be treated as a tick-box exercise prior to entering the field, but rather must be carefully considered and questioned throughout the entire research process.

One of the key concerns with ethics committee requirements when undertaking development fieldwork is the need to formalise the research relationship by obtaining written informed consent from all participants (Miller and Bell, 2012). Such a requirement fails to recognise that in cultures with strong oral traditions, and limited literacy, the provision of ‘information sheets’ can be an ineffective means of disseminating information and, when coupled with attempts to obtain written consent from participants, can create suspicion, and perpetuate notions of unequal power within the research relationship by seeking commitment through mediums which at best are unfamiliar, and at worst, represent oppression and distrust (Banks and Scheyvens, 2014). While certainly not condemning the need to obtain informed consent, it is argued here that in some circumstances it is more appropriate to do so verbally.

In the context of this research, linguistic diversity (LeVert, 2006), and low levels of literacy (Munro and Hiemstra-van der Horst, 2012), have led to oral communication traditionally being favoured over written communication in rural Sierra Leone. Further, weak legal and security institutions, endemic corruption, and a pervasive distrust of politics has left many in Sierra Leone reluctant to sign documents for fear they will end up in the hands of authorities (Kaldor and Vincent, 2006). Consequently, informed consent within this research was predominantly obtained verbally, with research assistants asked to convey the content of the ‘Information Sheet’ (see Appendix D for a copy of the Information Sheet) in the participants’ preferred language, before explicitly asking for their consent. While seeking verbal consent was done largely to negate the factors outlined above, removing the ‘contractualisation’ of the research relationship also enabled the rights of participants to be reinforced several times during their participation, essentially
allowing them to renegotiate their consent in a more informal manner throughout the research process (Cresswell, 1998), and enabling greater reflexivity by the researcher (Kindon and Latham, 2002).

The guidelines for obtaining informed consent outlined above, however, were further complicated by the use of participant observation as a method (Moore and Savage, 2002). Often large groups of people are being observed, which makes it difficult to inform and obtain consent, and to constantly do so, even where practicable, can hinder the ‘authenticity’ of observations (Homan, 1980). As such, some have argued that participant observation is inherently unethical by virtue of its deceptive nature (Ditton, 1977; Punch 1994). Others, however, argue that this is balanced by providing a deeper understanding of social and cultural practices, which can actually empower the people being studied by transforming the public consciousness about the disadvantaged in society (Fine et al., 2003; Li, 2008). In order to mitigate any ethical concerns, participant observation within this research was always overt, with the research methodology, purpose and identity clearly communicated in initial community meetings in both Panguma and Kayima. In addition, notes were taken publicly to reinforce that what was being done was research; I introduced myself in any interactions as a ‘researcher’, and distributed business cards to that effect, to reinforce my position within the community; and did not identify participants within the field notes in order to preserve their anonymity (DeWalt et al., 2000).

The other key concern with ethics committee requirements is that they tend to focus on the need to eliminate any negative impacts of the research, rather than promote processes that bring about more just social relations, which require a far more active approach to participation and change (Herman and Mattingly, 1999). Truly ethical research, therefore, requires flexibility to enable the researcher “the opportunity to exercise and act on [their] own ‘moral imagination’” (Hay, 2010: 35), and reflexivity to constantly renegotiate ethics as part of the participatory research process (Kindon and Latham, 2002). This does not reduce the need to follow conventions of good practice expected in ethically sound social research (Scheyvens et al., 2014; Hay 2010), but enables adaptability in the field, and brings researcher and participants’ conceptualisation of ethics closer together (Randstrom and Deur, 1999).
Given the focus on mitigating harm, rather than promoting positive outcomes, the processes of reporting back to research participants is often neglected within ethical considerations, but are often considered of great importance by those involved (Bridges, 2001). In terms of development research, Banks and Scheyvens (2014) argue that the researcher typically gains more than those who participate in it. While they state that this does not necessarily make the research unethical, they stress the importance of reciprocity in the research process. At the very least, this should include the researchers feeding back their research findings in an appropriate way which, as Tuhiwai Smith (1999) argues, should not be considered a one-off exercise achieved by submitting a written report at the end, but rather should be ongoing throughout the research process and beyond, and should utilise multiple forums.

In light of these concerns, reciprocity was embedded throughout the research process. Participatory methodologies sought to empower participants to pursue social transformation, and focus on their capacity as agents of change. All participants were encouraged to ask questions about the research and its intended outputs; an informal workshop, in which initial findings were communicated, was held for participants in each community during the third and final period of fieldwork (see below); and initial findings were also presented to staff and students at both Fourah Bay College in Freetown, and Njala University in Njala. Further, while travel to Sierra Leone has been severely impacted by the Ebola epidemic which evolved during the 2014 field research, I was able to return in January 2017, with the aim of disseminating the research findings more thoroughly, and work with participants to explore potential avenues of social transformation that have emerged from it. Unfortunately I had to leave part way through this visit due to a family bereavement, and so was unable to complete the process. During the 2014 field research, however, discussions were held with staff at both Fourah Bay College and Njala University, in which structures were put in place to enable them to facilitate the communication of the research findings in Panguma and Kayima at the completion of this thesis, should I be unable to do so in person.
3.7 Field site selection and programme

Given the retrospective longitudinal context of the research, the locations of the study were predicated on Binns’ (1980: 201) selection of study sites, the criteria for which included:

1. That the communities should be situated in areas where farming was the main occupation, yet within easy reach of the diamond mining areas. The communities should be located in chiefdoms declared as part of the Alluvial Diamond Mining Scheme (ADMS) but outside the Yengema and Tongo Field leases of the National Diamond Mining Company, where large areas of farmland have been destroyed through mechanised mining operations.

2. To facilitate mobility of the researcher and his assistant, the two communities should be reasonably accessible both from the mining areas and the national road network, though situated at some distance from major trunk routes, such as the Freetown – Koidu road, and the Freetown – Kenema road, which might have some direct impact on rural development.

3. The communities should be located in different tribal areas where full cooperation is available from the Paramount Chief and elders. Since these people provide an essential link between the researcher and the subjects of the research, it is important that they are interested in the project and offer their assistance at an early stage.

Given these criteria, he selected Panguma, the chiefdom headquarters of Lower Bambara Chiefdom in the Kenema District, and Kayima, the chiefdom headquarters of Sandor Chiefdom in the Kono District.

Where the longitudinal nature of the research meant that the selection of study sites was pre-determined, the ethnographic nature of the research similarly necessitated spending a considerable amount of time in each. As such, the field programme consisted of three separate visits to each of Panguma and Kayima. The first visit was in January 2014, and was a short (two days in Panguma and three days in Kayima) introduction to the towns, and key contacts within each. The key functions of these initial visits was to hold meetings with community gatekeepers, such as the paramount chief and town elders, in order to gain permission for the research to proceed. Broader community meetings were also held, to explain the aims and objectives of the research, enable community members to ask questions about the research process and its intended output, and help identify potential research assistants. The second visit, the main period of fieldwork in which the methods outlined earlier in the chapter were carried out, involved five straight weeks living in each community (Panguma in February and March 2014, and Kayima in March and
April 2014). The final visit was a two week follow-up in each town (May in Panguma, May and June in Kayima), in order to observe livelihoods in each community at a different time of year, and tie up any loose ends from the previous period of fieldwork. In total, more than seven weeks was spent in each town, with a further seven weeks spent undertaking complimentary data collection, predominantly in Freetown, but also Kenema (the closest city to Panguma) and Koidu (the closest city to Kayima), as well as at Njala University Campus. This time was also spent reflecting on field notes. It was initially envisaged that the field programme would be more fluid than this, as it was considered imperative to experience each place, as much as possible, across seasons, so as to experience, and participate in, different seasonal elements of livelihood generation (see limitations). But with mobility severely restricted through poor road networks and a lack of commercial vehicles, travel between field sites had to be carefully planned. The upshot of this was that it enabled the researcher to become embedded within the community, and spending extended lengths of time in each town also helped ensure the availability of participants.

3.8 Limitations
As discussed earlier, the longitudinal nature of this research is one of its key strengths, but it is also a source of limitation. The complexity of multiple positionalities has already been discussed in depth, and one of the key concerns identified was discerning the extent to which changes observed between the 1974 and 2014 studies were actual changes, and how much of it could be explained by the difference in researchers, and their differing approaches. Bremen (1997: 5) states that “the village is not the same village for all inhabitants”, indicating that different perspectives, based on different lived experiences, will be evident in any given community. Equally, it could be argued that the village is not the same village for all researchers, and thus any differences detected in Panguma and Kayima between 1974 and 2014 could, in part, be explained by the different perspectives of the two researchers involved. Further, as Crow (2014) argues, where the gap between the original study and the re-study amounts to several decades “the likelihood is greater that differences in findings will be attributable at least in part to changes in the research perspectives adopted” (Crow, 2014: 60).
In order to mitigate against the above limitations, research exploring long-term change would ideally be designed from the outset to incorporate future periods of fieldwork replicating the initial study which, in turn, would be carried out by the same researcher or team of researchers. Binns’ (1980) initial research, however, was not designed to be longitudinal, which necessitated the retrospective approach, and he was unable to carry out the re-study himself, which required the co-option of a second researcher, therefore the points made in the previous paragraph need to be acknowledged as potential limitations. That said, as will become evident in the remaining chapters of this thesis, relatively minimal change was detected in Panguma and Kayima between the two study periods, and thus in this instance, two different researchers, with different perspectives and methodological approaches, largely observed the same things at two different points in time.

The other central limitations of this research stem from the practicalities of undertaking research in Sierra Leone. Binns’ (1980) fieldwork involved a full year in the field observing a full cycle of the agricultural system. Ideally this should have been replicated in the 2014 re-study, but time, financial constraints, and the emergence of the Ebola epidemic in West Africa meant that such a long period of field research was not possible. Further, numerous practical issues emerge during the rainy season, including the deterioration of already poor transport networks, which severely limits mobility, and the dramatic increase of health and safety hazards, particularly water and insect borne diseases, and thus the reduced period of fieldwork was largely concentrated in the dry season. Consequently, observations made may be situated in ‘dry season bias’, which Chambers (1981) argues has prevented researchers from understanding the true impact of seasonality on the rural poor. In order to mitigate such bias, the field research was timed to at least straddle the seasons, so that some of the early rains were experienced, and their impact on the rural poor observed, while questions asked within the household surveys and semi-structured interviews specifically related to seasonal variations and impacts. But the full extent of the rainy season was not observed or experienced during the 2014 field research, thus necessitating the acknowledgement of potential seasonal bias.

3.9 Conclusion
This chapter has shown that undertaking longitudinal research retrospectively in a cross-cultural context is fraught with complexity, as it encapsulates changing
epistemological and methodological landscapes, multiple positionalities, and numerous ethical considerations. Hopefully, however, it has also illustrated that such complexity can be managed through epistemological and methodological choices, and reflexive practices, and thus that such research is still a worthwhile undertaking. Through a critical appraisal of Binns’ (1980) methodology, this chapter has put forward a pragmatic ontological and epistemological paradigm, incorporating an ethnographic, mixed-methods and participatory methodology, as an appropriate methodological framework for exploring continuity and change in Panguma and Kayima, because such an approach is compatible with livelihoods research, and allows for the reconciliation of data collected via different methods, at different times. It then outlined the suite of methods used within this broader approach, including household surveys, semi-structured interviews, focus groups, guided field walks, participant observation, mapping techniques and content analysis, and considered how the data gathered from each of these techniques was recorded, analysed and reported. Finally, this chapter explored issues of positionality and ethics, as well as the potential limitations that are entwined within the methodological approach adopted, arguing that critical reflexivity is crucial throughout the research process to ensure that such issues do not exert undue influence on the results which the research garners. Having outlined the conceptual and methodological frameworks, this thesis will now turn its attention to a discussion of the results.
Vulnerability Context and Transforming Structures and Processes

4.1 Introduction
The previous three chapters have provided the framework for this research. Chapter 1 outlined the scope of this research, and situated it within the context of Sierra Leone. Chapter 2 presented a conceptual framework for understanding processes of development in rural areas impacted by conflict, and political and economic change, through an exploration of livelihoods over a long period of time. And Chapter 3 outlined the methodology adopted in order to apply the conceptual framework presented in Chapter 2, within the scope and context delineated in Chapter 1. The next 3 chapters will present and discuss the findings of this research, and will specifically draw on the SLF for their structure. This chapter will explore the nexus between the ‘vulnerability context’ and ‘transforming structures and processes’, in order to outline the context in which livelihoods exist in rural Sierra Leone. Chapter 5 provides a foundation for a more detailed discussion of livelihoods at the household level in Panguma and Kayima, by exploring the assets upon which people’s livelihoods are constructed. And Chapter 6 encapsulates the final two components of
the SLF, the ‘livelihood strategies’ employed by households in Panguma and Kayima, and the ‘livelihood outcomes’ of those strategies.

As discussed in Chapter 2, people’s livelihoods are influenced by the context in which they live, which in terms of the SLF, is incorporated within the ‘vulnerability context’ and ‘transforming structures and processes’. Chapter 2 also highlighted the direct feedback between these two components of the SLF, in that processes, established and implemented through structures, affect trends both directly and indirectly, and can cushion the impact of external shocks, but equally can also contribute to the causation of shocks and trends in the first place (DFID, 1999). This nexus between the ‘vulnerability context’, and ‘transforming processes and structures’, essentially provides the framework for this chapter.

It is important to acknowledge that Sierra Leone is incorporated within the global political economy, indeed there have been a number of interesting threads relating to this within the literature on Sierra Leone. As noted in Chapter 1, for example, the British introduced a hierarchical system of local chieftaincies in the late 1800s, with the rationale for which, and ongoing impact of, being the source of much academic discussion since (see for example Abraham, 1972; Tangri, 1978; and Allouche, 2017). More recently, the role of mining and agriculture in Sierra Leone within the global and regional political economy have also received some attention (see for example Reno, 1996 and Akiwumi, 2012), as has the role of Sierra Leone’s position in the international community, particularly its relationship with Liberia, membership of ECOWAS, and strong ties with Britain, in the evolution of the civil war (see for example Zack-Williams and Riley, 1993; Williams, 2001; and Dumbuya, 2008). In the context of this chapter, however, Brown et al. (2005) describe Sierra Leone’s fragility as largely internally driven, and fundamentally political, and while a world view is slowly developing at the local scale, the global political economy appears to have limited influence on people’s livelihoods in Panguma and Kayima. As such, this chapter primarily focuses on the national and local scales, though the discussion does link with broader global processes at times as well.

At the national scale, Sierra Leone’s brutal civil war in the 1990s was both the culmination of the transforming process and structures at play since independence, and the major source of vulnerability to occur between the two phases of the study, thus understanding it in both contexts is essential. As such, the initial focus of this chapter is a broad discussion of Sierra Leone’s political economy from
independence until the end of the civil war, with a particular emphasis on the processes and structures that contributed to the conflict, and those which had an influence on rural livelihoods. Attention will then turn to the experiences and impact of conflict in Panguma and Kayima, with a focus on the subsequent manifestation of livelihood vulnerabilities.

Since the culmination of this conflict, Sierra Leone has experienced continuous peace, and has held three democratic presidential and parliamentary elections, indicating relative political stability, and has made some progress in economic and infrastructural reconstruction from the low base imposed by the civil war (Humphreys and Weinstein, 2009; UNDP, 2015a). But livelihoods, particularly those in rural areas, remain vulnerable to the more persistent long-term impacts of war, as well as numerous other stresses and shocks. Again, to contextualise these vulnerabilities, it is important to understand the structures and processes underpinning them. As such, this chapter will then refocus on the political economy of Sierra Leone, this time in the post-conflict period, specifically focusing on the prevalence of peace, and progress in human and economic development, since the war ended. It will then switch back to the micro-scale, situating Panguma and Kayima within the post-conflict period, with a particular emphasis on the vulnerability and resilience of livelihoods during this time. It will discuss the reconstruction of livelihoods as residents resettled in their communities at the conclusion of the war, before considering livelihood vulnerability and resilience in the current context in a more general sense, and comparing this to the livelihood vulnerability in Panguma and Kayima in the 1970s. Ultimately, this chapter will argue that while the war in Sierra Leone caused massive upheaval, and had a dramatic impact on livelihoods in rural parts of Sierra Leone, many of the livelihood vulnerabilities identified by participants in the 2014 fieldwork mirror those which were uncovered by Binns (1980) in the 1970s. Thus it could be argued that the vulnerability that presently exists in Panguma and Kayima has been perpetuated by the war, and other negative elements of Sierra Leone’s political economy, rather than being a direct consequence of it.

4.2 Post-independence political economy
When Sierra Leone became independent in 1961, Sir Milton Margai, who the following year would become Sierra Leone’s first elected Prime Minister, asserted
that ‘Sierra Leone will become a model state’ (Allen, 1968). Under Sir Milton’s leadership, there was limited change to the political structure established under British administration, and only moderate economic growth driven largely by the mining sector, additional foreign investment, and new positions for African professionals and technicians (Hayward, 1984). Despite this limited political and economic change, Margai was widely respected for his statesmanship, honesty and humility (Dalby, 1967), and his genuine efforts to build a unified Sierra Leone (Hirsch, 2001a). Upon his death in 1964, however, the pattern of corrupt politics that would go on to characterise Sierra Leone for the next three decades began and indeed accelerated as the leadership passed on to his half-brother Albert (Hirsch, 2001a).

The period between 1964 and 1968 saw the rise of the All People’s Congress (APC) as a genuine contender to the ruling Sierra Leone Peoples Party (SLPP). While the APC was often stigmatised as a ‘northern’ party, it was formed as an alternative to the Mende-dominated SLPP (Kandeh, 1992). Leader Siaka Stevens’ background as a trade unionist, and the party’s predominantly working and lower-middle-class leadership, was also in stark contrast to the SLPP, which was dominated by upper and middle-class professionals (Abdullah, 1998). This, coupled with the growing corruption within the SLPP, mentioned previously, and the relative openness of the political system at the time, enabled the APC to narrowly win the 1967 election (Kandeh, 1992). Brigadier David Lansana, however, staged the country’s first military coup four days later, preventing Stevens and the APC from assuming office, but he himself was then ousted in a second coup led by the National Reformation Council (NRC) two days later (Davies, 2000). On April 18 1968, there was a third military coup, in which a group of non-commissioned officers led by John Bangura, who was dismissed from the army during Albert Margai’s reign, repudiated the NRC, restored civilian rule, and re-installed Siaka Stevens as head of the government (Fisher, 1969). As Syl Cheney-Coker, the renowned Sierra Leonean poet, novelist and journalist noted, “the intervention of the military in 1967, paved the way for what became the military nightmare in the nineties” (Cited in Hirsch, 2001a: 29).

During this initial period of independence, Sierra Leone’s development was guided by the ‘Ten-Year Plan for Economic and Social Development’. At the time, Dixon-Fyle (1963) described it as the establishment of a conservative, yet flexible, framework, during an era when structural change and decisive governmental leadership was required. In addition, Airey et al. (1979: 21) suggested that the plan
was “scarcely more than a set of collated departmental estimates, gestated in the euphoric atmosphere of newly received independence”. Despite such scathing critiques, the plan did highlight low productivity, and the instability of the export market, as the two major problems associated with the agricultural sector, and thus proposed agricultural diversification in order to reduce dependence on primary produce, and to increase export for foreign exchange (Carney, 1962). The FAO (2010), however, argues that the government, heavily influenced by capitalist development theories such as Rostow’s (1960) *Stages of Economic Growth*, saw industrialisation as a means of kick-starting economic growth, with agricultural policies, therefore, simply becoming “conduits for the enhancement of industrialisation” (FAO, 2010: 22). Consequently, by the late 1960s, agricultural policies largely continued trends based on antecedents from the 1920s, or before, while there was little sign of rural ‘take-off’ in either the technological, economic or social spheres, and there were also signs that the mining sector, which had sustained the economy in recent decades, was in decline (Airey *et al.*, 1979; Mitchell and Swindell, 1965; Hall, 1969). This, combined with the volatile politics outlined in the previous section, led some to argue that Sierra Leone had become trapped in a vicious downward spiral toward economic stagnation, corruption and authoritarianism, from which they could do little to escape (Cartwright, 1978).

4.3 Siaka Stevens and the one party state (1968-1985)

Allen (1968) described political change in the early stages of Sierra Leone’s independence as both dramatic and deleterious. While the latter adjective could easily be transferred to the following period in Sierra Leone’s political history, the former certainly could not, with Siaka Stevens remaining in power for seventeen years, eventually relinquishing the reigns voluntarily, amid poor health, in 1985. His long tenure as leader was characterised by economic decline, growing political authoritarianism and the marginalisation of the majority of Sierra Leonean people (Zack-Williams, 1997). He transformed an already weak democracy into a one-party state, and in doing so, destroyed or corrupted all agencies of restraint and institutions that could pose a challenge (Davies, 2002). As Hirsch (2001a: 29) précised:

> Parliament was gutted of significance; judges were intimidated and bribed; the university was starved of funds; many professors compromised their integrity by joining the cabinet; the value of education itself was depreciated
in favour of the quick acquisition of wealth; and the professionalism and capacity of the army was undermined.

As he became increasingly wary of military intervention, Stevens reduced the army to a largely ceremonial status, while handing greater power to the quasi-personal army known as the Internal Security Unit (ISU), a move which helped him survive a number of attempted coups, and which played a key role in bringing down the widespread anti-government protests at the university colleges in 1977 (Zack-Williams, 1997). The few who dared to oppose the regime were either executed, or forced into exile to avoid such ‘unfortunate’ outcomes (Kposowa, 2006).

Stevens’ reign also corresponded with the beginning of a long decline in the diamond industry. After his accession to power, diamonds quickly became a key strategic resource for Stevens’ regime, as he appointed many of his cronies to positions of power and rewarded them with diamond revenues, reducing the industry to a parastatal that was rife with corruption and smuggling (Maconachie, 2012). He quickly transferred the power to grant mining licences from chiefs, who supported the SLPP, to the Ministry of Mines, a more concentrated group installed in office by the APC (Reno, 2003). These hegemonic strategies, however, eventually served to erode Stevens’ power, with official National Diamond Mining Company (NDMC) revenues plummeting, eventually leading to its collapse in the 1980s, and the industry as a whole becoming a chaotic free-for-all (Davies, 2000). By the time Stevens was succeeded as president in 1985, Sierra Leone’s diamond exports had decreased from 1.7 million carats in the 1960s, to a mere 50,000 carats (Temple, 2006). The impact this decline has had on livelihood portfolios of households in Panguma and Kayima, in terms of their engagement within alluvial diamond mining over the forty year period of this research, will be discussed in Chapter 6.

The agricultural sector also suffered decline during this period. Following the widely critiqued ‘Ten-Year Plan for Economic and Social Development’ which was hastily put together in 1962, Sierra Leone’s first true National Development Plan was published in 1974 (Government of Sierra Leone, 1974). Binns (1980: 58), who was undertaking his initial fieldwork in Sierra Leone when this plan was adopted, offered an optimistic appraisal, suggesting that it was a landmark in the history of planning in Sierra Leone because, “for the first time, it involved serious and detailed consideration of the future development of the national economy, as well as the interaction and integration of the various sectors, including agriculture”. The main
thrust of the Plan in terms of the agricultural sector was to increase productivity, with a particular emphasis on achieving self-sufficiency in staple foodstuffs, and the expansion of export crops, through a series of Integrated Agricultural Development Projects (IADPs) (Airey et al., 1979). The FAO (2010), however, have since argued that while the IADPs initially took-off, their over-reliance on donor support as the government concentrated limited national resources on infrastructural development, tourism and electrification, meant that they became unsustainable once outside funding dried up in unfavourable international economic conditions. Consequently, an increasing dependence on imported foodstuffs, particularly rice, and further neglect of the agricultural sector, led to continued agrarian decline (Zack-Williams, 1995; Richards, 1996).

In terms of broader economic and social development, as stated above, Stevens’ regime was characterised by economic decline and the marginalisation of the masses. Faced with rapid population growth, and a declining economy, the government turned to international financial institutions (IFIs) such as the World Bank and the International Monetary Fund (IMF) for financial assistance, and implemented a number of structural adjustment programmes (Ahearne, 2009). These neo-liberal reforms, however, only served to worsen the economic situation, as devaluation and deregulation led to widespread inflation unemployment and poverty (Zack-Williams, 1999). Further, Keen (2003) argued that while neoliberalism is often presented as an alternative to state-based corruption, the two tended to interact in Sierra Leone during the 1970s and 1980s. This led to the development and consolidation of a ‘shadow state’ economy, as Stevens used privatisation to enhance his own fortune, and those of his key allies, rather than strengthen institutions to protect and nurture autonomous groups of internal producers from whom taxes could be extracted (Reno, 2003). Thus by the early 1980s, the country had fallen into decline due to a combination of corruption, economic mismanagement, and a failing national and global economy (Weeks, 1992).

Stevens retired from office in 1985, handing the reins of power over to his hand-picked successor Brigadier Joseph Momoh (Reno, 2003). Momoh’s ascent to the leadership, and promise of a ‘New Order’ (Ogunmola, 2009), was welcomed by most Sierra Leoneans, who hoped that he could instil much needed discipline into the
country’s economic and political life (Zack-Williams and Riley, 1993), but according to Hirsch (2001a), he was notoriously inept. Indeed, many have argued that Stevens chose Momoh as his successor because he lacked the stature and acumen to challenge the clandestine economy that Stevens and his allies had created (see, for example, Zack-Williams, 1999; Chege, 2002; Reno, 2003). Stevens continued to be influential in the background, and two years after ceding office, allegedly conspired to overthrow Momoh (Luke and Riley, 1989). This coup, however, was discovered in advance, and Momoh placed Stevens under house arrest, where he died several months later (Hirsch, 2001a).

Hirsch (2001a) states that Momoh’s seven year tenure is remembered as the period of the country’s economic collapse, but as Kandeh (1999) argues, and the previous section illustrates, the state was already on the verge of collapse when Momoh “inherited a predatory regime that was steeped in corruption, opportunism, cronyism and sycophancy” (Kandeh, 1999: 352). There is no doubt, however, that this demise accelerated under Momoh’s weak leadership (Davies, 2002), as Kandeh (1999: 353) illustrates:

By the time Momoh was ousted from power in 1992, the state’s extractive and allocative capacity had all but disappeared. Gross Domestic Product (GDP) had fallen from $1.1 billion in 1980 to $857 in 1990 and -5.1 per cent (1991-95). International reserves, which stood at a paltry $31 million in 1980, dipped to an all-time low of $5 million under Momoh. Average GDP growth rates in the last five years of the Stevens dictatorship (1980-85) hovered around 3.0 per cent but dropped to 1.1 per cent in the first five years (1985-90) of the Momoh government.

Consequently, in 1987 Momoh was forced to declare a state of economic emergency, under which his government assumed powers to crack down on corruption, mineral smuggling, and the hoarding of essential commodities and local currency (Zack-Williams, 1999). In addition, Momoh was determined to fully implement the conditions of the structural adjustment programmes put in place by the IMF, something Stevens had avoided, which led to a drastic reduction in petrol and food subsidies, cuts in government spending on health and education, and uncontrolled inflation (Keen, 2003). This had a disastrous impact on the economy as a whole, and exacerbated the economic misery of Sierra Leoneans, particularly those on fixed incomes (Zack-Williams and Riley, 1993). It also led to the collapse of the education system, as treasury no longer had the funds to pay teachers, creating a growing cohort of young people lacking education, skills or job prospects (Hirsch, 2001a; Erbrick,
2012). This, in turn, contributed to the ‘crisis of youth’, which Richards (1995) argued led large numbers of marginalised youth to engage in the impending civil war.

The government’s ability to implement its agricultural policies was also significantly affected during this period. They did, however, attempt to implement a series of rice specific projects which aimed to cushion the intermittent food crises characteristic of the time (FAO, 2010). In addition, the Green Revolution Programme was launched in Sierra Leone in 1986, which according to Dries (1991: 226) had the aim of:

accelerating the national drive towards food self-sufficiency and economic recovery by means of a substantial increase in the rice growing area, increased use of fertilizers and improved seeds, and intensified mechanisation.

These projects, however, like the IAPDs before them, were unsustainable because the government lacked the financial and logistical capacity to manage them properly amid the harsh economic conditions that prevailed, and largely ignored the specific rice-growing ecologies in which they were applied, and the indigenous knowledge and experience of local farmers (FAO, 2010). This, coupled with poor cash crop prices, and isolation from key markets caused by deteriorating roads and fuel shortages, saw most farmers concentrate on the subsistence sector during this period, which led to the need for expensive food imports that drained the state’s limited supply of hard currency (Silberfein, 2004).

Another hallmark of Momoh’s tenure was his involvement in Liberia’s civil war. In 1990, Sierra Leone became a member of the ‘Economic Community of West African States Monitoring Group’ (ECOMOG), which Momoh allowed to use Sierra Leone’s airbase to initiate bombing raids on positions held by Charles Taylor’s National Patriotic Front of Liberia (NPFL) (Chege, 2009). Ellis (1995) has argued that Charles Taylor felt aggrieved that ECOMOG had prevented him from taking control of Monrovia, the Liberian capital, and in particular, Sierra Leone’s involvement in facilitating these attacks, while simultaneously professing its role as peacemaker. Consequently, Taylor swore to avenge these interferences in Liberia’s internal affairs (Zack-Williams and Riley, 1993). Charles Taylor’s involvement in funding and arming the Revolutionary United Front (RUF) during the Sierra Leone Civil War is believed by many to be the direct embodiment of these threats of retribution (Hirsch, 2001b), and proved to be the match that ignited the volatile
combination of political, economic and social conditions that had emerged since independence.

4.5 Sierra Leone’s civil war (1991-2002)

On 23 March 1991, the RUF, led by ex-Sierra Leone army corporal Foday Sankoh, and made up of Sierra Leonean dissidents, Charles Taylor loyalists from Liberia, and a small group of mercenary fighters from Burkina Faso, entered eastern Sierra Leone at Bomaru in Kailahun District (Ndumbe, 2001). The RUF set out a populist ideology of rural resentment against government corruption and exploitation, but in reality their wrath was felt most keenly by the rural peasantry, the group least responsible for, or able to influence, the actions of those in power (Hirsch, 2001a). The RUF occupied villages by targeting, and at times killing, local ‘big men’ such as chiefs, elders, court chairmen and the educated elite, commandeering essential resources such as food, labour and shelter in the process (Archibald and Richards, 2002a; Silberfein, 2004). Having entered the country with just a few thousand fighters, the RUF expanded rapidly, through the recruitment of disaffected youth whose education and employment prospects were bleak under the current regime (Zack-Williams, 1999), and were supplemented by the kidnapping of numerous children and young people (Abdullah, 1998). During the initial period of insurgency, the RUF diversified its resource base, using forced labour to cultivate and harvest food and cash crops, and collect diamonds from abandoned alluvial mining sites, as they made their way closer to the major diamondiferous areas in Kono District, and Tongo Field in Kenema District (Silberfein, 2004).

In order to counter the RUF, the government attempted to mobilise its limited military resources, but these forces lacked training, had limited supplies, and were frequently halted due to impassable roads or petrol shortages, and thus were only marginally effective (Silberfein, 2004). Fed up with the army’s incapacitation, and consequent inability to repel the rebels, a group of young Sierra Leone Army (SLA) soldiers, led by 25-year-old Captain Valentine Strasser, overthrew President Momoh on 29 April 1992, and instituted the National Provisional Ruling Council (NPRC) (Rashid, 1997). Strasser condemned the corruption of the Momoh regime, and its inability to curb the war, but the scale of rebel incursion actually increased throughout Sierra Leone during his rule (Zack-Williams, 1997). Despite expanding the SLA from 3,000 personnel to over 13,000, the RUF advanced to within a few kilometres of
Freetown, and it became increasingly apparent that the SLA and RUF would often avoid confrontation, preferring instead to live off the countryside while murdering, plundering, looting and abusing the civilian population (Richards, 2004). Indeed, numerous SLA soldiers were known to participate in such illicit activities, and thus became known as ‘sobels’, a portmanteau of ‘soldier’ and ‘rebel’, referring to their actions as soldiers by day, but rebels by night (Feldman and Arrous, 2013).

By January 1995, the RUF had control of the three most important mining sites in the country, and was poised to overrun Freetown (Francis, 2000). Given the SLA’s failings, the NPRC hired private South African security firm Executive Outcomes (EO) in a bid to achieve an outright victory over the RUF, and they were able to hold them off as result (Humphreys and Weinstein, 2008). But Sierra Leoneans were growing weary of the NPRCs inability to end the war and return the country to civilian rule (Zack-Williams, 1997). While Strasser apparently remained committed to the democratisation process, a reluctance to relinquish power among factions within the NPRC created division, and in January 1996, just two months before the planned presidential and parliamentary elections, he was deposed by his former deputy, Brigadier-General Julius Maada Bio, in a bloodless coup (Riley, 1996). Under increasing foreign and domestic pressure, Bio permitted the elections to go ahead, with the SLPPs presidential candidate, Ahmed Tejan Kabbah, a UN development worker and veteran politician, winning 59.49 per cent of the vote in a run-off second round election in March 1996 (Richards, 2005). Negotiations between Kabbah’s government and the RUF led to the signing of the Abidjan Peace Accord in November 1996, but both sides continued to pursue a war strategy, and thus hostilities resumed (Francis, 2000).

In the lead up to the Abidjan Peace Accord, the government forces, which now included both EO and the Kamajor militia, a group of traditional Mende hunters who first emerged in 1994 as the defenders of their towns and villages against RUF attacks (Riley, 1997), were able to recapture the main diamond mining areas, and temporarily gain the upper hand over the RUF (Abdullah, 1998). But Kabbah faced increasing pressure from the IMF and the international donor community to stop spending the government’s meagre reserves on EO, so he asked them to leave shortly after the accord was signed (Reno, 2003). This, according to Kandeh (1999), severely weakened the government’s capacity to deter military coups. Having already survived three attempted coups in his first year in office, Kabbah was forced to flee
to Guinea after Major Johnny Paul Koroma seized power on 25 May 1997, ending the country’s brief flirtation with democracy (Reno, 1997). This coup brought a fourth group into the conflict, the Armed Forces Revolutionary Council (AFRC), who forged an unlikely alliance with the RUF, inviting them to participate in a power-sharing arrangement (Humphreys and Weinstein, 2008).

Kabbah was restored to power in February 1998 when the Nigerian-led ECOMOG re-took the Freetown peninsula from the RUF, and the major provincial centres, while the RUF/AFRC retreated to the countryside to regroup, vowing to fight on (Peters and Richards, 1998). In October 1998 the RUF/AFRC began a push toward Freetown in retaliation for the execution of 24 soldiers linked to the coup, and the sentencing to death of RUF leader Foday Sankoh (Keen, 2003). During December 1998, the RUF cut “a particularly destructive swath across the northern half of Sierra Leone”, eventually entering Freetown from the east in the early hours of 6 January 1999 (Siberfein, 2004: 225). During this attack, which took a number of days to repel, approximately 90 per cent of the buildings in the eastern suburbs of Freetown were destroyed, RUF/AFRC forces killed an estimated 5,000-6,000 people, and injured, maimed, raped and abducted thousands more (Williams, 2001). While ECOMOG eventually managed to push the RUF back, they were unable to prevent the violence, deflating the morale of its forces, and prompting the international community to push strongly for a peace agreement (Keen, 2003). Consequently, the Lomé Peace Accord was signed on 7 July 1999, in which the government and the RUF/AFRC agreed to total and permanent cessation of hostilities, and RUF leader Foday Sankoh was accorded the status of vice president in a power-sharing political framework (Francis, 2000).

On 22 October 1999 the UN Security Council established the United Nations Mission in Sierra Leone (UNAMSIL) to assist with the implementation of the Lomé Peace Accord, and the Disarmament, Demobilisation and Reintegration (DDR) plan (Malan, 2003). Unfortunately, the Lomé Peace Accord proved another false dawn, and was nullified in May 2000 when the RUF seized 500 UNAMSIL peacekeepers in an attempt to seize power (Davies, 2002). The breakdown of the accord prompted the British to send a ‘spearhead battalion’ of approximately 700 troops into Sierra Leone in May 2000 (Williams, 2001). This intervention led to greater stability and boosted the morale of UNAMSIL, who were able to secure Freetown, capture Sankoh (who had gone into hiding since the abrogation of the Lomé Peace Accord), and
gradually moved 16,000 troops into the interior to demobilise the RUF, exchanging guns for training and resettlement packages (Kargbo, 2006; Zack-Williams, 2012). By late 2001, UNAMSIL peacekeepers had access to most of the country, and around 72,000 combatants from both the RUF and pro-government militia such as the Kamajors had been disarmed (Reno, 2003; Harris 2012). The Sierra Leone Civil War was officially pronounced over on 18 January 2002 (Kargbo, 2012a).

This brought to a close an eleven year conflict which has been described as one of the most brutal in the latter half of the 20th century (Coulter, 2008). The war engulfed the country with destructive force, killing more than 50,000 people, and displacing over half the population (Bellows and Miguel, 2006). Forced conscription of children, brutal rape and torture, public mutilation of innocent children and adults as a means of terrorising communities and extinguishing resistance, and looting and wanton destruction, were commonplace (Kline and Mone, 2003). Amputation was a particularly notorious characteristic of the war, with thousands of civilians, including babies, having their hands cruelly amputated by the rebels (Gberie, 2005). But as Denov (2006) states, sexual violence was committed on a much larger scale than the highly visible amputations, with approximately 215,000-257,000 females of all ages, ethnic groups and socio-economic classes, subjected to sexual violence during the course of the war. The government’s official Truth and Reconciliation Commission reported that the RUF committed more than 70 per cent of all war atrocities and human rights abuses (Sierra Leone Truth and Reconciliation Commission, 2004), but as Francis (2000: 358) argues, such “gross violations of human rights and crimes against humanity have been committed by all parties of the conflict, including the pro-government civil militias”. In terms of physical capital, more than 300 towns and villages, together with more than 340,000 houses, were destroyed (Macauley, 2012). Many public buildings, including schools, markets, and court bars (court houses) were also targeted, and key infrastructure such as transport and communication networks, and electricity supply, either fell into disrepair, or were decommissioned by more nefarious means (Binns and Maconachie, 2005). In addition, approximately 80 per cent of social services were in need of rehabilitation (Baker and May, 2004).

The root causes of the Sierra Leone Civil War were multifaceted and complex, and have been the focus of much scholarly debate (Maconachie, 2010). While adding to this debate is beyond the scope of this thesis, a summary of the key arguments provides useful context for the proceeding discussion. Poor governance,
over-centralisation of the state, and an underclass created through political exclusion and marginalisation, are considered by many to have been the key factors in catalysing the war (Macauley, 2012). As previously mentioned, Richards (1996) has characterised the war as a ‘crisis of youth’, arguing that the conflict was driven by large numbers of disaffected young people in fraught pursuit of empowerment, while others have put forth the crisis of patrimonial rule and economic decline as the key contributor (Zack-Williams, 1999). Others still have proffered the ‘greed not grievance’ thesis, arguing that combatants were motivated by a desire to better their own situation, rather than any genuine ideological agenda (Kaplan, 1994; Collier, 2000a; Collier and Hoeffler, 2002).

Within the latter argument, the role of diamonds in the war is prominent. Many, such as Keen (1998), Berdal and Malone (2000), and Ross (2004) have argued that ‘blood diamonds’ played a substantial role in the initiation of the war, while others, such as Richards (2003), contend that there is little evidence to suggest that diamonds were a causal factor. As Maconachie (2012) concludes, however, there does appear to be some consensus that diamonds were significant in fuelling and prolonging the war, as there is little doubt that mining activities were used to fund the war efforts of some of the main protagonists. The RUF sustained and financed its war-making capabilities by retaining territorial control over the diamond-producing mines in the north and east of the country, and illegally channelling the diamonds to the world market via diamond brokers and other intermediaries (Orogun, 2004). Alao (1999) indicates that numerous SLA troops, most notably those identified as ‘sobels’, were also involved in illicit mining activities during the war, while Keen (2005) states that factions within civil defence forces, such as the previously mentioned Kamajors, began to engage in unlawful diamond trading as their power and numbers grew toward the end of the conflict. Consequently, only a very small percentage of diamond exports during the war were legitimate, reducing both the economic performance and institutional capacity of the state. Further, and perhaps more importantly in the context of this research, thousands of civilians were driven away from diamond rich areas by combatants, significantly restricting their ability to generate a livelihood, either directly or indirectly, from diamonds (Keen, 2003).

The agricultural sector was also severely affected during the war, with agricultural production plummeting, which resulted in widespread food insecurity (Zack-Willaims, 1999). The bulk of productive agricultural land was not cultivated
as most of the rural population were either on the run or living in displacement camps (FAO, 2010). In many rural areas, occupying forces had a devastating effect on agricultural production, damaging rural infrastructure, and destroying food processing, storage and distribution systems, while in areas where farming was still possible, those who farmed were often forcibly compelled to supply food to the RUF (Sierra Leone Truth and Reconciliation Commission, 2004). An FAO (2010) review of policy during this period suggests that there was no specific agricultural policy, but adherence to the structural adjustment programme saw the removal of subsidies on rice, fuel and other consumer goods, all of which had a negative impact on the agricultural sector. Given that the majority of Sierra Leoneans relied on agriculture and/or mining for their livelihood, the near collapse of both sectors meant that Non-Government Organisations (NGOs) were left to fill the void of the failed state, thus this period was “characterised by emergency relief in the form of food aid to support the livelihoods of the people” (FAO, 2010: 30).

4.6 Panguma and Kayima during the war

Thus far, this chapter has broadly charted the political economy of Sierra Leone from independence in 1961 until the conclusion of the decade long civil war in 2002. In the context of this research the civil war was both the culmination of the transforming process and structures at play since independence, and the major source of vulnerability to occur between the two cohorts of the study. As such, this section will focus on the impact that the war had in Panguma and Kayima. It will place particular emphasis on the war-time experiences of participants in the 2014 fieldwork, and explore how those experiences impacted on their ability to generate a livelihood. First though, it will situate Panguma and Kayima within the war context in a more holistic sense.

Panguma’s location less than 60km as the crow flies from where the rebels first entered the country at Bomaru in the Kailahun District, and less than 10km from the strategically important Tongo Field diamond area, meant that it was vulnerable to attack from the outset of the war. This vulnerability is encapsulated by the following excerpt, which was published in the 20th Anniversary Memorial Mass for Father Felim McAllister who, along with Dutch doctor Elco Krijn, his wife Karin van Goudoever and their three year old daughter Zita, were killed by rebel troops on 12th March 1994:
The war had a profound affect [sic] on Panguma and the surrounding areas. During the first incursion in 1991, the rebels attacked many villages in the eastern part of the parish about twenty miles from Panguma, killing people and destroying houses. In 1992, when Kono fell to the rebels, attacks were coming from the north towards Tongo Field...the Panguma area was now threatened from the north and east. During Christmas 1992 the rebels came within two miles of Tongo Field, and the majority of people fled the area. The rebels were driven back; Tongo Field was not invaded, and life resumed to relative calm and peace for twelve months. Shock was registered throughout the area when news was received in the early hours of the morning on January 29, 1994 that some villages in the Malegohun area were attacked by rebels. The rebels advanced to within three miles of Panguma killing hundreds of people and destroying many villages. The Sierra Leone army mounted a strong counter-attack, drove the rebels out and secured the area. Again in March 1994, the rebel attacks came closer to Panguma...it was as they were leaving Panguma Hospital on Saturday morning, 12 March 1994, for safety that Fr. Felim, Dr. Elco, his wife Karin and their three year old child Zita, were gunned down (St. Kizito’s Parish Church, 2014).

Key Informant 13, who was in Panguma at the time, remembers the attack, stating:

The rebels came to Talama [1km northeast from the centre of Panguma]. They came quietly. They would come to a house and kill the people inside with a knife so there was no noise. But not all the soldiers had discipline, and some started shooting, so we knew they were close, and people started running to the bush…the rebels stayed here for 4 or 5 days, and did a lot of damage, but then the government soldiers came in and drove them away (KI13, Panguma, 15 March 2014).

Having expelled the RUF from Panguma, government soldiers and the Kamajors maintained their hold on the town for the remainder of the war, but rebel attacks in the area remained frequent, and in 1997 the RUF finally took control of Tongo Field, maintaining its hold until 2001 (Gerdes, 2013). Key Informant 02 (Panguma, 16 May 2014), who spent time in both Panguma and Tongo Field during this period, stated that tensions remained high on both sides, and civilians remained fearful of both sides. Thus, while violent conflict in the confines of the town was limited, Panguma remained vulnerable to war throughout its duration.

In contrast, Kayima is more remote, and consequently remained relatively sheltered from the early throes of conflict. But, as the following statement from Key Informant 62 illustrates, once drawn-in, it too remained vulnerable to the impact of war until its culmination in 2002:

The war first came here in 1995, we all heard the rebels were coming, so we ran away to the bush. But it was just a dodge, the government soldiers managed to repel the rebels, and we were able to come back after just one or two weeks. Then, in 1997, the war proper came. The rebels came into Kayima,
and everybody left. Those who were not fast enough were captured, and some were killed…After two years, the local hunters [Kamajors] and government soldiers managed to drive the rebels out, and word spread that it was safe to return. But then factions of the government force joined with the rebels [sobels] and it became impossible to tell who was a friend and who was an enemy, so many people stayed away…[they] didn’t feel completely safe to settle back in the town until after the war was officially over in 2002 (KI62, Kayima, 30 May, 2014).

In the face of such vulnerability, the instinct in both communities was to run. Both Panguma and Kayima were completely evacuated at various points during the war (Maconachie and Binns, 2007). This was corroborated in the 2014 household survey, with all respondents who were old enough to have experienced the war, and who were living in either Panguma or Kayima when the war broke out, indicating that they left their respective town at some point during the war. Collectively, each community experienced this displacement in different ways, as Table 4.1 summarises. It is important to acknowledge that these figures represent the war experience for the majority of the household, and indeed there was some variation within households. For example, some members within households that camped in the bush, predominantly the very young and the very old, were sent to stay in other villages and towns that were deemed safe, but those considered to have productive capacity remained. Similarly, many households reported members being captured, such as Panguma Respondent 17, who stated:

Early one morning the rebels attacked our farm, one of my children was captured, but the rest of us got away. We had to leave everything, we just ran. My son was forced to work, he was fifteen, they turned him into a rebel soldier (Panguma Respondent 17, 3 March 2014).

But only one household purported to have been captured as a family unit. These distinctions, however, are not represented in Table 4.1.

In Panguma, 34 of the 50 agricultural households surveyed indicated that the majority of its members lived on or near their farms in the bush, while away from the town for extended periods during the war. As Key Informant 04, a chief from Panguma, explains:

Everyone went to Sokoin [Mende word for hiding place], they went into the bush. Those that couldn’t stay in the bush, the very old, and the very young, went to the bigger towns, or even other countries, to find refuge. There were many people who had never even been as far as Kenema, so they didn’t want to move, they thought ‘why should I go’, so they went to their bush because they knew the bush, they knew how to cope there (KI04, Panguma, 17 February 2014).
Of the remaining sixteen households in Panguma, fourteen did go further afield. Six based themselves in other villages or cities within Sierra Leone, four moved around from place to place, three crossed the border to Guinea, and one was captured by rebel forces. The remaining two households did not live in Panguma prior to the war.

<table>
<thead>
<tr>
<th>Displacement during the war</th>
<th>Panguma</th>
<th>Kayima</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross border</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Other villages, towns or cities in Sierra Leone</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td>Camped in bush near town</td>
<td>34</td>
<td>1</td>
</tr>
<tr>
<td>Moved from place to place</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Captured</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Not living in Panguma/Kayima at war time</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research)

In contrast, only one of the 50 households surveyed in Kayima camped in the bush near the town while displaced during the war, and they only did so because two elderly members were considered too frail to go any further. Instead, the majority of households in Kayima based themselves in or near other settlements, predominantly in the Northern Province, but also in Freetown and across the border in Guinea, where they either lived in formal displacement camps, or with friends, family, or benevolent strangers, or lived in informal bush camps with other displaced households. A significant number of households in Kayima also became nomadic (18 out of the 50 surveyed), a lifestyle which a member of one such household describes:

We went north, running, running so they [the rebels] would not kill us. Magburaka, Koinadugu, Kabala, we kept moving...[In] some places people were sympathetic, and let us sleep on their veranda’s, but [in] other places people were suspicious, so we slept in the bush...we run run for two or three years before coming back here [to Kayima] (Kayima Respondent 19, 22 April 2014).

It is unclear from the surveys why displacement was experienced in such different ways between Panguma and Kayima, though it is probable that it was related to the length of RUF occupation in each place. As stated above, the RUF only occupied Panguma for a matter of days, whereas their occupation of Kayima, while not totally clear, was generally referred to in terms of years.

Because displacement was experienced in different ways in Panguma and Kayima, the impact on, and adaptation of, livelihoods was also different. With the
majority of respondents to the survey in Panguma living in the bush, on or near their farms, they were able to continue farming, albeit with significantly reduced capacity. Farms tended to be smaller, and more remote, as households tried to conceal themselves away from main tracks, and the traditional practice of burning the farm was fraught with danger, as Panguma Respondent 33 explains:

> We relied on swamp farming during that time, because we couldn’t burn large quantities of bush as it would give away our location to the rebels. They would send people up poles to survey the bush, see where farmers were working, and then attack them for food and money, and then either chase them away, capture them, or kill them. So upland rice farming was just too risky. Even cooking food was dangerous. We only did it at night so the smoke wouldn’t be as visible, and we only used a small fire so it couldn’t be seen from far away, and we tried to conceal the flames to the best of our ability. We lived off swamp rice and cassava during that time, it was very difficult (Panguma Respondent 33, 14 March 2014).

This inability to burn had implications for the productivity of the farm because, as outlined in Chapter 1, the ash helps to clear the land, and fertilise the soil. Further, as Richards (1986) highlights, burning reduces the germination of weed seeds, and thus an unburned farm tends to be weedier, which reduces the productivity of the rice. Consequently, as Panguma Respondent 33 stated above, many focused their attention on swamp farming during the war as it did not require burning, and could be cultivated more than once within a year.

The other challenge commonly referred to by respondents who continued farming around Panguma during the war was the limited access to key resources, including a lack of seed, tools and the capacity to maintain the ones they had, and lack of labour beyond the household unit, all of which had an impact on farm productivity. Numerous respondents also noted their inability to access markets during the war, which made it difficult to convert their permanent cash crops such as coffee and cocoa into cash, as Panguma Respondent 28 exemplifies:

> There was no-one to buy our cash-crops. None of them [produce traders] had any money, and they were all too frightened to come here and buy from us. The only way to make money from the garden during the war was to carry the produce by foot across the border to Guinea, it was the only way. But it was risky (Panguma Respondent 28, 11 March 2014).

Consequently, cash crops that were not immediately consumable, were neglected during this time.

Beyond the ability to produce and sell crops, the response of Panguma Respondent 28 above, also hints at the vulnerability of crops that were able to be
produced during the war. Key Informant 31, an agricultural extension officer in Lower Bambara Chiefdom, expands upon this, stating that:

Agriculture was totally disturbed. You may have the idea to do the work, and you could plant, but you could not always have the fruits of your labour. It happened to me. I do brush a swamp, over two acre land. I did ploughing, I did planting. When the products were now coming to harvest, we were driven out of the bush by some armed men. We had to run away. But we had to come back also, it [farming] was all we could do (KI31, Panguma, 13 March 2014).

Indeed, almost all of the 34 households who were farming near Panguma during the war, reported being chased off their farms at least once by combatants in search of food and other resources, or seeking to intimidate the local population.

In contrast, with respondents from Kayima generally venturing further afield, the majority suffered complete dislocation from their farms, and farmwork, forcing them to find alternative means of generating a livelihood. Some were able to find labouring work for other farmers, and some, who lived in displacement camps, stated that they were able to make a small vegetable garden within the camp, but most had to move away from the agriculture they had traditionally subsisted upon. Many, particularly those who moved from place to place, had to live off what they could find in the bush, and the good-will of strangers, as the following comments attest:

There is a food in the bush they call the bush yams, that was the major food [during the war]. People would go out and look for it, dig it, and boil it. People were living off bush yams (KI45, Kayima, 10 April 2014).

We moved around from town to town. We lived off the goodwill of others. Sometimes people would sympathise with us, give us food and clothes, and let us sleep on their verandas. Other times I had to go into the bush and search for any food I could find for my family (Kayima Respondent 06, 16 April 2014)

We ate what we could find. Mostly bush yams and cassava, and we found these yellow fruits in the bush. We would grind it down and eat it. It was very delicious (Kayima Respondent 19, 22 April 2014).

We made a small settlement in the bush in the Koinadugu District, but it was very hard to get food. Sometimes we trapped bush meat [catch-all term for the meat of various wild animals, including deer, cutting grass, rats, bats and monkeys], but mostly we ate bush yams and bananas, anything we could get our hands on in the bush (Kayima Respondent 27, 24 April 2014).

Similarly, the livelihoods of those in displacement camps were largely dependent on what was provided by the NGOs running them, which generally consisted of rudimentary shelter, and a diet of bulgur wheat, cassava and rice. Despite
this general dependence, some respondents stated that they were able to develop a niche within the informal economies that materialised within these camps. The following excerpts provide examples of this:

We rotated around during the war years, and ended up in Freetown, living in a refugee camp. They supplied us with some things, but it was not enough, so we collected wood and used it to produce charcoal, and sold it to people for cooking (Kayima Respondent 02, 14 April, 2014).

We stayed in a camp in Kabala in Koinadugu District. While we were there I learnt from a friend how to do mason work. That helped provide some extra money, but not much (Kayima Respondent 22, 23 April 2014).

We moved around a lot, but ended up in a displacement camp in Forecariah, in Guinea. We relied mostly on the supplies given, but I had two grinding machines (see Figure 4.1), and me and my three boys used them to grind the cassava we were given into garri. We reserved some of our ration every day, and when we had enough, we prepared the garri, and then sold it (Kayima Respondent 36, 22 May 2014).

Figure 4.1: Grinding machine used by Kayima Respondent 36 to supplement livelihood in a displacement camp during the war (Source: Author’s Field Research)
The different ways that displacement was experienced between, and within, Panguma and Kayima clearly had an impact on the way livelihoods were generated during the war and, as will be discussed later in this chapter, how livelihoods were reconstructed after the war. Food insecurity during this time, however, transcended all forms of displacement. As described above, those who stayed on or near their farms around Panguma were unable to produce enough food to feed their households, and the food they were able to produce was highly vulnerable to theft or destruction at the hands of combatants. Consequently, they commonly referred to the lack of food as the main challenge associated with displacement. Similarly, those who found refuge in other places, or moved from place to place, also frequently described inadequate access to food as the main challenge they faced during the war, as Kayima Respondent 38 explains:

Many people found it difficult living away. People from other tribes often treated us badly, and there was no food available. Farmers were not even able to grow enough food for their own families, so there was no food for outsiders, and we had no money to buy it anyway, even if there was (Kayima Respondent 38, 23 May 2014).

Even those in displacement camps, while supplied with food, indicated that it was irregular, generally insufficient in quantity, and lacked the traditional staples of the Sierra Leonean diet, a point exemplified by Kayima Respondent 4:

They gave us bulgur wheat, beans and sorghum, but there was never enough, and there was no rice. A Sierra Leonean has not eaten unless he has eaten rice (Kayima Respondent 4, 15 April 2014).

Indeed, Kayima Respondent 4 went on to offer perhaps the most telling summation of food insecurity during the war, stating:

People got sick, and some died, because they were hungry, and others because their bodies were not used to the food they had to eat. It was not only the violence that killed people during the war, but also the hunger (Kayima Respondent 4, 15 April 2014).

Violence also had a dramatic impact in both Panguma and Kayima. The deaths of Father McAllister and the Krijn-van Goudoever family, outlined earlier in this chapter, were clearly a high profile manifestation of this violence in Panguma, but as Key Informant 27 summed up, on-going violence had a profound impact on the entire community:

The war affected Panguma greatly. The rebels forced everybody out, they burnt down our houses, they destroyed our infrastructure, they killed many people here, they raped women, they raped children, young children, and they
captured others, and turned them into soldiers, turned them against their own families, their own people (KI27, Panguma, 7 March 2014).

While Key Informant 46 described the situation in Kayima in a similar manner:

The impact of this quarrel [war] here was very severe. People lost their lives, children lost their lives, elders lost their lives. People were maimed, women were raped, families were torn apart (KI46, Kayima, 11 April 2014).

Further, almost all households surveyed across both communities indicated that they had either witnessed or experienced violence of some description during the war, and a number suffered loss as a result. In Panguma, seven households reported the death of at least one household member as a result of violence during the war, while a further three reported that at least one household member went missing during an attack, and were presumed dead as they had not been seen since. Two indicated that at least one household member was injured as a result of violence during the war, and four stated that at least one household member was captured during an attack. In Kayima, fewer households reported any direct impact of violence. Three households stated that one or more members had died, and two that one or more had been injured, as a result of violence, while none reported that any household members went missing or were captured during the war.

This discrepancy in the impact of violence between Panguma and Kayima possibly reflects the different ways in which displacement was experienced between the two communities, coupled with the proximity of Panguma to the strategically important Tongo Field. With the majority of households in Panguma choosing to stay close to their farms, and Tongo Field being a site of contestation between the warring factions, they were perhaps more regularly exposed to the violence of the war than households in Kayima, who in contrast, had a propensity to go further afield, which perhaps enabled them to avoid violence to some extent. Conversely, it could simply be a reflection of Kayima’s relative isolation and smaller population.

In terms of physical damage, Panguma and Kayima are considered typical of many rural settlements that felt the brunt of the war (Potter et al., 2004). A post-conflict survey in 2004 found that the proportion of demolished buildings was 34 percent in Kayima and 32 percent in Panguma, while combatants also destroyed bridges, schools, hospitals, markets, community halls, water pipes, and in the case of Panguma, the electricity supply and sawmills (Maconachie et al., 2007). Maps produced by Maconachie et al. (2007) (see Figure 4.2 and 4.3) highlight the scale of physical damage to each town during the war. Households surveyed for this research
largely mirror the findings of Maconachie et al. (2007), with 15 of the 50 households surveyed in Panguma, and 18 of the 50 households surveyed in Kayima stating that their houses were completely destroyed during the war. However, only five households in Panguma, and only four in Kayima, reported no damage during the war, indicating that very few buildings were left entirely unscathed.

Figure 4.2: The scale of physical damage from the war in Panguma (Maconachie et al., 2007).
Beyond physical damage, the other major consequence of the war in Panguma and Kayima was the disruption to the structures and processes of governance and education at the local level. As mentioned previously, the RUF initially targeted the rural elite, particularly chiefs and court chairmen, and thus these ‘big men’ were among the first to flee both Panguma and Kayima. This created a vacuum in local governance, leaving both communities reliant on the failing state to fill the void, something that was well beyond its capacity. According to Key Informant 09 (21 February 2014), the targeting of the rural elite also dissipated an already weak civil society in the Eastern Province, as it severed the flow of information between isolated rural communities and central government. Consequently, governance in Panguma became *laissez faire*, while Kayima came under RUF control. This, in both instances, paved the way for the violence and destruction described above.

Education was also severely disrupted during the war. The education system was already on the brink of collapse before war broke out, as teachers sought fees from parents *in lieu* of state funding, forcing the withdrawal of many children from formal education (Hirsch, 2001a). But as Key Informant 43 describes, war-induced dislocation:
curtailed education for everybody. For ten years people were always running, so it was difficult to receive decent education (KI43, Kayima, 10 April 2014). The household surveys in both Panguma and Kayima revealed an under-educated generation who felt they were left with few economic opportunities beyond subsistence agriculture post conflict. The war also had a major impact on health facilities, trade and transport networks, all of which will be discussed in the following chapter.

4.7 Post-conflict Sierra Leone

As discussed in Chapter 2, Collier et al., (2008) state that post-conflict societies face two distinct challenges: reducing the risk of a recurring conflict, and economic recovery. Similarly, Addison (2003: 3) promotes the importance of veritable peace, though argues the need for a “broad-based recovery that improves the incomes and human development indicators of the majority of people, especially the poor”, rather than having a narrow economic focus. In terms of the former, Sierra Leone is considered by some as a model case for reasons discussed below, but progress on the latter, as will be discussed later in the chapter, has not been as profound. This section will situate these challenges in post-conflict Sierra Leone on a macro-scale, first discussing the factors that have contributed to lasting peace, including the DDR process; the restoration of democratic politics at both the state and local levels; improved civil society; and the collective lived experience of the population. It will then explore the continued vulnerability experienced by much of Sierra Leone, especially those in rural areas, framed within the political economy of the post-war period.

Following the culmination of conflict in 2002, Sierra Leone has experienced continuous peace (Humphreys and Weinstein, 2009). Many ascribe this to a successful disarmament, demobilisation and reintegation DDR programme. DDR refers to the process of demilitarising armed groups, both official and unofficial, through the control and reduction of possession and use of arms; the disbandment of non-state armed forces, and rightsizing of state security services; and assisting ex-combatants to reintegrate into civilian life, both socially and economically (Ball and van de Goor, 2006). DDR programmes have become integral to post-conflict peace consolidation, and have featured prominently in the mandates of peacekeeping
operations globally over the last two decades (UNDDR, 2010). The DDR process, thus, contributes significantly to the post-conflict narrative of Sierra Leone.

The DDR process in Sierra Leone, like the end of the war itself, underwent multiple iterations before its final manifestation (Comninos et al., 2002). A DDR programme was included in the conditions of the 1996 Abidjan Peace Agreement, but was never enacted, and it was not until 1998, after Kabbah’s government was returned to power, that any actual demobilisation began (Humphreys and Weinstein, 2009). This, however, was short lived, as the January 1999 attack on Freetown halted progress with only 3,000 ex-combatants registered (Molloy, 2004). A second phase began in October 1999, in accordance with the Lomé Peace Accord, but this too struggled to gain traction as hostilities resumed in 2000 (Malan, 2003). Consequently, the bulk of demobilisation took place during a third phase in 2001-2002 following further intervention by the UNAMSIL (Humphreys and Weinstein, 2009). Over the four years it took to complete the DDR process, 72,500 combatants, including 4,751 women and 6,787 children, were disarmed and demobilised; 42,330 weapons and 1.2 million pieces of ammunition were collected and destroyed (Solomon and Ginifer, 2008); and some 220,000 internally displaced Sierra Leoneans were resettled in their areas of origin (NRC, 2003).

Beyond these macro-scale implications, however, some have argued that there have been few tangible benefits of DDR in Sierra Leone at the micro-level. Mitton (2013) argues that the war itself was considered a rational investment by combatants, in that they saw it as the most viable way to generate a livelihood at the time, and thus suggests that the buy-in to the DDR process was the result of a similar cost-benefit calculation, in which the promise of alternative livelihoods in exchange for embracing peace, was deemed a more advantageous prospect than war. Solomon and Ginifer (2008), however, found that DDR programmes in Sierra Leone were often poorly funded, uncoordinated, and involved short-term reintegration activities, which contributed to widespread unemployment and poverty among ex-combatant populations. Similarly, Humphreys and Weinstein (2009) found no evidence that the DDR programmes were effective in breaking down factional structures and facilitating reintegration, arguing that ex-combatants not exposed to the DDR programme appeared to reintegrate just as successfully as those who were. Thus, while the DDR process clearly contributed to peace in Sierra Leone, insomuch as it significantly reduced access to arms, demobilised non-state armed forces, most
notably the RUF and the Kammajors, and realigned state security services, it was perhaps not the unmitigated success it is often purported to be.

Another contributing factor to lasting peace in Sierra Leone is the relative political stability created by the restoration of democracy, and increased legitimacy of the state. Since the end of the war, Sierra Leone has held three democratic presidential and parliamentary elections, each of which was declared free and fair by international observers (The Carter Center, 2013; Kandeh, 2003; Ohman, 2008). The 2002 election was won in a landslide by the SLPP, and its leader Ahmed Tejan Kabbah, not because of any ideological or policy differences with its main rivals, but because of the popular sentiment that the party had delivered the end of the war, and therefore deserved re-election (Kandeh, 2003). During the ensuing term, Kabbah’s government resumed its decentralisation policy, which saw the re-establishment of the local councils that were abolished in 1972 under Siaka Stevens, and the restoration of chiefdom administration, which lapsed during the war (CLGF, 2016). This improved the stability of the state by enabling it to reinstitute its control in the provinces (Richards et al., 2004). The stability of the state was tested, however, when the country again went to the ballot in 2007. Given that Kabbah had already served two terms, the maximum allowed under Sierra Leone’s constitution, a change of president was inevitable, but his party was also surprisingly ousted, with the ballot returning the APC to government, and installing Ernest Bai Koroma as President (Ohman, 2008). This result was seen as a landmark in Sierra Leone’s post-conflict recovery as the peaceful transition of power signalled that the country had indeed stabilised, thus diminishing the risk of conflict recurring (Fridy and M’Cormack-Hale, 2011). In addition, while the 2002 elections were primarily managed by the international community, Sierra Leoneans played a far greater role in the management of the 2007 election, adding to the perception of increased political stability, agency and legitimacy (Fridy and M’Cormack-Hale, 2011).

At the time of this research, Koroma and the APC remain in power, having won the 2012 presidential and parliamentary elections. Political stability, though, is perhaps more a consequence of, rather than catalyst for, prevailing peace. As Kandeh (2012) points out, while post-conflict elections have been reasonably transparent and peaceful, they have not brought significant changes in governance practice in Sierra Leone, and socio-economic conditions have not improved for the majority of Sierra Leoneans. Further, while some report that war seems to have produced a heightened
political awareness among many ordinary Sierra Leoneans, indicating a growing civil society (Keen, 2005; Bellows and Miguel, 2006), concerns have been raised over Koroma’s increasingly autocratic leadership, particularly during the Ebola epidemic. In 2015, for example, Koroma unconstitutionally dismissed his elected Vice President, Sam Sumana (Mustapha, 2016). Later in the same year, his plans to make changes to the constitution to enable himself to pursue a third term also emerged, while his order to detain Tom Baryoh, a popular radio host, for hosting a member of the opposition critical of this move, illustrated “the sweeping powers at his disposal and how they could be used to silence dissent” (DePinto, 2016: 221).

While the present political climate is certainly not as oppressive as the pre-war one-party state, some elements are clearly reminiscent. The traditional elites are once again politically and economically dominant, corruption remains pervasive, and traditional patron-client relationships, particularly between the rural gerontocracy and their constituent youth, have become re-entrenched (Boersch-Supan, 2012, Allouche, 2017). This, coupled with high youth unemployment (UN, 2010), has led many to argue that some of the factors that contributed to the conflict, most notably the ‘crisis of youth’, remain or have been re-created (Hanlon, 2005; Peters, 2011b; Allouche, 2017). Despite this, however, Mitton (2013) argues that the war hindered, rather than advanced, the personal welfare for the majority of Sierra Leoneans, such that their lived experiences act as a significant deterrent to renewed conflict. His assertion is supported within this research, with participants across all methods of enquiry consistently and emphatically expressing that there was no appetite for a return to war, regardless of the conditions under which they continue to struggle, a sentiment aptly articulated by Key Informant 02:

Things [now] are no better than before the war. The difference is, now we have experienced war. The scars are healing. Rebels, kamajors, government soldiers and civilians now all live and work side by side. We are all brothers again now, we are all Sierra Leoneans. But we will always remember the war and know that no matter how bad things get here, life will still be better than [during] the war (KI02, Panguma, 02 February 2014).

Thus perhaps the most compelling reason that peace has persisted is the collective will of the population to avoid a recurrence of violent conflict. Though, as Mitton (2013) cautions, the strength of this will cannot be taken for granted, as future generations may become detached from the costs incurred during the civil war, and once again resort to arms to register grievances or access resources.
While Sierra Leone has thus far experienced uninterrupted peace since 2002, fulfilling one of the two key challenges facing post-conflict societies outlined at the beginning of this section, human and economic development, the second of those challenges, has not been as pronounced. Since the end of the war, the government has introduced numerous development policies, predominantly aimed at restoring national security and good governance, re-launching the economy, and providing basic services to the most vulnerable groups (Government of Sierra Leone, 2001; Government of Sierra Leone, 2003). While these policies were not agriculture specific, the core tenets provided a strong base for growth within the agricultural sector. In 2005, policy was amended to include objectives aimed at promoting food security and job creation in rural areas, where agricultural development and increased food production are central (Government of Sierra Leone, 2005). Building upon this, the national ‘Food Security Policy’ was introduced in 2007, and has remained central to the Ministry of Agriculture, Forestry and Food Security (MAFFS) vision of making “agriculture the engine for socio-economic growth and development” (Government of Sierra Leone, 2009: 7). In order to achieve this, the food security policy has focused on increasing agricultural productivity and smallholder commercialisation, particularly in rice, cassava, livestock, and export crops such as palm oil, cocoa, coffee and kola nut, through the introduction of improved varieties and appropriate agronomic practices; improved research, extension and credit facilities; greater education around the sustainable management of financial, physical and human resources; the provision of basic infrastructure required for agricultural development, such as feeder roads, irrigation facilities, marketing, processing and storage facilities; and the introduction of food safety nets to provide food aid to smallholders at times of food stress in order to reduce vulnerability (FAO, 2010). There has also been a concerted effort to attract private sector investment in order to improve the output of medium and large agricultural holdings (Government of Sierra Leone, 2009).

Whilst these policy statements have been ambitious, their impact among many rural communities has thus far been minimal. The FAO (2010) argues that while the government’s development policies have had potential, their implementation remains susceptible to political interference, and consequent mismanagement and corruption; and is overly reliant on donor support, and thus subject to the conditionality of bilateral donors and multilateral institutions.
Consequently, this potential has yet to be translated into tangible achievements. At the macro-scale, Sierra Leone remains one of the poorest countries in the world, and at the time of this research, as noted in Chapter 1, was ranked 181 out of 188 countries according to the Human Development Index (HDI) (UNDP, 2015b). While Table 4.2 highlights some improvement in key human and economic indicators since the end of the war, they remain extremely low by world standards, and are well below average when compared to other countries in sub-Saharan Africa, and other countries categorised as ‘low HDI’. Table 4.2 also highlights that improvements across the indicators have largely plateaued after strong growth in the initial post-war period. This chapter will now consider the post-conflict period at the micro-scale, by exploring vulnerability and resilience within livelihood systems in Panguma and Kayima during this time.

Table 4.2: HDI trends in Sierra Leone 2000-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Life expectancy at birth</th>
<th>Expected years of schooling</th>
<th>Mean years of schooling</th>
<th>GNI per capita (2011 PPP$)</th>
<th>HDI Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>38.7</td>
<td>6.9</td>
<td>2.3</td>
<td>976</td>
<td>0.299</td>
</tr>
<tr>
<td>2005</td>
<td>43.6</td>
<td>7.8</td>
<td>2.7</td>
<td>1,130</td>
<td>0.344</td>
</tr>
<tr>
<td>2010</td>
<td>48.2</td>
<td>8.6</td>
<td>3.1</td>
<td>1,360</td>
<td>0.388</td>
</tr>
<tr>
<td>2011</td>
<td>49.0</td>
<td>8.6</td>
<td>3.1</td>
<td>1,451</td>
<td>0.394</td>
</tr>
<tr>
<td>2012</td>
<td>49.8</td>
<td>8.6</td>
<td>3.1</td>
<td>1,420</td>
<td>0.397</td>
</tr>
<tr>
<td>2013</td>
<td>50.4</td>
<td>8.6</td>
<td>3.1</td>
<td>1,697</td>
<td>0.408</td>
</tr>
<tr>
<td>2014</td>
<td>50.9</td>
<td>8.6</td>
<td>3.1</td>
<td>1,780</td>
<td>0.413</td>
</tr>
<tr>
<td>Low HDI Countries (2014)</td>
<td>60.6</td>
<td>9.0</td>
<td>4.5</td>
<td>3,085</td>
<td>0.505</td>
</tr>
<tr>
<td>Sub-Saharan Africa (2014)</td>
<td>58.5</td>
<td>9.6</td>
<td>5.2</td>
<td>3,636</td>
<td>0.518</td>
</tr>
<tr>
<td>World (2014)</td>
<td>71.5</td>
<td>12.2</td>
<td>7.9</td>
<td>14,301</td>
<td>0.711</td>
</tr>
</tbody>
</table>

(Source: UNDP, 2015b)

4.8 Post-conflict in Panguma and Kayima

The previous section explored the post-conflict period in Sierra Leone at the macro-scale, specifically focusing on the prevalence of peace, and progress in human and economic development, since the war ended. In doing so, it has further unpacked the transforming structures and processes that have shaped the livelihoods observed in the current research context. This section will situate Panguma and Kayima within
the post-conflict period, with a particular emphasis on the vulnerability and resilience of livelihoods during this time. First, it will discuss the reconstruction of livelihoods as residents resettled in their communities at the conclusion of the war, before considering livelihood vulnerability and resilience in the current context in a more general sense, and comparing this to the livelihood vulnerability in Panguma and Kayima in the 1970s. Ultimately, it will argue that while the war in Sierra Leone caused massive upheaval, and had a dramatic impact on livelihoods in rural parts of Sierra Leone, many of the livelihood vulnerabilities identified by participants in the 2014 fieldwork mirror those which were uncovered by Binns (1980) in the 1970s. Thus, it could be argued that the vulnerability that presently exists in Panguma and Kayima has been perpetuated by the war, and other negative elements of the political economy over the past forty years, rather than being a direct consequence of it.

As discussed earlier in this chapter, Panguma and Kayima experienced displacement during the war in different ways, with the majority of households, or parts thereof, in Panguma staying on or near their farms, while most in Kayima went much further afield. This not only led to different war-time livelihood strategies among the two populations, which has already been discussed, but also led to different experiences of resettlement and livelihood reconstruction after the war. The transition from conflict to post-conflict was referred to with much more fluidity among respondents from Panguma than those from Kayima, with respondents in Panguma tending to frame their livelihoods as continuous, albeit severely disrupted, whereas those in Kayima tended to talk of ‘starting again’ after the war. Consequently, those in Kayima were better able to articulate the key challenges they faced in terms of reconstructing their livelihoods immediately after the war, as there was a spatial juxtaposition between conflict and post-conflict, whereas for many in Panguma, resettlement was more gradual, and thus less easily defined. This is illustrated by Table 4.3, which shows that a significantly higher number of responses were elicited from Kayima respondents than Panguma respondents when asked about the main challenges they faced in reconstructing agricultural livelihoods after the war. No restrictions were placed on the number of challenges raised per household surveyed, yet only 47 responses were given in Panguma, compared with 133 in Kayima.
Table 4.3: Key challenges of agricultural livelihood reconstruction post-conflict

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Panguma</th>
<th>Kayima</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of seed</td>
<td>10</td>
<td>34</td>
<td>44</td>
</tr>
<tr>
<td>Lack of food</td>
<td>13</td>
<td>29</td>
<td>42</td>
</tr>
<tr>
<td>Lack of money</td>
<td>12</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Lack of tools/materials</td>
<td>2</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Lack of shelter</td>
<td>1</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>Loss of labour/knowledge due to death/migration</td>
<td>5</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Lack of clothes</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>No access to land</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Thickness of bush</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Lack of livestock</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Lack of social capital</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Poor Mobility</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lack of Medicine</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total number of challenges raised by households</strong></td>
<td><strong>48</strong></td>
<td><strong>133</strong></td>
<td><strong>181</strong></td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research)

Despite the difference in scale of response between Panguma and Kayima, there were a number of commonalities in the challenges which each community faced, and they largely allude to a scarcity of resources. In particular, the limited availability of rice seed to plant, tools and materials to clear land in preparation for planting, food to sustain such work, and money to purchase what resources were available, were considered the key constraints to agricultural livelihood rehabilitation. Limited supplies of, and high demand for, these key resources subsequently forced prices up, which further exacerbated the problem. A lack of shelter caused by the widespread destruction of physical infrastructure was also noted as a significant constraint for many, while other challenges mentioned included the loss of labour and knowledge as a result of the death or migration of household members during the war, overgrown bush as a result of neglect during the war, lack of clothes and medicine, limited access to land, livestock and social capital, and poor mobility.

In order to address these challenges, a number of strategies were adopted by households, but each generally revolved around generating sufficient financial capital to access the key resources discussed above. Cash crops such as cocoa, palm oil and coffee took on added significance in both Panguma and Kayima, as they were generally perennial crops, and therefore in some instances, and to some extent, were
able to be harvested straight away, whereas subsistence crops such as rice and cassava generally do not regenerate, and therefore were not immediately available for harvest upon resettlement, and required greater capital input to restart. Although cash crop yields were impacted significantly by the lack of maintenance during the war years, some households were able to use the small income derived from their sale to slowly re-build their capital base, and re-establish their livelihood portfolios, as the following comments exemplify:

There was no money for food or seed [after the war], so I tapped palm wine and used the profits from that to start farming again (Panguma Respondent 12, 25 February 2014).

[After the war] the foundations for my cocoa and palm oil gardens were still here, so I was able to use them to get started again. Everything was in big demand, so I was able to process what I had and sell it for good prices, which gave me the finances to get my farm crops going again (Kayima Respondent 11, 18 April 2014).

It was very difficult [after the war]. The rebels had destroyed most crops. They took the harvests of my farm crops for their own consumption, but my plantations were ok. They had been left because they required processing, and the rebels were only interested in food for consumption. So I brushed [cleared] my plantation, and was able to make a small harvest, and sell it very quickly. It gave me enough money to eat, repair my dwelling, and start a new farm. So little by little I was able to rehabilitate my life through agriculture (Kayima Respondent 31, 25 April 2014).

Other households, particularly those without cash crop plantations, or those who were unable to salvage any produce from their cash crop gardens, sought other means of generating the start-up capital required. Some, such as Kayima Respondent 22, engaged in mining activities:

We had no money to buy seeds or tools, so I went mining with my father to earn some money. We worked for a bossman near Yomadu, but the money was only small-small. After some time, we decided to go back into the bush. We had access to family land in Kayima, so we used the small-small money from mining to buy seeds and tools, and started farming again (Kayima Respondent 22, 23 April 2014).

Others, such as Kayima Respondent 14, provided labour for those with sufficient access to the resources required to start farming immediately:

It was really difficult to come back here after the war. You can see, we have no shelter, until now we have been sleeping under a tarpaulin. It was very difficult to start farming. I had to work for others to get enough money to buy the materials to get my own farm going again (Kayima Respondent 14, 19 April 2014).
While these strategies show a level of resilience, almost all households surveyed in both Panguma and Kayima reported receiving some form of aid, generally in the form of seed, food, tools and implements, and tarpaulins for temporary shelter, to supplement their livelihoods in the aftermath of the war. Many indicated that accessing assistance from NGOs was their primary livelihood strategy while some, as the following comments indicate, even suggested that re-engaging in agriculture after the war was relatively easy given the plethora of NGOs active in both Panguma and Kayima at the time:

Farming was better straight after the war than it is now. It is harder now. After the war there was lots of aid. Food, money and farming materials were available from lots of different NGOs, but that is all gone now. Now there is no money or food. No help! (Panguma Respondent 27, 10 March 2014).

Immediately after the war I had assistance from an NGO. They supplied me with seed, tools and clothing, so it was not too difficult to start farming again. But then those supplies stopped, and it became hard to carry on (Kayima Respondent 20, 22 April 2014).

The above comments also hint that emergency aid delivered by NGOs in the immediate aftermath of the war may have contributed to a dependence on foreign aid, as they indicate that the livelihoods of these households have regressed as a consequence of NGOs withdrawing. While this alone is not a sufficient indicator that such a dependence exists, evidence was pervasive during discussions around future development throughout the research. Almost all households in both Panguma and Kayima, suggested that outside money was the main requisite for future prosperity, an attitude exemplified by Panguma Respondent 20, who stated:

We need money! My house is falling down, and I don’t have the resources to grow enough food for my family, or send my children to school. The only way to fix that is with money. But there is no money here. That is why we need you people [foreigners] to give us money (Panguma Respondent 20, 6 March 2014).

Similarly, participants involved in interviews, focus groups and guided field walks, also often framed their needs, and/or the needs of the organisation they were representing, in these terms. Teachers and health workers, for example, would commonly state that outside money was needed to improve school and hospital facilities respectively.

While certainly not condemning the post-war intervention of NGOs and foreign governments, as it was clearly necessary given the weak state’s limited capacity to drive post-conflict reconstruction, the ongoing dependence on outside
help is perhaps indicative of a failure in the way that outside assistance has been implemented in Panguma and Kayima in the years since. Degnbol-Martinussen (2002) highlights the importance of capacity-building, and the role of aid as a catalyst, in human development projects, while Binns (2009) discusses engaging and disengaging with the receiving community, and the importance of timing therein. Unfortunately, there are numerous examples in both Panguma and Kayima where these processes have not occurred and, as a result, many well-intentioned projects remain ineffective, or have ceased operating altogether. This is evident in the plethora of signage promoting specific development projects which, when followed up in the course of this research, had evidently become redundant because either the international donor had stopped funding it, or the local person/people charged with maintaining the project had mismanaged the resources provided and/or no longer lived within the community. A number of these issues were articulated in a wide-ranging interview with a former field assistant for one such project in Kayima, an excerpt of which is presented in Box 4.1.

Box 4.1: Excerpt of an interview with Key Informant 50

KI50: The Sandor Agricultural Development Project started in 2002, after the war. It was part of the EC/SL Rehabilitation and Resettlement Programme and was sponsored by the European Commission. The main purpose was to encourage agricultural growth in the chiefdom after the war. We provided seeds for groundnuts, rice and cassava, and once the farmers had harvested the crops, they would return the same amount we gave them, plus some extra, and we would give them to other farmers the following season. It was like a loan scheme, a rotation of seeds, so many farmers benefitted. We also tried to educate the farmers on inland swamp rice. The chiefs gave us a large swamp to demonstrate swamp methods. The other part of the project was to provide services and facilities to minimise post-harvest crop losses. Mostly, it was supplying small-scale machinery for processing crops, so that nothing went to waste. There were 15 garden graters for farmers to turn cassava into garri, a rice cleaning machine, two power saws, a vehicle for transporting crops, and a drying floor, and a store for harvested crops. The building is still there…you can still see the sign board.

KI50: The project ended in 2004. The European Commission only sponsored it for three years. They said they set it up so we could continue to run it after they withdrew their funding, but it didn’t last. There were problems. The co-ordinator mismanaged things. He couldn’t afford to maintain the equipment, so he let farmers take it away, and when he tried to get it back, some of the farmers would not [give it back]. For now, none of it is available. None of the machines work anymore, and there is no money to repair them, and no-one knows how to repair them anyway. We do not have access to the store because the co-ordinator does not stay here now, he lives in another chiefdom. Some of the farmers would not give up the seeds after
their harvest, so the seed loan stopped as well. And then the chiefs took the swamp from us. Once there was no more funding, we couldn’t manage the work, so now the swamp is not being used at all. But all we need is funding. If ‘you people’ help with finances, we could get the equipment repaired, and access working tools. The chiefs would give us the swamp back if ‘you people’ were involved.

Figure 4.4: Agricultural Development Project Sign (Source: Author’s Fieldwork 2014)

JB: But what would stop the same problems from happening again? I don’t have any finance, but if I did, it would be limited, so what would happen when the money ran out again?

KI50: You could send money, even when you are out [of the country]. We have a bank here. You can transfer money to here from anywhere in the world.

JB: But that is not the point. Funding is always finite. People can’t just keep sending money every time you run out. A project like this needs to be able to sustain itself.

KI50: But all we need is the finance. We have the skills and the knowledge to produce lots of rice in the swamp, and lots of people willing to do the work, but they need to be paid, and they need seeds to plant, and tools to work with. We are very poor here and don’t have the money to finance the work ourselves. We can only do projects like this if we have assistance from ‘you people’.

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The issues exemplified by Key Informant 50, both explicitly and implicitly, were not uncommon in either Panguma or Kayima, with many other development projects incapacitated for similar reasons. The Agricultural Business Centres (ABCs) in Dodo (6km southwest of Panguma) and Kayima, two of the 193 set up across the country by the FAO and MAFFS, with funding support from the European Union, the Italian Government, Irish Aid and the Global Agriculture and Food Security Programme, are clear examples. Set up to promote smallholder commercialisation through the provision of small-scale mechanisation, storage and transportation facilities, and educational material, the ABC concept has potential, and indeed has accrued some benefits. Focus groups and site visits in both Dodo and Kayima, however, found that the respective local management committees had not received adequate training in the use and maintenance of some of the machinery provided. This resulted in its misuse and subsequent breakdown which, coupled with limited facilities for mechanical repair in either location, meant that much of it had become inoperative less than 4 years after the ABC’s had first been established. Further, in the case of Kayima, some of the machinery promised still had not materialised, with Focus Group 13 (Kayima, 21 April 2014) raising questions about the efficacy and integrity of the project’s management at the district, provincial and national scale.

Another high profile example evident in both Panguma and Kayima is the community banking institutions that will be discussed in greater depth in Chapter 5. Again set up by MAFFS, with support from the International Fund for Agricultural Development (IFAD), the primary objective of these institutions was to provide micro-credit to farmers to encourage agricultural commercialisation. Similar to the ABC’s, the Financial Services Association (FSA) in Panguma and the Community Bank (CB) in Kayima have not come without their benefits, but they have largely fallen short in terms of fulfilling their primary objective. Again, this is largely the result of a lack of capacity building and institutional support at the local level, which according to many key informants has manifested in a failure to ‘sensitise’ local farmers to unfamiliar processes.

Evident throughout this discourse on post-conflict aid is what Harvey and Lind (2005) describe as a ‘dependency mentality’, in which continued assistance becomes expected, subsequently undermining individual, household, community, and governmental initiative. This chapter has shown that vulnerability is a big part of the post-independence narrative of Sierra Leone, and as will be discussed in Chapter
6, livelihood strategies are understandably steeped in risk aversion in order to counter such vulnerability. Households surveyed for this research showed a much greater tendency to engage in higher risk livelihood activities with the potential of higher returns, if that risk is external to themselves. The corollary of this, however, is that without personal risk, there appears to be little incentive to ensure the sustainability of these activities, but rather a general acceptance that externally supplied resources are finite, and therefore may as well be used exhaustively while they are available, before reverting to more risk-averse strategies. While this may accrue some short-term gains, livelihood outcomes remain static in the long term.

Beyond the individual and household level, a similar cycle emerges. As mentioned earlier in this chapter, the government’s agricultural policies in the post-conflict period have had a strong dependency, and subsequent conditionality, on donor support, which in itself has been detrimental to their efficacy, as the government lacks the means or initiative to sustain them beyond their initial capital (FAO, 2009). Further, as Collier (2000b) argues, crises force change, but aid, in averting or mitigating the impact of such crises, can enable poor practises and policies to continue. Many of the problems which plagued the political economy of Sierra Leone before the war remain in the post-conflict period, but are somewhat masked by the prevalence of external assistance.

**4.9 The Vulnerability Context in Panguma and Kayima in 2014**

In terms of vulnerability in the current research context, the war still casts a long shadow. As outlined in the introduction to this chapter, vulnerability influences access to livelihood assets, and a scarcity of key resources, particularly shelter, seed, tools and money which was identified in the previous section as one of the main challenges in the immediate aftermath of the war. Access to some of these resources remains a significant source of vulnerability in both Panguma and Kayima, and will be discussed in greater depth as the ‘asset pentagon’ is unpacked in Chapter 5. Similarly, food insecurity was identified as a major contributor to vulnerability in the 2014 fieldwork. Many households described a ‘poverty trap’, in which an inadequate supply of food made it difficult to sustain the work upon which that food supply depends, thus resulting in lower yields and reduced labour capacity. But, as food security is discussed extensively in Chapter 6, this cycle will not be covered in any depth here. Rather, this section will focus on more immediate micro-scale shocks,
and broader climatic, health and population trends, which were considered to be the
greatest source of vulnerability for agricultural households in both communities
during the 2014 fieldwork. These included unexpected crop losses, household illness
or death, climate change, the outbreak of disease, and population trends.

When asked to identify sources of vulnerability in the post-conflict period,
the unexpected loss of crops was easily the most commonly referred to factor among
agricultural households surveyed in Panguma and Kayima. In particular, respondents
regularly discussed the loss of crops, both in the ground and from post-harvest stores,
due to ‘pests’ such as cutting grass, rats, birds, deer, insects, and parasitic weeds and
plants. Thirty-four of the 50 households surveyed in Panguma, and 30 of the
households surveyed in Kayima, reported having lost a significant proportion of their
farm crops as a result of pests at least once in the previous five years. Other causes
of unexpected crop losses commonly mentioned were theft and fire.

The impact of unexpected crop loss is multifaceted, as it not only affects the
short/medium-term availability of food (which will be covered in greater detail in a
discussion on food security in Chapter 6), but as most agricultural households reserve
seed from their harvest to plant the following season, can also have implications
for long-term productivity. This cycle is demonstrated by Kayima Respondent 37:

The pests make it hard. Cutting grass are a major problem for the rice, but
also blackbirds and insects like grasshoppers, they too give me a heavy
headache. Thieves as well. They go into the bush and harvest my own crops
in the night. Last year the cutting grass took a lot of my rice, so there was not
enough for my family, and this year there is not enough rice to plant, so my
farm will be very small (Kayima Respondent 37, 23 May 2014).

Without reserve seed, farmers are forced to source it from elsewhere. While the more
fortunate may be gifted seed from friends or relatives with a surplus, most have to
either buy or borrow seed, or as the comments above allude to, are forced to decrease
the size of their farm, ultimately perpetuating this cycle.

The other major source of vulnerability identified in both Panguma and
Kayima was household health shocks, ranging from illness or injury, to death of a
household member. Twenty-two of the households surveyed in Panguma, and 26 of
those in Kayima, reported such health shocks as a cause of vulnerability in the past
five years, exemplified by the following selection of responses:

Two years ago my oldest daughter needed to be admitted to hospital. I had no
money to pay, so I had to sell some rice, which meant we did not have enough
for the family. So I only ate small small, but then did not have the energy to
work, and got sick myself. It was very hard to break out of, because if I could not work, there was even less food or money for my family (Panguma Respondent 12, 25 February 2014).

This injury [points to badly swollen foot]. I fell down a hole. I ignored it for a week or two, but it got worse, so I went to the clinic and now I cannot work. Three years ago I hurt my back brushing [clearing] my farm, and could not do any work for one month. The rains were coming so I had to pay others to finish my brushing for me, but that meant that I did not have enough money for seed, so my crops were only small small [small yield]. Seven years ago I got bitten by a snake, and the similar thing happened. I cannot get ahead. These injuries affect your work only for a small time, but the hardship carries over for a long time, and it can take years to recover (Kayima Respondent 42, 24 May 2014).

My brother died 4 years ago, so now I am responsible for his wife and 2 children. There are more mouths to feed, but no more people to do the work (Panguma Respondent 02, 18 February 2014).

As the comments above highlight, these health shocks have had wide-ranging implications. Unexpected expenditure on treatment, medication, and in the case of death, funerals, can reduce or halt expenditure on other essential commodities such as food and education, and can leave households with debt, which they have limited means to get out of. Further, a reduction in the availability of labour due to the incapacitation of a household member can significantly constrain the size and output of the farm, resulting in reduced production and income, significantly affecting the short/medium-term availability of food which, as highlighted above, can also have an impact on long term productivity.

The incidence of these small-scale shocks as a source of vulnerability largely mirror the national situation. A World Food Programme (WFP, 2011) survey on household food security found that some 85 per cent of rural households in Sierra Leone had recently experienced a ‘shock’ of some sort that had affected their household food production and consumption. Death and illness among household members, were most frequently mentioned, while the loss of crops due to pests, either when growing in the fields, or when being stored, was also found to have had a significant impact on food availability among Sierra Leone’s rural households (WFP, 2011). Over 77% of the households surveyed reported that coping with such shocks could affect both their food production and ability to purchase food (WFP, 2011). However, for many households the impact of such shocks reflects the absence of
adequate safety nets to cushion households from the impact of such events, reiterating the low threshold of vulnerability for the majority of people in Panguma and Kayima.

While localised shocks were identified as the most common source of vulnerability in Panguma and Kayima, broader trends have also contributed. In particular, Key Informants and survey respondents in both communities indicated that climate change was increasingly becoming an issue for agricultural households in rural Sierra Leone. The focus of their concern was not so much on any overall changes to annual rainfall or temperature, but the increasing variability of rainfall and temperature, and the impact that has on agriculture given that the farming system is so closely aligned to climate patterns. These concerns were articulated by Key Informant 04 (17 February 2014), a chief in the Lower Bambara Chiefdom, who stated:

The seasons have changed, caused by us, through poverty. We needed the money so we let you people [foreigners] cut down all the trees. The Harmattan used to blow solidly for months, now it comes for one week, then stops, then again for three days, then stops. Same with the rains. We used to have a solid rainy season, but now it can rain as early as February. It is hard to make the proper preparations because of this uncertainty” (KI04, Panguma, 17 February 2014).

Similar sentiments can be drawn from a focus group (FG04, Panguma, 2 March 2014), in which a group of community ‘gatekeepers’ discussed changing climate patterns, and the implications it has for farmers:

This is the first time I can remember it being this cold in March. March is usually the hottest month of the year. This is more like the weather we formerly get in January (Participant 1).

It [climate] is definitely changing. This is cold. And the rain is different. The rains used to come in mid-May/June, with early showers in April/May. But now the rains come as early as March. We have already had some showers and March has only just started (Participant 2).

We know it [the climate] is different, but we are not sure why. Maybe all the forests being cut down. That is what I have heard (Participant 3).

Also the pollution from cars and fires. A white man told me that that can affect the weather. But whatever the reason, these differences affect farmers. If the rain comes and they have not yet burned their farm, then there will be trouble for them (Participant 2).

Yes, if they have not burned their farm when the rains come, they can forget their farming, they will need to find something else to do (Participant 3).
That is why most farmers have finished, or almost finished, brushing and felling already. They try to get it ready so at the first sign of the early showers, they are ready to burn (Participant 4).

Yes, but also, if they plant, and the rains come late, the seeds will not germinate. They will just shrivel in the ground. There is so much uncertainty now ( Participant 5).

Other livelihood vulnerabilities associated with climate change to emerge from the household surveys included a perceived increase in extreme climatic events, such as drought and flooding, a point reinforced by the government (see Figure 4.4); more frequent insect attacks as a result of variable temperatures; and more frequent water shortages for both agricultural and domestic uses, which in turn, has led to increased inter-household conflict.

![Image: Government billboard in Koidu highlighting the impact of climate change](https://example.com/climate_change_billboard.jpg)

**Figure 4.5: Government billboard in Koidu highlighting the impact of climate change (Source: Author’s Field Research)**

While there is no scientific data specific to Panguma and Kayima to support this anecdotal evidence of climate change, others have noted similar trends in broader contexts. Boko *et al.* (2009), for example, indicate that precipitation trends have significantly decreased across Africa since the 1960s, while Chappell and Agnew (2004) situate this point within West Africa, arguing that annual rainfall regimes have changed such that the established climatic cycle upon which agricultural systems are based, are slowly being eroded. In the context of Sierra Leone, Bangura *et al.* (2012) argue that variable climatic conditions and climate events, such as drought and flooding, have created uncertainty for subsistence agriculture in the country as a whole. Similarly, the UNDP (2015c) suggest that increased incidence of flash floods and mudslides, and changing rainfall patterns, are having a dramatic effect on
agricultural production, indicating that climate change is already a reality in Sierra Leone, while the Government of Sierra Leone’s (2012) *Second National Communication to the United Nations Framework Convention on Climate Change*, argues that the future impacts of climate change will be even more critical, and include decreased agricultural productivity, food and nutrition insecurity, a shift from tropical rain forest to dry forest, widespread water stress and severe economic impacts.

It was established earlier that household health shocks were considered to be a major source of vulnerability in Panguma and Kayima. While this was exemplified by localised accidents and/or illnesses, broader health trends often underpin such vulnerability. Endemic diseases such as Malaria and Lassa Fever, for example, remain a constant threat to livelihood continuity, but the outbreak of Ebola in 2014/15, which involved of 14,122 declared cases and 3,955 deaths in Sierra Leone (WHO, 2015), brought such vulnerability back into sharp focus. Poor health care facilities proved to be woefully inadequate in coping with the crisis and international intervention was necessary. Many rural communities were in ‘lockdown’ for over a year in an attempt to prevent the spread of the disease. While the full extent of the Ebola outbreak on rural livelihoods is yet to be fully assessed, initial indications suggest that the quarantines and other restrictions imposed to prevent the spread of the disease have had a dramatic effect on economic activity, while the agricultural sector has suffered significant declines in production, and disruptions in the planting cycle, that may take many years to recover from (UNDP, 2015a).

Population trends can also have an impact on livelihoods, with increasing populations, in particular, placing pressure on resources. While Sierra Leone’s population has more than doubled in the 40 years between the two fieldwork periods of this research, population growth was only mentioned in Panguma, and not Kayima, as a source of vulnerability. According to the *Sierra Leone Demographic and Health Survey 2013*, the population of Panguma has increased from 3,100 in 1963 (Government of Sierra Leone, 1963) to approximately 7,965 in 2013 (Statistics Sierra Leone, 2014), which mirrors the national growth rate. As such, a number of households pointed to this growth as placing pressure on resources, with a particular emphasis on the issue of land encroachment, which has affected land availability for farming and cash crops. In contrast, the population of Kayima is little changed, marginally increasing from 1853 in 1963 (Government of Sierra Leone, 1963), to
approximately 1881 in 2013 (Statistics Sierra Leone, 2014). Consequently, there was no mention of pressure on resources as a result of population change among the households surveyed in Kayima.

4.10 Conclusion: vulnerability - now versus then?
This Chapter has weaved its way through the political economy of Sierra Leone, from independence in 1961, until the time of this fieldwork in 2014, purposively alternating between national and local narratives so as to contextualise scale across time. In doing so, it has straddled the nexus between two of the dimensions represented in the sustainable livelihoods framework, the vulnerability context, and transforming processes and structures. Sierra Leone’s brutal civil war, which spanned 1991-2002, is at the centre of this, as it is both the culmination of the transforming process and structures at play since independence, and the major source of vulnerability to occur between the two cohorts of the study. As such, the initial focus of this chapter was on the political and economic processes and structures leading up to Sierra Leone’s brutal civil war. The discussion then shifted to the war itself, first holistically, and then its manifestation in Panguma and Kayima, with a particular emphasis on the impact it had on local livelihoods. Finally, it explored the post-conflict period, again highlighting the vulnerabilities to emerge from the war, and the transforming processes and structures central to the reconstruction process.

This chapter culminated in a description of the current vulnerability context in which livelihoods in Panguma and Kayima exist. While the war clearly had a dramatic impact on livelihoods in Sierra Leone, the main sources of on-going vulnerability identified within this research were not direct consequences of it. Households surveyed in both Panguma and Kayima highlighted micro-scale shocks such as the loss of crops as a result of pests, fire or theft, and household health shocks resulting in the incapacitation or death of one or more household members, as the main sources of vulnerability to their livelihoods. While Binns (1980) did not specifically ask about sources of vulnerability in the 1970s, it can be inferred from his discussion on the problems faced by farmers that the situation was much the same. He states that the loss of both subsistence and cash crops to pests, particularly cutting grass and grasshoppers, as well as parasitic plants, was frequently referred to as a major problem for farmers. Similarly, he found ill-health to be a significant factor militating against higher agricultural production among households surveyed.
Further, Binns (1980) found that limited access to key resources, particularly labour, but also seeds, tools and fertilizers, was also a significant source of vulnerability in the 1970s. While this will be discussed in depth in Chapter 5, it is worth touching on here as it adds perspective to the shortages that were identified in this chapter as being among the main constraints to livelihoods in the immediate aftermath of the war. While the war clearly exacerbated such shortages, Binns’ observations suggest that they were an issue long before the outbreak of war, while Chapter 5 will show that they remain an issue twelve years after the war officially ceased.

The persistence of these issues indicates that livelihood vulnerability in Panguma and Kayima is as much symptomatic of the limited capacity to mitigate against micro-shocks, and the lack of adequate safety nets to cushion them when they occur, as it is a consequence of larger scale shocks such as the civil war. Thus, it could be argued that the war has perpetuated vulnerability in rural Sierra Leone, rather than being the root cause of it. As has been discussed throughout this chapter, however, the incidence of, and inability to deal with, micro-scale shocks over time, cannot be extricated from the broader political and economic structures and processes at play. Poor governance and corruption which began at the national level under Siaka Stevens’ leadership, have become pervasive at all scales, and has contributed to the failure of the state, and other local and district-level administrative bodies, to create adequate safety nets. Consequently, NGOs have filled the void, particularly in the post-conflict period, but this too has been problematic as it has helped foster the dependence on aid, and culture of risk aversion, as highlighted earlier in the chapter. Ultimately, this chapter has shown that livelihoods in Panguma and Kayima exist in a context of omnipresent vulnerability influenced, though not necessarily created, by the transformation of political and economic structures and processes. The following chapter will begin to explore these livelihoods in greater detail, by situating household access to livelihood assets within this context.
Livelihood Assets

5.1 Introduction

The previous chapter explored the context in which livelihoods exist in rural Sierra Leone, through a delineation of the transforming processes and structures which influence people’s vulnerability. In doing so, it was argued that the assets upon which people’s livelihoods are constructed, and the livelihood strategies and outcomes that are available to them, are fundamentally affected by the policies and legislation of multi-scalar institutions and organisations, as well as by critical trends, shocks and seasonality. Chapter 4, therefore, has provided the foundation for a more detailed discussion of livelihoods at the household level in Panguma and Kayima, a discussion that this chapter begins to engage with as it explores changes to the structure of the asset pentagon from the Sustainable Livelihoods Framework (SLF) over the forty year period covered by this research. Chapter 6 will continue this discussion through an exploration of the livelihood strategies being employed by households in Kayima and Panguma, and ultimately, their livelihood outcomes.

As discussed in Chapter 2, the ‘asset pentagon’ is at the core of the SLF (Figure 2.1), and thus is central to the analysis of livelihoods in Panguma and Kayima. It identifies five core categories of assets or capitals, upon which livelihoods are built, namely human capital, social capital, financial capital, physical capital and
natural capital. Drawing predominantly on the household surveys, but also other forms of data collected, this chapter will discuss household access to each of these capitals in the current context, before comparing this access to Binns’ (1980) results from the 1970s in order to gauge continuity and change over the forty year period of this research. It will show that there has clearly been some change in both access to, and the influence of, the different capitals between 1974 and 2014, and that there are at times spatial variations to such change. But when considering the five different capitals more holistically, it appears that there has been little change to the overall asset base. This would suggest a fluidity to the asset pentagon, in that access to individual assets can improve or regress, but such a shift is generally counteracted in one or more of the other capitals. Thus, ultimately, finding ways to increase the overall asset base is crucial in the pursuit of sustainable livelihoods.

5.2 Human Capital

5.2.1 Labour and knowledge

In terms of assessing levels of human capital in Panguma and Kayima, a number of different indicators were considered across a range of different scales. Household size, for example, was explored in order to understand the availability of family labour. As in 1974, households are larger in Panguma than in Kayima, but as Table 5.1 shows, the average number of household members available to engage in livelihood activities has increased significantly in both towns. Numerous factors have contributed to this increased household size, including the destruction of physical capital during the civil war which forced many families to co-habitat in what shelter remained; and the declining attraction of artisanal mining, leading many to stay home and pursue agricultural livelihood activities. But the main contributing factor has been the increased capacity for secondary education in both communities. Binns (1981) stated that education was one of the most common reasons given for the absence of household members in 1974, particularly in Kayima, as it was not well provided for in the local area. In contrast, Panguma now has a fully operational senior secondary school, while Kayima Secondary School is currently transitioning into a full senior secondary school (see Figure 5.1), meaning fewer dependents are being sent to larger centres for education, thus creating greater access to family labour for households with school aged children. Additionally, children from smaller villages in each chiefdom are now being sent to live with family members in Panguma and
Kayima in order to access education, further boosting the availability of family labour.

Table 5.1: Average number of household members available to engage in livelihood activities in Panguma and Kayima (1974 and 2014)

<table>
<thead>
<tr>
<th></th>
<th>1974</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panguma</td>
<td>8.24</td>
<td>10.96</td>
</tr>
<tr>
<td>Kayima</td>
<td>7.38</td>
<td>8.92</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research and Binns (1980))

As outlined above, there has been some improvement in the availability of family labour, but access to labour in more general terms remains a significant concern to agricultural households in both Panguma and Kayima. Binns (1981: 281), in his original survey in 1974, found that “the availability and cost of labour were the major constraints on expansion in both areas”, an observation mirrored in 2014. As Table 5.2 shows, the main factors limiting farm size are still predominantly associated with access to labour, with 61 of the 100 respondents across both communities citing access to labour as the main factor that limited the size of their farm in 2014. There has, however, been a significant shift in the barriers to such access, particularly in Kayima, with the majority of respondents suggesting the cost of labour, rather than the availability of labour, is now the key constraint, largely brought about by a
growing expectation of monetary remuneration, rather than payment in kind, placing hired labour financially out of reach for many households. This was articulated by Kayima Respondent 12 (18 April 2014) who, reflective of the dominant sentiment, stated “if you have money, you can get labour. For me there is no money, so there is no way”. This is further reinforced by the increase in responses stating lack of finance as the main factor limiting farm size, with respondents coded in this category taking a more holistic viewpoint, suggesting that finance reduced their access to tools, seed, land, and food, as well as labour, all of which combined to limit the size of their farm.

Table 5.2: Main factors limiting farm size 1974 and 2014

<table>
<thead>
<tr>
<th>Availability of Land</th>
<th>Availability of Labour</th>
<th>Price of Labour</th>
<th>Time Constraints</th>
<th>Ill Health</th>
<th>Lack of Finance</th>
<th>Pests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panguma 1974</td>
<td>6%</td>
<td>24%</td>
<td>48%</td>
<td>4%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td>2014</td>
<td>12%</td>
<td>8%</td>
<td>46%</td>
<td>0%</td>
<td>0%</td>
<td>34%</td>
</tr>
<tr>
<td>Kayima 1974</td>
<td>0%</td>
<td>46%</td>
<td>16%</td>
<td>12%</td>
<td>2%</td>
<td>16%</td>
</tr>
<tr>
<td>2014</td>
<td>2%</td>
<td>20%</td>
<td>48%</td>
<td>12%</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>Total 1974</td>
<td>3%</td>
<td>35%</td>
<td>32%</td>
<td>8%</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>2014</td>
<td>7%</td>
<td>14%</td>
<td>47%</td>
<td>6%</td>
<td>2%</td>
<td>23%</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research and Binns (1980))

There is also concern that the short-term benefit of increased family labour facilitated by improved access to education may, in fact, have the opposite effect in the long term, as more and more educated young people seek higher education and/or employment opportunities elsewhere. Focus groups of senior secondary school students in both Panguma (FG02, FG05) and Kayima (FG10), collectively defined the value of education as a means of escaping village life, and more specifically, the tether of subsistence agriculture associated with it. This is commonly referred to in migration and development literature as the ‘brain drain’ (de Haas, 2010), but Penninx’s (1982: 793) term the ‘brawn drain’ – a loss of agricultural labour caused by the departure of young, able-bodied people from rural areas - is an equally relevant concern in both Panguma and Kayima. While there is no evidence that this has
occurred so far on any great scale in either community, many farmers expressed concern that it was only a matter of time, a point explicated by Panguma Respondent 01, who stated:

my children are getting a good education because they do not want to be farmers. This is good, but who will help me with the farm work when school *don don* [is finished] (Panguma Respondent 01, 15 February 2014).

The above response also hints at a prevalent attitude held by agricultural household heads, who commonly juxtaposed education and agriculture dichotomously, arguing that formal education is only of value if pursuing non-agricultural employment. This attitude is summed up succinctly by Panguma Respondent 37 (15 March 2014), who posed the question, “why do you need education if you are just going to be a farmer?” This attitude has become so deep-seated within both communities, that it is being perpetuated, and acted upon, by those engaged in formal education, as evidenced in the following interaction between two secondary school students in Kayima (FG10, 7 April 2014):

Our parents want us to stay in school, because they want a better life for us, but it is hard for them. They spend so much money on school fees and materials. They need our help on the farms now that we are stronger, but if we help them, we can’t go to school. If we don’t help them, they can’t afford to pay for us to go to school (Participant 3, FG010, 7 April 2014).

That is why many people drop out [of school]. They see this pattern and realise that even if they are lucky to finish school, they will end up farming anyway. So what is the point of finishing school? (Participant 4, FG10, 7 April 2014).

This idea that formal education has no value in pursuing agricultural livelihoods in developing countries, however, is at odds with Lipton’s (1980) assertion that the rural educated are typically the most significant agricultural innovators. While, again, there is little empirical evidence from this research to support Lipton’s argument, the following excerpt from my field diary suggests, at the very least, that such a correlation may exist:

There appears to be a relationship between level of education, and the ability of farmers to articulate and implement solutions to some of the challenges they face. Farmers who had attended school for a meaningful length of time seemed better placed to extend their resources through agricultural growth, multi-functionalism and multi-livelihoods, while those with minimal or no education tended to posit government and NGO assistance as the only solution to their myriad challenges (Field Diary, 15 April 2014).
Regardless of whether this correlation exists, there is clearly a disparity between local and outside perceptions of the value of formal education to human capital. The importance of indigenous knowledge to human capital, however, is more universally acknowledged. In this respect, Binns’ (1981: 347-349) assessment of the situation in Sierra Leone was ahead of the game, stating:

From consulting farmers, it was evident that they had a detailed understanding of their physical environment, with a wealth of knowledge about aspects such as soil characteristics and the activities of various pests which could affect their crop yields…such ‘indigenous technical knowledge’ (ITK), as it has been called recently, is impressive to the outsider, and should be more fully understood by planners and extension officers engaged in formulating and implementing rural development projects.

As this statement indicates, academic and institutional understanding of indigenous knowledge was still in its infancy at that time, and while recognition of its significance to agricultural livelihoods in developing countries has increased exponentially in the interim, popularised by Richards’ (1985) book *Indigenous Agricultural Revolution*, the depth and breadth of knowledge displayed still remains impressive to the outsider.

In the context of this research, the importance of indigenous knowledge systems to agricultural livelihoods was reaffirmed throughout the fieldwork process, but the depth of these indigenous knowledge systems in Panguma and Kayima was most explicitly evident during the guided field walks. A participant in Guided Field Walk 10 in Kayima, for example, pointed to a termite hill, explaining that the termites only come out three times a year, each occasion providing a marker for the farming calendar. He stated:

> the termites will be coming for the third time soon, any farmers who have not burned [their farm] by then will be anxious because of the rains” (Participant 1, GFW10, Kayima, 3 April 2014).  

The ‘coming of the termites’, while seemingly mythological in nature, actually correlates with the early rains, with the changing moisture levels in the soil causing the termites to emerge (Solleh, 2011). The presence of termites, therefore, is a tangible sign of increasing soil moisture based on generations of experience, and where few other measures exist. Similar examples of in-depth indigenous knowledge from both Panguma and Kayima are numerous.

Clearly indigenous knowledge remains a key component of human capital in Panguma and Kayima and, as the following observation from Guided Field Walk 01
(16 February 2014) suggests, the transfer of indigenous knowledge has been maintained, despite the disconnection of people and land caused by war that was discussed in Chapter 4:

Four boys, ranging in age from 10 to 18, took me on a loop through the bush from Panguma to Ketuma (approximately 5km southwest) and back. What struck me most during the walk was their in-depth knowledge of the environment, and how the different elements of the environment related to different livelihood activities. To display this level of knowledge despite the fact that none came from predominantly agricultural households, nor had any desire to engage in agriculture themselves once they had finished school, highlights that the transmission of indigenous knowledge remains strong (GFW01, 16 February 2014).

As with any knowledge system, however, indigenous knowledge requires evolution to remain relevant. In this sense, minimal change to traditional farming practices indicates that the knowledge transferred has remained relatively stagnant. There was also some concern in both communities that potential migration, as a result of improved access to education, as discussed above, could be detrimental to the future transmission, and ultimately survival, of indigenous knowledge systems in Panguma and Kayima.

5.2.2 Health

The other key component of human capital is the health status of household members. As discussed in Chapter 4, household health shocks persist as a major source of vulnerability in both Panguma and Kayima, which indicates that health remains a significant barrier to livelihoods. While difficult to assess overall health at an individual or household level, and even more challenging to compare this between 1974 and 2014, some inferences can be made based on access to health care, and how it has changed over this time. In this context, access to healthcare has regressed significantly in Panguma, and at best remained similar in Kayima, over the 40 year period of this research.

In Panguma, healthcare facilities have regressed significantly since 1974, with the war having a major impact. Binns (1980) labelled Panguma hospital as ‘excellent’, stating that it operated a mobile ante-natal and child care clinic, and had undertaken important research on parasitic diseases and Lassa Fever in the 1970s. In the aftermath of the war, however, Binns and Maconachie (2005: 75) described a very different situation, stating:
The hospital remains largely abandoned and in a state of disrepair, as a consequence of the aftermath of destruction during the war. Much of the hospital’s equipment was looted or vandalised by the RUF ‘rebels’. Health care provision is presently severely constrained by a lack of qualified personnel, and there is not even a resident doctor at the hospital. They went on to further highlight the deterioration of health care provision by suggesting that many of the prevalent health problems that were reported during research undertaken in 2004, including dysentery, leprosy, elephantiasis, Lassa Fever, and hernias from carrying heavy loads, were able to be effectively treated, and contained locally, during the 1970s. The situation had improved by the time of the 2014 fieldwork, with 69 staff, including one resident doctor, employed to provide basic healthcare services at Panguma Hospital, with a strong emphasis on maternal and under-five health, the latter being funded by the government. A lack of funding, however, has meant that all hospital patients, with the exception of under-fives, are required to pay 100,000 Le (c. NZ$30) before any treatment is provided. Consequently, the majority of households surveyed in Panguma felt that healthcare was unaffordable, and therefore inaccessible. The lack of funding was also creating uncertainty around the retention of the resident doctor, who was coming to the end of his three-year term, with management expressing grave concerns about the future of the hospital if finances restrict his retention or replacement. Access to equipment and medical supplies was also a constant concern given these financial restrictions.

Kayima, too, was well provided for in terms of health care for a time, with Binns (1980: 211), stating that:

The [former] Paramount Chief was well known for the emphasis he placed on improving local health and sanitation…the first hospital in Kono District was opened in Kayima in 1924, but was unfortunately closed in 1933 and replaced by a dispensary.

The dispensary was still in operation during his fieldwork in the 1970s but, as with the hospital in Panguma, was damaged and abandoned during the war. In 2014 it had been re-established and employs five staff, who are able to provide maternal and sexual health care, and fulfil basic diagnosis and dispensary functions. But while all of the staff have undergone some training, none have formal qualifications. Further, limited funding restricts access to equipment and supplies, and they only have limited bed capacity to admit patients. Overall, the provision of healthcare in Kayima remains on a par with 1974, with the majority of households still forced to travel to Koidu, which is some 40km away, for most healthcare needs. This, however, is compounded
by the deterioration of the roads between Kayima and Koidu, which is discussed in greater detail later in this chapter, and the absence of an ambulance to transport acute patients, thus it could be argued that access to healthcare has marginally declined in Kayima between 1974 and 2014.

5.3 Social Capital
As stated in Chapter 2, social capital in terms of livelihoods refers to the ways in which social networks, formal memberships, and relationships, relate to the accessibility of the other livelihood assets, and contribute to livelihood strategies that ultimately lead to livelihood outcomes. As such, the influence of social capital in relation to Panguma and Kayima will be discussed within this context. In both Panguma and Kayima, the predominant perception was that the importance people placed on social capital is diminishing. Key Informant 45, a Kayima elder, lamented this shift in attitude and the impact it was having on livelihoods, stating that:

up until the war, there was oneness, but now, everybody is living independently of one another. For now, there is no oneness, everyone is going ahead with life the way they like it, and going about their own farming without concern for the farming of others (KI045, Kayima, 10 April 2014).

Similarly, a focus group in Dodo, a small town approximately 6km southwest of Panguma, elicited the following response when discussing the selected locations of a Ministry of Agricultural initiative:

Panguma has a history of not buying in to community programmes. The Ministry of Agriculture set up a demonstration swamp there two years ago, and invited farmers to come and work, learn different methods, and help provide more food for the community. But nobody came, they all wanted money for their work. Nobody seemed interested in the long-term benefit that new skills could bring to their own production, or that vulnerable families would have better access to food. They were only interested in their own situation (Participant 3, FG08, 11 March 2014).

While these two examples are reflective of popular belief, particularly among older community members, the influence of social capital on livelihood activities was certainly still evident in both communities, though perhaps more so in Kayima than Panguma. There has, according to Key Informant 64, been “a significant increase in ‘farmer based organisations’ (FBO) in Kayima” (KI64, Kayima, 1 May 2014), which he says has largely been facilitated by the introduction in 2010 of the Sandor Agricultural Business Centre (ABC) (discussed in Chapters 5). Farmers in these FBOs maintained their individual farms for household subsistence, while the FBOs
are more commercially focused, and thus aimed at increasing financial capital. This form of social capital is not new in Kayima, but signifies the return of formal agricultural associations that Binns and Maconachie (2005) found notably absent in the immediate aftermath of the war. In contrast, agricultural associations in Panguma are much less common, remain informal, and are predominantly formed by marginalised groups, such as women and youth, with the aim of increasing their access to food, rather than increasing financial capital. On the surface, this discrepancy between Panguma and Kayima can be attributed to the lack of an ABC in Panguma, but MAFFS’ (Ministry of Agriculture, Fisheries and Food Security) decision to situate the Lower Bambara ABC in Tongo, despite Panguma being the Chiefdom Headquarters, was largely the result of the perceived lack of ‘buy-in’ in Panguma mentioned above, and thus the minimal number of agricultural groups is simultaneously indicative of, and a consequence of, diminished social capital.

In terms of accessing labour in Panguma and Kayima, the influence of social capital is clearly evident. As discussed in the previous section, a lack of financial capital was seen as the main barrier to accessing labour, and thus the ability to draw upon social networks is, for many, their only means of doing so. Reciprocal labour groups (known as ‘jageja’ in Panguma, and ‘boma’ in Kayima), in which people work on each other’s farms quid pro quo, remain a vital source of labour in both communities, but those with limited or no social capital, such as Kayima Respondent 26 (24 April 2014), have difficulty accessing such groups:

          Because I have been away from Kayima, I don’t have the contacts to help. It is just me and my mother, but she is too old to help. I alone do the farm work, and there is no-one to prepare food for work, so I have to prepare meals, and make sure my mother is feeding (Kayima Respondent 26, 24 April 2014).

At the other end of the scale, there were examples where a high level of social capital was converted into human capital relatively easily, without the need for reciprocity, as highlighted by the following excerpt from my field diary:

          I was woken early this morning by someone speaking into a megaphone outside my window. I couldn’t understand what was being said, but as with the Ebola message of a few weeks ago, it lasted for a couple of minutes, followed by a pause, before starting again, a little quieter, a little further up the road. A few hours later, once in the field, I learned that the message was from one of the local chiefs, imploring all available ‘young’ men to gather their tools, and meet on his farm at an appointed hour...a call to ‘arms’. Subsequently, it was difficult to find anybody to participate in my research
today, indeed the only interview I was able to conduct was with the chief who had sent the message (Field Diary, 24 April 2014).

Access to land is even more entrenched in this form of hierarchical social capital, and remains much the same as it did in 1974. While different forms of land tenure exist in Panguma, where the land is owned by extended family groups, and Kayima, where it is vested in the chiefdom, access to land in both is governed by town elders. Those with strong links to ancestral family heads in Panguma, and the Paramount Chief, and to a lesser extent to the section chiefs, in Kayima, therefore, have greater access to land than those who do not. This point was illustrated by a survey respondent in Panguma, who stated:

I am a stranger here, I only came last year, and finding land was difficult. I approached many families to beg for land, but only after ten or more [attempts] I was given some” (Panguma Respondent 42, 11 May 2014).

Further, social capital not only determines access to land in a binary sense (i.e. whether you have access to land or not), but can also impact upon the size, quality and location of the land to which access is granted. For example, none of the six households in Panguma that indicated the availability of land as the main factor limiting the size of their farm (see Table 5.2), had access to ‘family bush’ (area of land owned by the extended family group); while Kayima Respondent 15, elucidated the latter two consequences listed above, stating:

I begged small-small (a small amount of) [land] from the eldest brother of the Paramount Chief. It is more than five miles from here, and the soil [is] no good. We [do] no[t] expect for much, but better than nothing (Kayima Respondent 15, 20 April 2014).

Similarly, Panguma Respondent 02 stated:

I do not own any land. A farmer I know from Dodo moved away last year, so he lets me use his land and I pay him. But Dodo is about 4 miles from here, so it is a long way to go to do my work (Panguma Respondent 02, 18 February 2014).

The unequal access to labour and land as a result of hierarchical social capital described in the previous paragraph, is reflective of the re-entrenchment of the traditional patron-client relationships in post-conflict Sierra Leone noted in Chapter 4. Mitton (2013) and Fanthorpe and Maconachie (2010), among others, have argued that the war made everybody poorer, and consequently traditional patrons, who no longer had the resources to distribute, abandoned their clients in favour of self-enhancement. As Allouche (2017) argues, however, the emphasis on decentralisation as a benchmark for post-conflict political settlement did not devolve power to those
who had been excluded, but rather re-created, and perhaps even strengthened, the power structures that existed in rural communities before the war.

Another example of the influence of social capital on livelihoods was the existence of financial clubs in both Panguma and Kayima, which were described by numerous participants, across multiple methods of data collection. These financial clubs generally have memberships of between 10 and 40 people, and are aimed at increasing access to financial capital for their members. They operate, in essence, as banking co-operatives, whereby members buy shares, and take out loans, with the interest paid on loans providing interest on members’ original investments. Interestingly, in the context of social capital at least, membership of these groups was marginally more common than membership of formal banking institutions (which will be discussed in the following section) among survey respondents in both Panguma and Kayima, indicating the level of trust involved in networks built through social capital, and perhaps the lack thereof for central government, who administer the formal community banking institutions.

It was also clear that membership of a secret society, Poro (men’s society) and Sande (women’s society), is a highly important form of social capital in both Panguma and Kayima, although how that relates to livelihoods is difficult to ascertain given that they are ‘secret’ societies. In a rare moment of candour on the subject, however, a member of Poro from Panguma stated that initiation into the society:

    teaches boys to be men…teaches you how to make better production from the land, and how to take care of your family (KII18, 5 April 2014).

Little (1949: 200), one of the few scholars to write specifically on the role of secret society in Sierra Leone, expands upon this in stating that one of the key roles of the Poro and Sande is to provide “general education, in the sense of social and vocational training and indoctrination of social attitudes”. Little (1949) further defines the role of secret society in Sierra Leone, suggesting that they are responsible for the regulation of political and economic affairs, with membership being a necessary condition of political office in Sierra Leone; and the operation of multiple social services, ranging from medical treatment to forms of entertainment and recreation. Membership of Poro or Sande, therefore generates social capital manifesting as knowledge and skills, political and economic agency, and access to key services within Panguma and Kayima, all of which have an impact upon livelihoods.
Conversely, those who are not members are marginalised from these forms of social capital.

Religion is the dominant form of social categorisation in Panguma and Kayima, and therefore also plays a part in the accrual of social capital. The manifestation of social capital from religion, however, is more a representation of the power structure within each religion, rather than any tension between religions. Both Muslim and Christian faiths are strongly represented, as illustrated by Table 5.3, yet very little religious tension exists in either community. In fact, a fair degree of religious mobility is evident, as Key Informant 02, a religious leader in Panguma, explained:

There is no religious tension here, in fact there is religious mobility. My parents were Muslim, but I became a Christian leader\(^6\). There is a lot of that here. You will see Muslim men with Christian wives and vice versa. We all believe in god, that is the most important thing, but we choose to do so in different ways (KI02, Panguma, 23 February 2014).

Such religious mobility is highlighted by the fact that three households in Panguma, and four in Kayima, identified as being of mixed religion. Further, it was not uncommon for a household member with a Muslim name to identify as a Christian during the survey process.

<table>
<thead>
<tr>
<th></th>
<th>Muslim</th>
<th>Christian</th>
<th>Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panguma</td>
<td>24</td>
<td>23</td>
<td>3</td>
</tr>
<tr>
<td>Kayima</td>
<td>18</td>
<td>28</td>
<td>4</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research)

Given the lack of religious tension, it is perhaps unsurprising that religious denomination does not appear to be a major barrier to accessing social capital, with numerous examples of inter-religious co-operation evident throughout the fieldwork process. This co-operation, however, tends to be between people of an equal standing within their respective religious groups, promoting reciprocity, rather than networks forged on shared identity, as the key condition in the transfer of social capital. Consequently, stark disparities exist in the ability to transfer social capital into other forms of capital within each religious group. Again, there were numerous examples

\(^6\) Removed reference to church denomination to protect the identity of the informant.
of this in both communities throughout the fieldwork process, but as the following excerpt from my field diary illustrates, the distribution of items donated by an overseas organisation to one particular Christian denomination in Panguma, best encapsulates the point:

I witnessed the delivery and distribution of aid from an overseas organisation today. Non-perishable food items, second hand clothing and footwear, and furniture, were among the main items donated. The church executive oversaw the delivery, each arriving with two Okada [motorcycle taxis], one to transport themselves, and the other to transport their haul (see Figure 5.2). They started eating muesli bars, even as the truck was still being unloaded, and not just one each, sometimes three or four, and members of the executive each took a big bag of them home. Meanwhile, one of the executive members continually chased children from the congregation away. Once the truck was unloaded, the executive drew numbers to decide who would get first pick from the store, all the while singing “have faith in Jesus and good things will come to you”. During this process, one of the local chiefs turned up, a Muslim man, and he too left with a large bag of donated items, despite not being part of the congregation. Even I received some of the donated items. Despite my protestations, the church leader gave me a pair of sandals and a shirt, saying “these will fit you, you can have them”. The thought of me, from middle-class New Zealand, benefitting from aid intended for Sierra Leoneans was irreconcilable, and I returned the items to the store as soon as I was able to without offending the church leader. Once the executive had loaded up their Okada’s and left, the church leader gathered some of the children from the congregation, and took photos of them posing with some of the remaining items, so he could include them in his report to the donors. But once done, the items were locked away in the store, rather than going to the families of those children (Field Diary, 1 March 2014).

So, while religion itself does not overtly influence social capital, religious groups in Panguma and Kayima are a microcosm of the wider societal power structure, and thus religion further illuminates the unequal access to, and influence of, social capital that exists in both communities.
As discussed at the beginning of this section, there is anecdotal evidence to suggest a changing social fabric in both Panguma and Kayima, but as the subsequent discussion has highlighted, the influence of social capital on livelihoods remains evident, and access to it remains unequal. This aligns with Peeters et al. (2009: 6) argument that:

while the social infrastructure in post-conflict Sierra Leone is changing, intergenerational tensions remain. In many rural areas, elders still hold power over land and labour; throughout the country people over 35 appear to have more promising opportunities than young people (Peeters et al., 2009: 6).

It is not just access to land and labour that are restricted as a result of the unequal distribution of social capital, nor are age and power the only discriminants. This is evident in that all manifestations of social capital discussed here are contingent on access to other forms of capital. Generating social capital through financial clubs, for example, requires a level of financial capital to begin with; while membership of the secret societies is dependent upon the provision of food and cash for initiation.
Reciprocal labour groups and farmer-based organisations, too, require a level of human capital that is not universally held. Thus it could be argued that access to social capital in Panguma and Kayima is as much a consequence of, as it is a substitute for, the deficit of the four other livelihood assets, and consequently, the inequality of its distribution has been perpetuated.

5.4 Financial Capital

5.4.1 Income and expenditure

Assessing financial capital proved difficult as very few households in Panguma or Kayima keep financial records. Only 10 of the households surveyed in Panguma were able to estimate their income from the previous year, and seven of them were only able to do so as they claimed to have received none. Income figures were more forthcoming in Kayima, with 35 respondents offering an estimate of their income from the previous year, and only three of them stating that they had received no income. For most, however, any such income was low, received sporadically throughout the year, and disposed of almost immediately, a point succinctly summed up by a survey respondent in Kayima, who stated:

We make some sales, but they are not in bulk. If someone wants to buy a pineapple, we sell them a pineapple, but we never sell fifty pineapples at once, so it is hard to say how much we earn from selling pineapples. Any money that we do get, we spend straight away. See, if you buy a pineapple off me now, I will send this pikin here [points to child] off to the market to buy some fish for chop [food] (Kayima Respondent 23, 23 April 2014).

For the record, the average household income for the previous year was 120,000Le (US$27) in Panguma, and 579,714Le (US$133.42) in Kayima. While the disparity appears significant, little weight can be given to the comparison between Panguma and Kayima in this instance, given that the Panguma figure is based on such a small sample size, from which the majority of respondents stated that they received no income in the previous year.

A more accurate read on household-level income can perhaps be gained by analysing responses as binary, rather than continuous, in order to first ascertain whether an income has been generated or not, before analysing the expenditure of any income, and comparing it to income expenditure in the 1970s, in order to evaluate change in income value in terms of actual spending power. To this end, 43 of the 50 households surveyed in Panguma, and 47 of the 50 surveyed in Kayima, indicated
that they had received some income from their agricultural activity in the previous year. In comparison, Binns (1981) found that 37 out of the 50 households he surveyed in Panguma, and 40 of the 50 he surveyed in Kayima, received some income from their agricultural activity in 1974. This suggests a slight increase in the number of households now generating an income from their agricultural activity in both communities, but again, this in itself, sheds little light in terms of actual change in income levels.

In terms of expenditure, respondents to both the 1974 and 2014 surveys were asked to list items upon which their household had spent income during the previous year. Figure 5.3 and 5.4 provide graphical representation of their responses, and highlight that some differences in expenditure do exist across both time and place. School fees, for example, have usurped clothing as the most common item of expenditure, while the decreasing influence of social capital discussed earlier in this chapter has manifested in a significant reduction in the number of households spending income on ceremonies such as burials and society initiations. Similarly, expenditure on building or repairing housing was evident in Kayima, but non-existent within the Panguma 2014 cohort. Overall, however, household expenditure is still largely focused on school fees, clothing, food and farming, with very few in either survey mentioning discretionary items, which would suggest that the spending power of agricultural income remains similar to that of 1974. Further, the 2014 survey placed no restriction on the number of responses given per household in relation to items they had spent income on in the previous year, yet yielded only 240 in total (140 in Panguma and 100 in Kayima), whereas the 1974 survey asked for up to five responses per household, and yielded a total of 307 (163 in Panguma and 145 in Kayima). This indicates that households, on average, are currently spending income on fewer items than they were in 1974, and thus it could be argued that the spending power of agricultural income is now actually marginally lower than it was in 1974. It does not, however, account for the amount of income spent in each category, meaning that the reduced number of items income is being spent on, may be compensated for by greater spending within one or more of the categories. For example, a household may now only be spending income in three categories instead of five, but spending more money across those three than they were over the five in the past.
Further analysis of household expenditure highlighted a discrepancy between the expenditure of agricultural income and overall expenditure, with most household’s total expenditure exceeding its income generated through agricultural activity. In some instances, this shortfall is balanced by income generated from non-agricultural livelihoods such as teaching, business and diamond mining (to be discussed in greater detail in Chapter 6), and remittances (discussed in greater detail below), but it is predominantly met by the transfer of other forms of capital. Providing
labour (human capital) in exchange for food was the most common form of such transfer, but other examples of capital transfer, such as drawing on social capital to access farming materials, were also evident. This reinforces Serrat’s (2008) argument that the limited availability of financial capital among the rural poor, magnifies the importance of other livelihood assets.

5.4.2 Credit facilities

Another measure of financial capital is the availability and accessibility of credit. The installation of the Community Bank (CB) in Kayima (see Figure 5.5), and the Financial Services Association (FSA) in Panguma, has improved the availability of credit for agricultural purposes in both communities, but not necessarily access to it. As Table 5.4 highlights, very few households surveyed in either Panguma or Kayima even hold an account with these banking institutions, while only two of the households surveyed in Panguma, and five in Kayima, had taken out loans in the preceding three years (the FSA in Panguma opened in 2011, the CB in Kayima opened in 2010). These figures are at odds with information supplied by Key Informants within each financial institution, with both saying that farmers made up approximately 40% of their respective clienteles, and the remaining 60% being involved in business. Both conceded, however, that many of their agricultural clients have never been active, and therefore may not identify as holding a bank account despite having registered for one.
Table 5.4: Proportion of households with bank accounts

<table>
<thead>
<tr>
<th></th>
<th>With Bank Account</th>
<th>Without Bank Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panguma</td>
<td>6 (2 loans taken out)</td>
<td>44</td>
</tr>
<tr>
<td>Kayima</td>
<td>11 (5 loans taken out)</td>
<td>39</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research)

The most common reason given by agricultural households for not engaging with the banking institutions in Panguma and Kayima was, as mentioned above, that any money coming in was spent almost immediately, therefore limiting their opportunity to save. The FSA in Panguma, and CB in Kayima, operate standard credit procedures in which customers must have some financial capital before they are extended any credit, which given the discussion above, excludes most agricultural households in Panguma and Kayima from accessing it. Another common reason given for this lack of engagement was that prohibitive interest rates, and rigid repayment schedules, are not suited to agricultural activity, a point which Key Informant 35 from Kayima explains, stating:
The bank was set up to help farmers, but most have not involved themselves in it. The problem is, you borrow money, and spend it on your farming, but it is not until you harvest later in the year that you are able to sell some crops and get some of that money back. But the bank wants to be refunded each and every month, with high interest. It is too hard for farmers (KI35, Kayima, 7 April 2014).

Again, Key Informants representing both banks countered this argument, stating that their respective institutions do offer agricultural loans, which have no repayment requirements until after crops have been harvested. These loans, however, incur 25% interest on the balance of the loan, and therefore end up costing more than a standard commercial loan would over the same term. Further, Key Informant 42, a local politician from Kayima, questioned the reality of such loans, stating that:

[the bank] says there are agricultural loans, but they are only on paper. No-one here knows anything about them, the bank is interested in business, not agriculture (KI42, Kayima, 9 April 2014).

The accessibility of credit, or lack thereof, is fraught with complexity, however, as it is as much rooted in the deep-seated risk aversion strategies of the rural poor, as it is in any shortcomings in the implementation and administration of these rural banking institutions in Sierra Leone. Neither Panguma nor Kayima have had formal banking facilities within their communities before, with many respondents suggesting that they had limited knowledge of banking services as a result. Panguma Respondent 35, for example, stated:

I don’t use the bank yet, but I am thinking about it. It is still new here, and I don’t know much about it, so I am waiting to see how it works before committing (Panguma Respondent 35, 14 March 2014).

That being said, numerous participants, across multiple methods of data collection, indicated the existence of ‘financial clubs’ which, while much smaller and more informal than banks, generally operate along similar lines in offering both savings and micro-credit facilities. Moreover, seed banks, which operate a non-monetary form of micro-credit in which agricultural households can borrow seeds at the time of planting, and return the same quantity, plus interest, after the crops have been harvested, have been operating in both communities for decades. The prevailing attitude toward the banks, therefore, is not solely based on uncertainty borne of a lack of exposure to banking systems, but also an element of suspicion as to their intent, as a survey respondent in Kayima highlights:

farmers don’t want to involve themselves in the bank, it can only lead to trouble. They [the bank] only make trouble for the farmers, that is why the
manager spends three days each and every week living in Koidu, attending the courts to bring trouble for those who cannot pay’ (Kayima Respondent 44, 25 May 2014).

On the other hand, the financial institutions, themselves, are frustrated that those engaged in agricultural livelihood activities in Panguma and Kayima, are not willing to engage with them, as highlighted by Key Informant 65, who stated:

They [farmers in Kayima] are not serious. Just look at the ABC, it was established here for them to be able to do agricultural business. But it has never become feasible, because the farmers here are not serious about extending themselves unless someone else takes the risk (KI65, Kayima, 2 June 2014).

Thus a combination of miscommunication and mistrust appears to be the main barrier to improving the accessibility of credit, and therefore the accessibility of financial capital, in Panguma and Kayima. Ways in which this impasse could be addressed will be discussed in a later chapter.

5.4.3 Remittances

While the introduction of banking institutions may not have appreciably improved access to credit, their presence, in conjunction with the recent proliferation of mobile communication technology, has significantly aided the flow of remittances, in both Panguma and Kayima (see Box 5.1). Twenty of the 50 households surveyed in Panguma, and 18 of the 50 in Kayima, felt that remittances had increased since the inception of banking facilities within each community. In contrast, only three in Panguma, and two in Kayima, felt that remittances had decreased in that time, but in each of those cases, the decrease was due to a change in circumstances for the benefactor (death or loss of job, for example). The remaining households (27 in Panguma and 30 in Kayima) stated that there had been no change in remittances. Comparing these figures to Binns’ (1981) data from the 1970s is not possible, as no questions were asked regarding remittances in his survey. While this makes it difficult to offer any definitive conclusion regarding change since the 1970s, the fact that an improved capacity for money transfer appears to have been the catalyst for recent increases to remittance flow, makes it unlikely that remittances would have been more frequent when such capacity did not exist.
“Early one afternoon I was tending to my farm when my brother-in-law from America called me on the phone. He told me to write down a code, but I did not have a pen or paper, and it was too far for me to go home. So, I got a stick and scratched the code into the dirt, and once my brother-in-law had hung up, I used my phone to take a photo of the code in the dirt. Later in the afternoon, when I was finished with the farm work, I went back to the town [Kayima], showed the people at the bank, and they gave me the money that my brother-in-law had deposited with Western Union in America earlier that day” (KI35, Kayima, 7 June 2014).

Transfers such as this would have been unthinkable in 2010, but were very much a reality for Kayima just four years later. Back then, mobile phones were reasonably common amongst the population, but there was no network coverage within a one hour radius of the town, and the nearest money transfer facility was in Koidu, at least a four hour round trip by okada (motorcycle taxi), costing a minimum of 50’000Le. Consequently, remittances were generally only transacted face to face, while remittances from overseas required a third party living in one of the cities to facilitate the exchange. The inconvenience and cost associated with such transfers, according to participants within this research, meant that remittances were infrequent, and vulnerable to misappropriation.

The introduction of the Sandor Community Bank, with links to Western Union (for international transfers) and First International Bank (for domestic transfers), in August 2010, meant that remittances could be sent to Kayima electronically, but the process was still cumbersome, as without network coverage, vital information relating to the transfer remained difficult to communicate. As a result, most remittances remained manually distributed. Airtel’s construction of a cell phone mast in Kayima, which became operational in July 2011, was the final piece to the puzzle, enabling information to be communicated far more effectively, and with it, the capacity for funds to be transferred almost instantaneously. While the process is still not normalised within the community, the frequency and value of remittances have increased as a result.

The introduction of Airtel money across Sierra Leone has further enhanced the accessibility of money transfers in Kayima, which again has been facilitated by enhanced communication capacity. Airtel customers can go to any Airtel Money seller, ubiquitous throughout Sierra Leone, buy Airtel Money, and send it to Airtel customers anywhere in the country as a voucher via a text message. The receiver then takes their phone to an Airtel Money Agent, and receives the money.

The situation in Panguma, while similar, is not as advanced, which is somewhat surprising given its relative size and accessibility compared with Kayima. The main reason for this discrepancy is that the Community Bank for the Lower Bambara Chiefdom is situated in nearby Tongo, while Panguma, despite being the Chiefdom Headquarters, is serviced by a Financial Services Association. Financial Services Associations are subsidiaries of the Community Banks, but have reduced capacity, and thus do not have access to Western Union. Consequently, only First International Bank and Airtel Money transfers can be processed in Panguma itself, which limits remittances to those sent from within Sierra Leone. International transfers can be processed in Tongo or Kenema.
5.4.4 Liquid assets

Another expression of financial capital is liquid assets, which for agricultural households in rural Sierra Leone, predominantly equates to livestock (chickens/goats/sheep/cattle). While other measures of financial capital have been comparable between Panguma and Kayima, there was a distinct difference between the two communities in livestock ownership. Some 36 of the 50 households surveyed in Panguma, yet only 17 of the households surveyed in Kayima, owned livestock. A further 14 households in Kayima, however, stated that a disease had killed their sheep and/or goats during the recent dry season, which largely accounts for this discrepancy. In comparison, livestock ownership was lower in both communities in 1974, with 26 farmers in Panguma, and only 16 in Kayima, owning livestock. As with income, this does not necessarily mean that there is now more livestock in Panguma and Kayima than there was in 1974, but the fact that more agricultural households now own livestock, indicates that access to financial capital through liquid assets has improved.

Interestingly, livestock discussed by respondents in 1974 referred almost exclusively to chickens, with very few mentioning sheep or goats. The results from Panguma in 2014 largely mirror this, with livestock predominantly referring to chickens. In Kayima, however, the distribution of livestock is now more evenly spread between chickens, sheep, and goats and, when taking into account the responses of those who lost sheep and/or goats to the recent outbreak of disease mentioned above, actually swings heavily in favour of sheep and goats. The reason for this move toward sheep and goats in Kayima is unclear, though it could be assumed that it relates to a combination of access and profit. Whatever the reason, it reaffirms just how vulnerable livelihoods in these communities are to shocks, in that an unidentified disease decimated livestock reserves for nearly half the respondents that had any.

5.5 Physical Capital

5.5.1 Communication infrastructure

The main advance in terms of physical capital over the past forty years has been the enhanced capacity for communication. According to Binns (1980) there were no telecommunication facilities, nor any form of postal service, in either Panguma or Kayima in the 1970s, and thus communication was limited to face to face interaction.
Anecdotal evidence from all methods of enquiry within this research indicates that little had changed when civil war erupted in 1991, nor by the time it had culminated in the early 2000s. Post-conflict, however, there has been a proliferation of mobile phone ownership in Sierra Leone which, with the construction of phone towers in Panguma (2006) and Kayima (2011), has infinitely improved the capacity for communication in both communities (see Figure 5.6 for example). In the context of this research, this has manifested in 37 of the 50 households surveyed in Panguma, and 33 of the 50 households surveyed in Kayima, having access to at least one mobile phone. Moreover, their use throughout each community was ubiquitous during the fieldwork process.

![Figure 5.6: Phone tower in Kayima (Author's Field Research)](image)

In a general sense, this improved capacity for communication has enabled people to connect more regularly with networks, particularly family and friends, who live away from Panguma and Kayima. It has also significantly aided the flow of information, both to and from each community, something which will continue to improve as awareness of, and accessibility to, mobile internet technology, such as smartphones and mobile modems, continues to increase. In terms of livelihoods, the
The proliferation of mobile phones has had an equally important impact. While one or two households surveyed staunchly refuted that mobile phones had added any value to their livelihood activities, the vast majority felt that they had. The most common reason given for holding this viewpoint was that it enabled communication between the farm and the town which, as the following responses highlight, can save time and energy, reduce opportunity cost, and provide security in case of illness or injury:

If I need something [like seed, tools or food] from the town when I am in the bush, I can call my wife or pikin [children] and they will carry it for me. Before I would have to come all the way [4 miles] back to the town, get what I need, and go all the way back again, sometimes I wouldn’t even go back. Now I don’t need to stop, I can continue the farm work until the pikin arrives (Kayima Respondent 17, 22 April 2014).

If I am out of station, in the bush, I can call for help if something happens to me, or if I need something. See this [removes bandage from foot to reveal wound], I was bitten by a snake in my family bush last week. I used my phone to call for help, and some men from the town came and carried me back (Panguma Respondent 49, 15 May 2014).

The ability to deal directly with traders from larger centres, rather than local middle men, improving profit margins for cash crops; and the ability to mobilise labour, particularly among those involved in reciprocal labour groups; were also recognised by survey respondents as ways in which mobile phones had positively impacted upon their livelihoods. In addition to agricultural livelihoods, the proliferation of mobile phones in both Panguma and Kayima has created opportunities for supplementary livelihood activities (discussed in greater depth in Chapter 6), such as charging centres and the sale of air time; and, as described in Box 5.1, this has aided the flow of remittances, and thus improved access to financial capital in both communities. The impact of mobile phones on financial capital, however, was also framed negatively by some, with the initial cost of purchase, as well as the cost of airtime and charging, considered to balance out any benefit gained.

5.5.2 Mechanisation

The presence of farm machinery is another area of physical capital where some advancement, in a superficial sense at least, has been made in the past forty years. From his 1974 survey, Binns (1981: 235) noted that machinery was “not readily available to most farmers”. While ostensibly still true, there is now some evidence of mechanisation in Kayima, and to a lesser extent Panguma. This has largely been facilitated by agricultural development initiatives, of which the ABCs are the most
recent manifestation, that have aimed to increase the efficiency of food production. Machinery provided as part of these initiatives include power tillers complete with trailers for hauling rice, motorised rice cutters, and rice mills and rice threshers for post-harvest processing, which are generally available to groups (such as the FBOs at the ABCs that were discussed in the previous section) registered for the initiative. In reality, however, access to machinery was non-existent for most agricultural households, a point emphatically emphasised by Panguma Respondent 04, who stated:

look at these hands (holds out hands), these are my machines! I have no chance to use machines, only human power (Panguma Respondent 04, 18 February 2014).

Indeed, only one household across both communities acknowledged access to any form of machinery.

The main reasons that machinery remains inaccessible, despite evidence of its presence within Panguma and Kayima, became clear during focus group discussions with the executive committees of both the Kayima and Dodo (closest ABC to Panguma) ABCs. Poor governance at both the local and national level has meant that some of the resources promised have never been delivered, while in cases where machinery has materialised, little or no training has been provided as to its correct use. This has led to some machinery being misused, and some not being used at all. It was not uncommon, for example, to see a rice hauler emerge from the bush overloaded with firewood; while a participant in FG13 (21 April 2014) stated:

there has been a rice thresher here since the start [in 2010], but without training, we have not been able to use it.

In addition, neither community has the technical expertise (human capital) to maintain or repair the machinery, a point illustrated by a participant in FG08 (11 March 2014), who stated

our power tiller and trailer are not in use for now because they need maintenance that is not available here.

Thus, the most overt representation of mechanisation in both Panguma and Kayima is the litany of redundant machinery in various states of decay (see Figure 5.7 for example).
5.5.3 Crop storage facilities

Crop storage facilities have also undergone some change. Binns (1980) found that 84% of households in Kayima, but only 52% of households in Panguma, stored their crops in a barn on the farm in 1974 (see Figure 5.8), stating that:

farmers in Panguma complained about the problem of theft when rice was stored on the farm, whilst this did not seem to be a major problem in Kayima (Binns, 1980: 301).

He went on to state that his 1978 re-survey revealed an increase in both Panguma and Kayima of storing crops in or in close proximity to the house, because of increasing theft from barns on the farm. This trend appears to have continued, with 47 of the 50 households surveyed in Panguma, and 36 of those in Kayima, stating that they store the majority of their crops in or around their houses. The main reason given for this shift, as in the 1970s, was the threat of theft, but the threat of pests was also a significant contributing factor. The storage of crops in the town is not unproblematic, however, as most do not have dedicated storage facilities, instead storing crops in bags in their bedrooms. Panguma Respondent 28 offered a cost-benefit analysis of the storage situation that was representative of the general response, stating:

We used to build a barn on the farm to store our crops, but it was risky. There were problems with thieves and pests. Rats could easily get in and eat our crops. So now we put them in bags and store them in the room I sleep in. That has problems too though. It is hard work to transport the crops from the farm.
to the house all at once. It attracts pests to the house as well, and when family and neighbours come in, they see it and expect me to give them some. But we are losing less than we were when we were storing it in a barn on the farm (Panguma Respondent 28, 11 March 2014).

![Figure 5.8: Example of a barn used for crop storage near Kayima (Source: Author’s Field Research)](image)

5.5.4 Tools and implements

Other embodiments of physical capital have remained relatively unchanged, and in some cases have even regressed, in Panguma and Kayima since the 1970s. Given that machinery still remains inaccessible to most, agricultural livelihoods in Panguma and Kayima, and indeed throughout Sierra Leone, still predominantly rely on hand tools. Both the 1974 and the 2014 surveys discovered little variation in the suite of tools available to agricultural households. Moreover, as Figure 5.9 highlights, little has changed in terms of design and quality. In one sense, it could be argued that this reinforces the value of indigenous knowledge discussed earlier in this chapter, in that tools have been adapted and perfected, for a specific use, in a specific environment, over a long period of time. But, in reality, the lack of change represents pragmatism rather than optimisation. This contestation between efficiency and sufficiency is evident in the comments of Key Informant 49, a blacksmith in Kayima, who stated:
we lack the equipment and materials to make better tools, or more complicated tools…we are constrained by this deficiency (KI49, 19 April 2014).

Figure 5.9: Comparison of tools from 1974 (left) and 2014 (right) (Source: Binns (1980) and Author’s Field Research).

5.5.5 Water supply

Water supply also remains much the same in Panguma and Kayima as it did in the 1970s. Binns (1981) noted that both Panguma and Kayima had piped water supply at the time of his original study in 1974, but that water was untreated, and temporary shortages were experienced during the dry season. Guided Field Walk 06 (1 March 2014), which involved following the pipeline from Panguma to the reservoir in the hills to the north of the town, revealed that the original pipeline had been replaced since the end of the war, but the juxtaposition provided by remnants of the old pipeline indicated that the capacity for water supply remains much the same. Further, there had been little improvement in the capacity of the reservoir itself, and the water remains untreated (see Figure 5.10). Similarly, Key Informant 36, stated that excavation, cleaning and repair of Kayima’s water supply had been undertaken by members of the community in February 2014. In both instances, however, work done amounted to maintenance, repair or replacement, rather than any significant improvement to the volume or quality of the water supplied, thus the water supplied to both Panguma and Kayima remains untreated and prone to shortage.
There has also been little improvement in terms of household access to the water supply discussed above. Very few households in either community have taps within their compounds, while plumbed houses are almost non-existent. The scarcity of access points within the community was further evident in the community mapping exercise (see Figure 5.11 for example), in which participants identified, among other things, water sources that they had access to. Maps produced in Panguma identified, on average, four points of access, while for maps in Kayima, the average was only three. This has implications for numerous household activities, including cooking and laundering, and the time and energy spent sourcing water for such activities often creates an opportunity cost in terms of livelihood activities, particularly for women. Further, access to water on farms was even scarcer, meaning any water required needed to either be carried from the town, or collected from the nearest river or stream, further impacting on livelihood activities.
5.5.6 Vehicle ownership

Vehicle ownership is another area where little appears to have changed since the 1970s. Motor Vehicles are extremely rare in both Panguma and Kayima, as highlighted by Key Informant 02 in Panguma, who stated that:

> there are not many cars here. I have one, and the hospital has one, that is all. The Paramount Chief also has one, but for now he is not staying here, so there are only two (KI02, Panguma, 15 February 2014).

In terms of agricultural households, private ownership of any form of transport is almost unheard of, with 49 of the 50 surveyed in Panguma, and 46 of the 50 surveyed in Kayima, claiming no vehicular ownership. The one exception to this in Panguma, and three of the four exceptions in Kayima, owned a motorbike, while the remaining household in Kayima owned a bicycle. The situation was much the same in 1974, when not one of the 50 farmers surveyed in Kayima, and only two in Panguma, owned a vehicle, while in 1978 Binns (1981: 334) stated that his “re-survey revealed little change in the transport ownership situation”.

5.5.7 Transport infrastructure

While vehicle ownership has remained relatively stagnant, transport infrastructure in and around both Panguma and Kayima has degenerated significantly. Binns (1980) stated that the road northwards of Panguma was improved by Panguma Sawmills to increase access to the forest reserves; the road between Panguma and Tongo Field
was improved by the Sierra Leone Selection Trust (SLST) in preparation for diamond mining; and the road southwards from Panguma to Kenema had been widened, graded and surfaced by the Ministry of Works in conjunction with a proposed Chinese-constructed hydroelectric scheme to the west of Panguma. While Kayima was not as well served, Binns (1980) noted that there were 132 miles of road in Sandor Chiefdom, connecting Kayima with key transport and marketing nodes such as Yomandu and Tefeya, both of which had access to Koidu via ferries across the Bafi River. In addition, these roads were maintained by 40 labourers, and financed by the Native Administration.

In contrast, these roads are now predominantly ungraded, and generally consist of a combination of exposed rock, dirt, and loose gravel, and there was no evidence of maintenance or spending over the duration of this fieldwork. While both the Kenema-Panguma, and Koidu-Kayima, roads can be navigated by four wheeled vehicles in the dry season (see Figure 5.12), passage can be unreliable during the rainy season, thus motorbikes have become the most practical form of transportation. The one notable improvement is that there is now a bridge over the Bafi River. A number of factors have contributed to the deterioration of these road networks, but the significant loss of industry in the Lower Bambara Chiefdom, including the closure of the Panguma Sawmill, and the closure of the National Diamond Mining Corporation in Tongo, has been complicit in the case of Panguma; while 10 years of damage and neglect during the civil war, and limited access to resources since, has had a telling impact in both instances. In terms of livelihoods, the condition of the feeder road network severely limits long- and medium-distance transport options, restricting mobility, which in turn has restricted access to key markets, therefore limiting the opportunity to optimise income. This is exemplified by the fact that farmers in the 1970s often sold surplus crops at markets in other towns and villages (Binns, 1980), whereas in 2014, any surpluses were predominantly sold within the local market.
5.5.8 Housing and electricity supply

Other manifestations of physical capital to have regressed since 1974 include housing and electricity supply, both of which are a direct consequence of the war. Binns (1980) reported that traditional mud and thatch huts had almost entirely been replaced by more modern housing made with cement, and roofed with corrugated iron, in both Panguma and Kayima by the time of his fieldwork in 1974. During the war however, the RUF targeted signs of wealth, and consequently destroyed many of these houses. Many remain as empty shells (see figures 5.13, 5.14, 5.15 and 5.16), primarily due to a lack of resources available to rebuild in the aftermath of the war, but also in some instances because their owners have chosen not to return to the towns. Instead, many households have reverted to more traditional styles of housing (see Figure 5.15), using mud bricks and corrugated iron. This change, and the processes leading to it, are exemplified by the following comments, which were made during a guided field walk in Panguma, and by a community leader in Kayima, respectively:

You can see the impact the war had here. All these buildings were destroyed. People don’t have the money to repair them, so they still sit here as a reminder…You will notice that it is many of the bigger, nicer homes that were
destroyed. This was a deliberate ploy by the rebels. They attacked anything that resembled wealth, took anything that was of value to them to fund resources such as guns and fuel, and then destroyed the buildings...The families who own those houses I showed you before have moved out here [south-east periphery of Panguma], because the cost of repairing concrete houses is too high. Cement is very expensive, so people are again building with mud, like these ones here [points out a cluster of houses under construction]. They can level the section using spades, and then use the dirt to make mud bricks, it is much cheaper. If they have some money, they plaster the walls with cement to strengthen it, but many can’t afford even that (Participant 1, GFW03, Panguma, 23 February 2014).

Before the war Kayima was known as Kono London. It was a very beautiful town. All the roads were straight, and all the houses were in a line, and they were all well-built. But there was no planning when people rebuilt [after the war], they just put structures up on their land where they could, often around the foundations of their destroyed homes. And most people built mud brick houses, not concrete, because the cement is too expensive (KI62, Kayima, 30 May 2014).

One subtle difference between Panguma and Kayima evident within these comments, is that the majority of post-war building in Kayima has been on or near existing foundations, whereas Panguma households have tended to build on new plots of land. Consequently, housing in Kayima remains largely contained within the same geographical area as 1974, whereas there has been significant growth around the periphery of Panguma (see figure 5.13 and 5.14, and compare to figures 4.2 and 4.3). This difference also reflects the fact that the population of Panguma has increased during this period, while the population of Kayima has remained relatively similar.
Figure 5.13: The scale of physical damage from the war still evident in Panguma in 2014 (Source: Author’s Field Research).

Figure 5.14: The scale of physical damage from the war still evident in Kayima in 2014 (Source: Author’s Field Research)
Figure 5.15: Example of houses damaged during the war in Kayima, and new houses being built to replace them (Source: Author’s Field Research).

In terms of electricity, neither Panguma nor Kayima had a permanent supply during Binns’ (1980) fieldwork in the 1970s and, while this has remained the case in Kayima, a hydro-electric dam built in Guala during the 1980s, did supply Panguma with electricity for a number of years. Unfortunately, as the following comment illustrates, critical infrastructure, including the Panguma sub-station, and power lines (see Figure 5.16), were badly damaged during the war, and deteriorated further after the war as desperate local people utilised any resources they could get their hands on:

There was electricity here before, but the transformer was destroyed by the rebels during the war, and all the powerlines were cut. Then after the war, all the farmers stole the wires to make traps and fences. Materials were hard to come by, so they used whatever they could. Even my own father stole some wires to make traps. We hope to get electricity again, but so far there has been no chance (Participant 1, GFW15, Panguma, 13 May 2014).

At the time of this fieldwork in 2014, Panguma’s power supply had still not been rehabilitated, despite the hydro-electric dam being in operation. While plans to utilise solar energy to supply electricity to the town were under discussion, this had not yet come to fruition at the time of writing either.

There were some examples of solar energy being used in Panguma, most notably at the hospital, but its use was not widespread, and was certainly not evident at the household level, while there was no evidence of its use at all in Kayima. The only access to electricity at a household level in both communities is provided by generators, but most households do not have access to a generator, and many houses are not equipped for electricity anyway. Even those that do own a generator, rarely
use them as they do not have the capacity to maintain them, and cannot afford the fuel to run them. Consequently, the majority of households in Panguma and Kayima rely on battery powered torches or lamps for light, and wood-fuelled fire for heat, as their only sources of energy.

![Damage to electrical infrastructure and housing in Panguma](image)

**Figure 5.16: Damage to electrical infrastructure and housing in Panguma**  
(Source: Author’s Field Research)

### 5.6 Natural Capital

Natural capital refers to the natural resource base from which resource flows and services useful for livelihoods are derived. There is a wide variation in the resources that make up natural capital, from intangible public goods such as the atmosphere and biodiversity, to divisible assets used directly for production, such as trees and land (Cochrane, 2007). Given the broad nature of natural capital, it is difficult to assess at the micro-scale, but in the context of this research, it is best understood as the natural resources which directly relate to prevailing agricultural practices in Panguma and Kayima, most notably land, water, seed and permanent cash crops. As such, an understanding of access to land and the quality of it, as discussed in the section on social capital, access to seed and permanent cash crops, as well as the
changing climate patterns discussed in Chapter 4, provide useful indicators. Ultimately, though, levels of natural capital remain similar in Panguma and Kayima between 1974 and 2014, and the key constraint remains the dramatic seasonal fluctuations in access to productive natural capital.

5.6.1 Access to land

Access to land has already been discussed in terms of social capital, in which it was argued that hierarchical power structures do still have an influence over land allocation in both Panguma and Kayima, and thus not all households have equal access to land in terms of size, quality, and distance from town. However, as alluded to in the discussion of human capital, access to labour, and not land, was considered to be the main factor constraining farm size among agricultural households surveyed in both communities. While there has been a small increase in the number of households who stated that access to land was the primary constraint to farm size (see Table 5.2), overall access to land appears to have remained relatively similar between 1974 and 2014. This is further illustrated by Maconachie (2008), who stated that:

In terms of production, land availability in Sierra Leone is often described as being one of the least constraining factors. The role that land tenure systems assume in constraining agricultural productivity is frequently played down by critics: it is believed by many commentators that ‘customary’ or indigenous systems have generally accommodated the needs of farmers seeking access to land. (Maconachie, 2008: 243).

Some households in Panguma, however, did express concern about growing pressure on land as the population of the town increases, as the following comment exemplifies:

Panguma is growing. God-willing we will be a city someday, and have the opportunities that are available in places like Kenema and Freetown, but for now agriculture is still our focus, and with more people, there is more pressure on the land. Now you cannot let land be idle, because somebody will see that the land is not being used, and use it for their own farming (Panguma Respondent 41, 16 March 2014).

Reports of encroachment onto another household’s land, were not widespread in Panguma, and were non-existent in Kayima, where the population has remained relatively stagnant, but its position in the consciousness of some agricultural households does serve to highlight the broader implications of population growth on the sustainability of natural capital. These include the potential to reduce fallow periods, which can impact on soil and vegetation regeneration, and ultimately degrade the productivity of the land. To this end, a slight decrease in the length of the
fallow period was detected in Panguma and Kayima between 1974 and 2014, with Binns (1980) stating that a minimum fallow period of 8-9 years was regarded as necessary for reasonable crop yields, whereas the 2014 survey found that fallow periods were generally now only 5-7 years. Further, it is more common for households to re-purpose land used for the previous year’s rice harvest, most notably to grow groundnuts or cassava, than it was in the 1970s. While Binns (1980) indicated that this practice did exist in 1974, it was by no means widespread, whereas in 2014 almost all households surveyed were doing it.

5.6.2 Access to seed and permanent cash crops
Access to seed, and ownership of permanent cash crops, is another useful indicator of natural capital, though the latter is heavily contingent on access to land. Little change was detected in access to seed between 1974 and 2014, with reserved seed from the previous year’s harvest still being the most common source, which means a poor harvest, or post-harvest crop losses, can be compounded, as households are then forced to buy or borrow seed. Seed banks, which operate a non-monetary form of micro-credit where households borrow seed at the beginning of the farming cycle, and return it with interest after harvest, were operating in Panguma and Kayima in both 1974 and 2014, but have not been particularly effective due to poor governance. Consequently, households who were unable to reserve seed from the previous harvest, and have insufficient financial capital to purchase seed, tend to borrow seed from other farmers who have a surplus. In terms of cash crops, there has been an increase in cash crops, with almost all households surveyed in both communities producing cash crops to some extent. Households not involved in cash crop production, tended to be those without land rights, and so lacked the security of tenure necessary to facilitate such a long-term investment. Cash crops will be discussed in greater depth in Chapter 6 as livelihood diversification is unpacked, but are worth mentioning here, as they provide a rare example of increasing natural capital.

5.6.3 Climate change
As discussed at the end of Chapter 4, anecdotal evidence in both Panguma and Kayima, supported by broader patterns across West Africa, indicate that there is now greater variability in the climate, which also has the potential to impact on natural capital. There was little empirical evidence to indicate that this has had an impact on overall access to natural capital in either Panguma or Kayima between 1974 and
2014, but rather this causes uncertainty for an agricultural system so heavily aligned to climate patterns which, in essence, is the crux of natural capital in Sierra Leone. In a general sense there is an abundance of natural capital, but the key constraint to agriculture, and therefore livelihoods, remains the inability to utilise it year round. As will be discussed in Chapter 6, there has been some progress in that there is now a greater emphasis on swamp farming, which is considered more sustainable and has fewer seasonal restrictions. But in many ways, this is reflective of the lack of change in physical capital, in that there is still limited capacity to harness and store rainfall when it is abundant. Similarly, the lack of change in access to seed is as much a consequence of the inadequate storage facilities discussed in the section on physical capital, as it is a lack of natural capital in a more general sense. Thus, finding ways to more productively and sustainably utilise the natural capital that does exist, rather than finding ways to expand the natural resource base, needs to be the priority if access to natural capital is to improve.

5.7 Conclusion
This chapter has explored the assets upon which people’s livelihoods are constructed at the household level in Panguma and Kayima, comparing levels of availability and access in the current context to Binns’ (1980) fieldwork from the 1970s in order to assess continuity and change. The asset pentagon from the SLF has proved useful in organising the various types of capital evident within these communities, though human, social, financial, physical, and natural capitals are each multi-faceted in their own right, and are certainly not mutually exclusive. There has clearly been some change in access to, and the influence of, the different capitals between 1974 and 2014, and there are at times spatial and temporal variations to such change. That said, there are also numerous commonalities and thus some generalisations can be made.

In terms of human capital, growth in household size has increased access to family labour, but access to labour in a general sense remains one of the biggest concerns. Increased access to education in both Panguma and Kayima is tempered with concern that it will lead to a long-term loss of labour, skill and knowledge, both academic and indigenous. Further, access to healthcare has significantly regressed in Panguma and, at best, remained the same in Kayima. While social capital was commonly perceived to be diminishing since the war, it still clearly has a significant impact on access to other livelihood assets including land, labour, equipment and
knowledge, while there is also evidence of social capital playing a role in both formal and informal development processes. That said, this chapter argues that social capital perhaps needs to be reframed as also being contingent on, and not simply a substitute for, these other forms of capital. Access to financial capital appears similar with income levels much the same in terms of spending power, and although there is now the facility to access credit in both Panguma and Kayima, this has not yet translated into an increase in financial capital at the household level. In terms of physical capital, mobile phone technology has significantly improved the capacity for communication, but is countered by an equally dramatic deterioration of transport networks, limiting physical mobility, with parallel declines in housing, storage facilities, and in the case of Panguma, electricity supply, while access to clean water and sanitation, farm machinery, and tools and equipment, remain remarkably similar. Natural capital, too, remains similar, with the main constraint still being an inability to access the natural resources year round. There was, however, some concern over growing pressure on land in Panguma due to population growth and changing climate patterns.

Figure 5.17: Visual representation of changes to livelihood assets in Panguma and Kayima between 1974 and 2014 (Source: Author’s Field Research)

Figure 5.17 is an attempt, albeit a subjective one, to visually represent change to the structure of livelihood assets in Panguma and Kayima as summarised in the above paragraph. The outer perimeter represents maximum access to assets, while
the centre point of the pentagon represents zero access, with the coloured pentagons highlighting the variation in household access to assets in Panguma and Kayima across time. There has clearly been some change in access to, and the influence of, the different capitals between 1974 and 2014. This is represented by the changing shape of the pentagons in Figure 5.17, but they remain similar in size, which indicates that there has been little change to the overall asset base. This would suggest a fluidity to the asset pentagon, in that access to individual assets can improve or regress, but such a shift is generally compensated for conversely in one or more of the other capitals. The following chapter will discuss the strategies that have been adopted by households in Panguma and Kayima, given the livelihood assets available to them, in order to assess the extent to which livelihood outcomes have improved as a result. Ultimately, it will argue that there has been limited improvement in livelihood outcomes over the 40 year period covered by this research. Thus, finding ways to increase the overall asset base is crucial in the pursuit of improved livelihood outcomes.
Livelihood Strategies and Livelihood Outcomes

6.1 Introduction

As discussed in Chapter 2, resilience is one of the key concepts incorporated within livelihoods approaches to development. Within the Sustainable Livelihoods Framework (SLF), resilience is encapsulated in the term ‘livelihood strategies’, which refers to the range and combination of activities that people undertake, and choices that they make, in order to achieve their livelihood goals. ‘Livelihood outcomes’ are the achievements or outputs of these livelihood strategies (Scoones, 1998). Livelihood strategies are influenced by the transforming structures and processes, and ensuing vulnerabilities, as discussed in Chapter 4, conditioned by access to the livelihood assets discussed in Chapter 5, and ultimately shape livelihood outcomes through change in income, well-being, vulnerability, food security and natural resource conditions (Ruben et al., 2007).

In the context of this research, livelihood strategies can be categorised in three distinct ways. First, strategies that relate directly to the upland rice farm which, as discussed in Chapter 1, is the dominant form of livelihood activity in both Panguma and Kayima. Secondly, strategies which are still agricultural in nature, but additional
to the upland rice farm, such as swamp farming and cash crop production. And thirdly, non-agricultural strategies, such as small business, mining, teaching and remittances, which are used to supplement agricultural livelihoods. This chapter will explore the continuity and change in livelihood strategies within each of these categories in both Panguma and Kayima over the forty year period of this research. It will then examine livelihood outcomes in each community, arguing that while changes in the structure of livelihood assets, and in the transforming structures and processes that influence access to them, have led to some change in the livelihood strategies employed, there has ultimately been little change in the outcomes that these strategies have facilitated.

6.2 Livelihood strategies

6.2.1 The upland rice farm: intensification, extensification and resilience

Broadly speaking, the upland rice farm is the dominant form of agriculture in terms of providing subsistence for households in Panguma and Kayima, and indeed throughout Sierra Leone. All 100 households surveyed across both communities were still predominantly engaged in upland rice farming, which is unsurprising given that the prevalence of agriculture was the main selection criterion for the survey, though not insignificant in that, as will be discussed later in the chapter, other forms of agriculture are practiced in both Panguma and Kayima. Perhaps more indicative of the importance of the upland rice farm as a livelihood strategy, however, is the fact that almost all participants in this research, across all methods of enquiry, were engaged in upland rice farming at some scale, regardless of whether they identified as farmers or not. Participants primarily engaged in non-agricultural livelihood activities, including teachers, local politicians, religious leaders and police officers, consistently indicated that they produced at least some of their household food requirements themselves, a point highlighted by Key Informant 37, who stated:

I am a teacher, but teacher salaries are meagre here, so I am also engaged in agriculture. I grow rice, beans and cassava, so I don’t have to spend what little money I get from teaching on staple foods. This is Sierra Leone, everyone in Sierra Leone is a farmer (KI37, Kayima, 6 April 2014).

The process of upland rice farming has been discussed in a general sense elsewhere in this thesis, and thus will not be revisited here. Specific practices within that process, however, can be considered livelihood strategies in their own right, in
that they have been developed and adapted in order to minimise risk and increase resilience, and/or aid the intensification or extensification of the upland rice farm. For example, inter-cropping rice with a wide variety of other crops such as yams, sweet potatoes, groundnuts, maize, tomatoes, okra and beans, and planting other vegetables, particularly cassava, on the edge of the farm, spreads the risk of failure, meaning that if a particular crop fails, there will be others to fall back on. Reserving seed at harvest in order to avoid expenditure on seed the following year, is also a commonly practiced livelihood strategy.

While intercropping and seed banking are based on generations of indigenous knowledge and an intimate understanding of the environment, and were both widely practiced during the 1970s, other strategies have been introduced, or become more widespread, between 1974 and 2014. As discussed in the previous chapter, farms were left to fallow for 8-9 years in the 1970s, but more and more farmers are now using the previous year’s farmland to cultivate secondary crops such as groundnuts and cassava, reducing the average fallow period to 5-7 years in doing so. The benefits of this are two-fold in that it reduces the amount of labour required to clear land for secondary crops, and also provides a safety-net should the main farm produce less than expected, though it can also reduce the productivity of the land in the long-term. Similarly, there has also been a recent trend among agricultural households with good land availability, to spread their main crops over two or more geographically distinct plots to insure against loss caused by pests, fire, flooding or theft, and there has been a significant shift since the 1970s from storing harvested crops in barns on the farm, to storing them in the house, for the same reasons.

Other strategies, however, have declined since the 1970s due to external factors, most notably the marketing of surplus subsistence crops to generate income. Binns (1980) noted that it was common for farmers to sell surplus crops in the local market, as well as in nearby mining areas during the 1970s. In contrast, only 16 of the 50 households surveyed in Panguma in 2014, and only 13 of the 50 households surveyed in Kayima, reported selling surplus subsistence crops in the previous year, with the sentiments of Kayima Respondent 34, representative of those who had not:

Farm crops are for consumption. I cannot even grow enough to feed my family, so there is no chance to sell any (Kayima Respondent 34, 26 April 2014).
This mirrors the findings of a World Food Programme (WFP) survey conducted in 2010, which found that 65% of rural households in Sierra Leone that cultivate rice do not produce enough to feed their family (WFP, 2011). Of those that had sold some of their subsistence crops, most had done so to other households in search of certain foodstuffs, rather than to a market, and those that did sell to market, tended to do so locally, rather than in nearby mining areas, despite the prospect of gaining a better price elsewhere. Lack of mobility caused by poor roads and limited transport options, was cited as the main reason for this shift, while the collapse of key periodic markets in mining areas, notably the fortnightly Tokpombu market near Tongo, and the weekly Yomalda Market in the Kono District, as a result of the decline in the mining industry was also put forward as a reason. The significance of this change can be drawn from Riddell’s (1974) assessment of periodic markets in Sierra Leone, in which he described them as the most important type of market as they facilitated the supply of surplus foodstuffs from rural areas into urban centres and mining areas.

6.2.2 Agricultural diversification

The livelihood strategies discussed thus far have related to upland rice farming, the predominant form of agriculture in Sierra Leone, but supplementary forms of agriculture, such as permanent cash crops and swamp farming, are practiced as well. Similar to the strategies associated with the upland rice farm discussed in the previous section, these strategies represented an overall intensification and/or extensification of agriculture, and were generally motivated by a desire to spread risk over a range of agricultural activities in order to decrease vulnerability to shocks.

Perhaps the most significant change in agricultural diversification over the 40 year study period has been the increase in swamp farming, particularly in Kayima (see Figure 6.1 for example). In the 1970s, Binns (1980) found swamp farming to be reasonably common in Panguma, but non-existent in Kayima, as the following excerpt describes:

Many Panguma farmers cultivate swamps, in some cases additionally to upland farms. There was however, no evidence of swamp farming in Kayima either in 1974 or 1978, but the newly appointed Agricultural Instructor was keen to introduce it (Binns, 1980: 239).

In contrast, the 2014 survey found that swamp cultivation was being practiced in similar proportions in the two towns. Seven of the 50 households surveyed in Panguma, and 6 of the 50 surveyed in Kayima, stated that they cultivated swamps on
their own land, while 24 in Panguma, and 29 in Kayima, indicated that they were involved in groups that cultivated swamps collectively.

Figure 6.1: Swamp farming near Kayima (Source: Author’s Field Research)

While numerous government policies aimed at wetland utilisation over the last 40 years have met with resounding failure (Maconachie, 2008), more recent attempts to enhance wetland rice production appear to have gained more traction amid concerns for food security in the post-war period, as well as concerns around the sustainability of traditional farming practices amid emerging evidence of climate change. Whereas previous policies have been criticised for being technocratic, ignoring indigenous production systems, and neglecting the wider institutional challenges of development, this recent shift toward swamp cultivation has been facilitated by the promotion of farmer-based organisations (FBOs), and the dissemination of resources and information by agricultural extension officers from within each community. Consequently, respondents engaged in swamp cultivation in both communities articulated a relatively positive position, suggesting that swamp farms require fewer labour inputs to prepare, are more conducive to high-yield rice
varieties, are less reliant on climatic patterns, and do not require a fallow period before re-planting. Further, farmers have adapted indigenous production systems in order to grow additional crops that were traditionally the preserve of the upland farm, in or around the swamp.

The other form of agricultural diversification widely practiced in Panguma and Kayima is the production of cash crops (see Figure 6.2 for example). The production of cash crops is certainly not new to either Panguma or Kayima, indeed Binns (1980) found it widely practiced during his fieldwork in the 1970s, although he indicated that it was more well-established in Panguma than Kayima due to its closer proximity to the former railway, which closed in 1974. There was evidence, however, that cash crops took on greater importance as displaced populations returned to their towns in the immediate aftermath of the civil war. Traditional cash crops such as coffee, cocoa, kola nut, palm oil, banana, orange and mango are perennial crops, and therefore were able to be harvested straight away to some extent, whereas traditional subsistence crops such as rice and cassava generally do not regenerate, and therefore were not immediately available for harvest upon resettlement, and required greater capital input to restart. Although cash crop yields were impacted significantly by the lack of maintenance during the war years, households were able to use the small income derived from their sale to slowly re-build their capital base, and re-establish their livelihood portfolios, with a particular emphasis on their upland rice farms. This strategy was commonly referred to by household members who had lived through the war, and this is exemplified by Kayima Respondent 30, in the following account of his wartime experiences:

I went north during the war, to Koinadugu, then Masingbi, Matotaka and Magburaka. We lived off bush yams and bananas and slept on peoples verandas, if they let us, otherwise we stayed in the bush. I was away for two years, but it was too hard, so I risked it and came back. My house in Kayima had been destroyed, so I camped near my plantation, lived off what was there. Little by little I was able to sell some and get enough money to build this house and start farming again (Kayima Respondent 30, 25 April 2014).

Since the immediate post-war period, the growing of cash crops has steadily increased in both communities, as international aid agencies such as the World Food Programme (WFP) have promoted them as a means of income from which food can be purchased at times of shortage (WFP 2008, 2009). The ability to access cash crop markets has also improved with a number of produce trading posts being set up in each community. This has enabled agricultural households to sell their cash crops to
a local agent, rather than having to transport their crops to traders in Kenema or Koidu, or wait for itinerant traders to come to them, the two most common forms of transaction in the 1970s. The corollary of this, however, is that it adds another step to the supply chain, thus reducing the price received by the producers. The majority of households surveyed preferred to sell to local agents, irrespective of these tighter margins, for reasons of convenience, as well as the social capital built through regular interaction and trade.

In the current context, cash crop production was practiced by almost all households surveyed, and still primarily consists of coffee and cocoa sales in both communities, while kola nut, palm oil, pineapple, oranges, citrus and mango were also still prominent. While there appears to have been limited change in the type of crops grown between the two periods of fieldwork, households commonly described instances when they had adapted their cash crop portfolios based on market conditions. During the 2014 fieldwork, for example, the majority of households in both communities were investing in groundnut production as world groundnut prices
had experienced sharp increases in the previous 18 months (US$152,000 per metric
tonne in August 2014, US$232,000 per metric tonne in February 2014 (IndexMundi,
2015)). Similarly, a number of households indicated that they would prioritise
pineapples over other cash crops in the immediate future because demand in urban
areas was high, as described by Panguma Respondent 42:

For now, pineapples are fetching a high price in Freetown, Bo, and even
Kenema. Just one pineapple can sell for 7000-15000Le [US$1.28-US$2.74]
in Freetown, but only 1000-2000Le here [in Panguma]. That is why I want to
grow pineapples if I am lucky to get some money from my groundnuts
(Panguma Respondent 42, 11 May 2014).

This illustrates an ability among agricultural households to understand local, national,
and even international market information, and adapt livelihood strategies
accordingly. This aligns with Polly Hill’s (1970) conceptualisation of ‘rural
capitalism’, in which she highlighted numerous examples of rural West African
communities acting astutely and innovatively in their pursuit of livelihoods, and
Samuel Popkin’s (1979) assertion that peasants are rational agents who make
calculated decisions based on their interests and choices.

This construction of farmers as innovative and agents of change, however,
was contested by key informants in both communities. Key Informant 64, a former
agricultural extension officer in Kayima, argued that adaptations to cash crops in
Kayima tended to be reactionary, drawing on the groundnut example outlined above
to illustrate his point. He suggested that while there had been a sharp increase in price,
it had peaked in the middle of 2013, and was on its way back down at the time of
interview. Thus he felt that the current focus on groundnuts in Kayima had come too
late to capitalise on global price increases. In addition, Key Informant 51, an apiarist
with beehives in Panguma, argued that in his experience, agricultural households in
Sierra Leone tended to be resistant to change, stating that:

traditional indigenous knowledge is hindering new ideas. Slash and burn
agriculture is not sustainable. It is destroying our forests, and not maximising
use of arable land. But farmers are continuing to do it because it is what they
have always done, they are not open to new ideas (Key Informant 51,
Panguma, 11 May 2014).

He went on to suggest that households in which agriculture was not the main source
of livelihood, but practiced in addition to primary sources such as teaching, religious
communication, and small business, were more receptive to his attempts to integrate
honey production into their existing agricultural activities. Similarly, Key Informant
36 (1 April 2014), a development practitioner with roots in Kayima, felt that the majority of agricultural households in Kayima were unwilling to consider alternative forms of farming, despite being presented with evidence of its efficacy.

6.2.3 Livelihood diversification

The previous two sections have discussed livelihood strategies that are agricultural in nature, either involving the adaptation of traditional farming practices, or diversification into different forms of agriculture. But, as Owusu (2009) argues, there has been a shift in focus from agricultural diversification to livelihood diversification within contemporary rural development research and policy. This shift is largely due to the growing recognition that agriculture, in itself, is rarely an adequate means of survival in rural areas of developing countries, a point explicated by Amekawa (2011) who argues that income diversification and asset disposal, rather than agricultural diversification, are the predominant forms of coping strategy adopted by rural households within vulnerability contexts. Further, Ellis and Biggs (2001) argue that agricultural activities, on average, tend to correspond to only 40-60% of the livelihood portfolios of rural households in sub-Saharan Africa, and are a key strategy in strengthening resilience. In light of these arguments, this section will explore livelihood diversification in Panguma and Kayima, which Ellis (1998: 4) defines as:

the process by which households construct a diverse portfolio of activities and social support capabilities for survival and in order to improve their standard of living” (Ellis, 1998: 4).

Binns (1980) discussed at length the symbiosis between agriculture and diamond mining in Panguma and Kayima in the 1970s, highlighting that farmers not only benefited from their ability to sell surplus produce at markets in mining areas, but also actively engaged in mining as a form of livelihood diversification. While the common perception is that this relationship has diminished somewhat, as Table 6.1 highlights, the responses to the subject are remarkably similar between the 1974 and 2014 surveys. When breaking these responses down, however, engagement in mining tended to be sporadic, and in many cases was referred to in the past tense, across both cohorts. Of the 26 households in Panguma in the 2014 survey who reported that one or more of their members had engaged in mining at some stage within their collective memory, only 11 were currently actively engaged in mining (see Figure 6.3 for example). By contrast, none of the 28 households in Kayima that reported that one or more of their members had engaged in mining at some stage, were currently actively
involved in mining. The main reason for this difference is that Panguma is in close proximity to Tongo Field, the main diamond mining location in Kenema District, and a number of small concessions also exist in and around Panguma, whereas Kayima is more isolated from the main mining areas in Kono District, and mining has never been practiced in or around the town itself. This point was exemplified by Kayima Respondent 06, who stated:

There has never been mining in this environment. In other parts of the chiefdom there has been mining, but not here. We only love agriculture here (Kayima Respondent 06, 16 April 2014).

Essentially, some households in Panguma are able to engage in part-time mining while continuing with agriculture, whereas those in Kayima have tended to devote longer periods to mining, which comes at the expense of agriculture. Further, this situation appears unchanged over the forty years of this research, with Binns (1980) making a similar observation from his fieldwork from the 1970s.

Table 6.1: Households with one or members who have engaged in mining activities (number of households engaged in mining at the time of survey in parenthesis)

<table>
<thead>
<tr>
<th></th>
<th>Panguma</th>
<th></th>
<th>Kayima</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Never engaged in mining</td>
<td>25</td>
<td>24</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Engaged in mining at some stage</td>
<td>25 (7)</td>
<td>26 (11)</td>
<td>28 (1)</td>
<td>28 (0)</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research and Binns (1980))

Figure 6.3: Group of farmers engaged in alluvial diamond mining near Panguma (Source: Author’s Field Research)
Interestingly, the past importance of mining was a common theme in both 1974 and 2014, with comments from key informants and respondents alike, again bearing a striking resemblance, as the following two quotes illustrate:

When diamonds were found in Yomandu in 1953, everybody left farming and went to Yomandu. Some of them are still there – but trying to come back to do farming. At first it was easy to get diamonds, but now you need machines…People are coming back, and when diamonds run out everyone will come back into farming (Deputy Head Teacher, Kayima Primary School, 17 July 1974, cited in Binns, 1980: 219).

You used to be able to find diamonds just below the surface, or in the street, or even in your own compound after a heavy rain. Not any more though, the only way to get diamonds is deep underground. Now you need machinery. People are now coming back to farming because diamonds are too hard to find (KI 02, Panguma, 15 February 2014).

In the more recent survey, very few respondents admitted to having been successful in mining, with a lack of success being the typical response given by those who no longer engage in mining, regardless of the time elapsed since they stopped. This point is evident in a comparison of the following two survey responses:

I did mining around Koidu from 1982-1986…I stopped because I did not prosper. I was not getting enough money because I went too long without seeing diamonds (Kayima Respondent 33, 26 April 2014).

I was engaged in mining from 2003 until 2005, in Tefeya and Bagbema, near the Bafi River. But there were no prospects. I was not able to support my family on mining, so I decided to go back to the bush (Kayima Respondent 15, 20 April 2014).

Even those in Panguma who still engage in mining lacked enthusiasm about their prospects, participating more in hope than expectation, as Panguma Respondent 21 posits:

I could sit at home during the dry season, but mining gives me something to do. It stops me being idle. I have not seen a diamond for 2, 3, maybe 4 years, but I might get lucky, so it is still worthwhile (Panguma Respondent 21, 6 March 2014).

While these responses could be put down to a reticence among farmers when discussing their mining activities, similar to that detected by Binns (1980), the consistency of response across generations also indicates a perpetual romanticism around artisanal mining among agricultural households. As discussed in Chapter 4, the mining industry in Sierra Leone, in a general sense, has declined over the 40 year period covered by this research, but the impact of this decline on the incidence, and success, of artisanal diamond mining as a form of livelihood diversification among
agricultural households appears less dramatic. Keili and Thiam (2015) indicate that more than 250,000 people in Sierra Leone are still engaged in artisanal mining, and Maconachie and Binns (2007a) reiterate Binns’ (1982) earlier findings in arguing that agriculture remains intricately linked to mining systems, estimating that over 500,000 people depend on the small-scale mining sector to derive their livelihoods. This, coupled with the commonalities between 1974 and 2014 outlined above, indicates that mining remains a part of livelihood portfolios, either directly or indirectly, for some agricultural households in Panguma, and to a lesser extent in Kayima.

Beyond the farming/mining nexus, Binns (1980) highlighted blacksmithing, carpentry and hunting as other significant forms of livelihood diversification for agricultural households, while handicrafts such as the weaving of ‘country cloth’, as well as basket making, mat weaving, and the production of fishing nets, were also common economic activities in both Panguma and Kayima. Blacksmithing and carpentry remain vital services in both communities but the skills and materials required mean that both are only practiced by a handful of people across both communities (see Figure 6.4 for example). In the more recent survey, only one respondent in Panguma and two in Kayima stated that blacksmithing, and three in Panguma and one in Kayima stated that carpentry, also contributed to their household’s livelihood portfolio. Hunting, while more widely practiced than blacksmithing and carpentry, has declined in the post-conflict period, as first the disarmament process, and then the tightening of gun ownership laws, have significantly limited access to guns, as revealed in the following exchange with a farmer during a guided field walk in Kayima:

“Come, we move down”, the farmer said as we made our way to the bottom of the farm. We walk a couple of hundred metres down a bush track before stopping at a tree with a small, yet distinctive, marking, at which point we leave the track and make our way through twenty metres or so of thick bush. “I have to hide my gun very well out here” the farmer says. “I don’t want people to find it, but I can’t keep it at home because of government regulations. Since disarmament after the war, they [the government] don’t want us to have guns, but this has made things very difficult for farmers. Pests like cutting grass and beef [deer], eat our crops, and without guns it is very difficult to control them. It also reduces the meat farmers can catch for their family to eat, or to sell for money. I am lucky, not many farmers here [in Kayima] have guns anymore” (Participant 1, GFW12, Kayima, April 4 2014).

The production and maintenance of fishing nets, and indeed fishing itself, remains a common form of livelihood diversification in both Panguma and Kayima, particularly
among female household members, but there was little evidence of the handicrafts discussed by Binns (1980) among the households surveyed in the more recent study.

Figure 6.4: Local blacksmith in Kayima (Source: Author’s Field Research)

Binns (1980) also noted the prominence of the Panguma Sawmill in 1974, stating that it was an important employer of local labour. The sawmill, however, was forced to cease operation in 1997 due to the war and, despite rumours of new foreign investment, had not restarted at the time of fieldwork (see Figure 6.5). While clearly a huge loss in terms of employment opportunities, some households have filled the vacuum it left, investing in portable power saws to enable them to process timber for the local market, thus creating another source of livelihood diversification. Industry on the scale of Panguma Sawmill has never been present in Kayima, and household-level timber production was evident to a lesser extent than Panguma in the 2014 fieldwork.
The rapid growth of new technologies in the past decade has seen a dramatic shift in non-agricultural livelihood diversification in Panguma and Kayima. As discussed in Chapter 5, mobile phone ownership has expanded rapidly with the construction of mobile phone masts in recent years, and this in turn has created numerous opportunities for livelihood diversification. Mobile credit, for example, is now sold by numerous agents in both communities, while a number of ‘tele-centres’ have been set up which, given the lack of electricity in both communities, provide a vital phone charging service (see Figure 6.6 for example). These credit agents and tele-centres are generally open from early in the morning until late into the night, not only providing a form of livelihood diversification to entrepreneurial farmers, but also employment opportunities to others who may not have access to the different forms of capital required to set one up themselves. As discussed in Chapter 5, the growth in mobile phone ownership has also helped facilitate the electronic transfer of money through international agencies such as Western Union and MoneyGram, as well as domestic mobile to mobile transactions through Airtel Money. Consequently, the scale of remittances received in each community has significantly increased,
which can be considered a form of livelihood diversification in itself, since remittances contribute to the livelihood portfolios of the households receiving them.

The other significant change in livelihood diversification in recent years has been the growth in the number of Okada (motorcycle taxi) riders (see Figure 6.7 for example). Before Sierra Leone’s brutal civil war, four-wheel taxis were the dominant form of commercial transportation, both within Freetown, and for longer distance trips into the provinces (Menzel, 2011). Post-conflict, however, reduced mobility caused by the deterioration and destruction of the country’s road networks, the need to address youth unemployment, and greater accessibility to less capital intensive vehicles, combined to create a new industry of commercial transportation. The okada are now ubiquitous in Freetown, and other urban centres, but they have also begun to pervade rural areas as well, making transport to and from smaller settlements more affordable and accessible. While this growth is commonly framed as a form of ‘self-initiated re-integration’ of ex-combatants post-conflict (Peters, 2007b), there was evidence of it also being used as a form of livelihood diversification among
entrepreneurial agricultural households in both Panguma and Kayima. Like mobile phones, the growth of the Okada has led to other livelihood diversification opportunities in both communities, including the transport and sale of petrol, and the provision of small-scale mechanical maintenance and repair services.

Figure 6.7: Okada ‘terminal’ in the centre of Panguma, and the author using one to travel between Panguma and Kayima (inset) (Source: Author’s Field Research)

Figure 6.7: Okada ‘terminal’ in the centre of Panguma, and the author using one to travel between Panguma and Kayima (inset) (Source: Author’s Field Research)

Other manifestations of livelihood diversification spawned by the growth of new technologies include the showing of films and sports. One agricultural household in Panguma had invested in a generator and satellite television subscription, and charges people to come and watch films when not busy on the farm. Similarly, a group of Panguma Hospital staff have set up a social complex in which they show English and European football matches, and operate a canteen, in order to supplement their income (see Figure 6.8). While no such facilities existed in Kayima at the time of fieldwork, a handful of agricultural households there indicated that they would like to diversify their livelihood portfolios to fill this void, but lacked sufficient financial capital to set it up. In addition, numerous other niches were evident in each community, including cookery and bakery, recycling, and petty trading.
While the new forms of livelihood diversification to emerge in the post-conflict period have largely been facilitated by technological advancement, they also represent the new forms of resource capture that were forged as a result of the war. As discussed in section 4.3, more traditional patron-client relationships based on intergenerational power structures have since re-emerged, but during the war, and in its immediate aftermath, many clients were abandoned by their patrons, who no longer had the resources to distribute. The abandoned clients, who were predominantly younger people, had to find new avenues of support, with many seeking self-enhancement by capturing resources from alternative sources, including post-conflict donors and international development organisations (Fanthorpe and Maconachie, 2010). In this sense, many younger people became what Lewis and Mosse (2006) describe as ‘brokers and translators’, as they sought new sources of support beyond the unequal patron-client relationships in which they were previously bound. In many cases, the resources for the forms of livelihood diversification outlined in the previous paragraphs were captured in this way. For example, Key
Informant 59 (29 May 2014), a tele-centre owner in Kayima, stated that he procured the hardware required to start his business from a small NGO working in a neighbouring village in 2007. Similarly, a focus group discussion with okada riders in Panguma (FG03, Panguma, 24 February 2014), revealed that entry into the industry for the majority of participants was gained through the capture of resources during the DDR process, and maintained by building strong bonding social capital within an effective network of motorbike riders associations. What remains to be seen, however, is whether or not the re-entrenchment of traditional patron-client relationships discussed in 4.3 will diminish the gains made by the younger generations through these institutions and, in turn, contribute to the perpetuation of the ‘crisis of youth’.

6.3 Livelihood outcomes

Thus far, this chapter has discussed a plethora of strategies adopted by people and households in Panguma and Kayima, in order to achieve their livelihood goals. While each of the individual strategies outlined have contributed to livelihoods in some way, there has been little significant change to the overall livelihood outcomes in either community over the forty year period of this research. The remainder of this chapter will outline this argument in the context of the five livelihood outcomes listed in the SLF, namely more income, improved food security, increased well-being, reduced vulnerability, and a more sustainable use of the natural resource base.

6.3.1 More income?

As illustrated in the discussion of financial capital in Chapter 5, income levels in Panguma and Kayima are difficult to assess as very few households in Panguma or Kayima keep financial records, and any income generated is generally low and sporadic. An analysis of expenditure, however, indicated similar patterns in spending in both 1974 and 2014, and perhaps more poignantly, highlighted that key services such as healthcare remain financially unattainable for many agricultural households, and discretionary spending remains almost non-existent. The factors contributing similar patterns of expenditure have been discussed at length elsewhere in this thesis, making repetition here redundant. The point that expenditure remains similar to forty years ago, despite an increase in remittances, and improved access to credit, however,
indicates that income levels remain similar to those in the 1970s, and therefore this is worth reiterating in the context of livelihood outcomes.

6.3.2 Improved food security?

Access to food in both Panguma and Kayima varies significantly between households, but the majority of households surveyed in each town expressed some form of food stress. The first element of the FAO (2009) definition of food security outlined in Chapter 2 uses the term ‘all people’ as a condition of achieving food security, thus from the outset, in a holistic sense, neither Panguma nor Kayima can be considered food. In a more atomistic sense, an exploration of food security within households uncovers further inequalities in access to, if not the availability of, food. Pinstrup-Andersen (2009) argues that the allocation of food within each household is not necessarily based on the needs of each individual member, an assertion reinforced in both Panguma and Kayima, where an intra-household hierarchy of food distribution was clearly evident. Indeed, I experienced such discrepancies myself, as the following excerpt from my field diary attests:

There is clearly a food chain here [Kayima], and I, a white male guest, am at the top of it. Each evening a pot of rice and a pot of ‘sauce’ is delivered to my room, to be consumed by me alone. The adult males in the household share a large bowl of the same, eating until they are full. The women then eat, though their consumption is not always so fulfilling, perhaps conscious of the fact that the more they eat, the less the children will get. Finally, well into the night, once all other needs are sated, the children are fed the scraps. Breakfast for me is fresh bread, or boiled yam, and a cup of tea, for the rest of the household it is what is left in my pots from the night before, distributed in the same order as their evening meal…This food hierarchy was even more distinct during my recent month in Panguma. There, the head of the household and I would eat together, away from the rest of the family, three times a day. He had a decommissioned chest freezer, secured by a large padlock, in which he stored food and filtered water. He gave me a key, but implored me to keep it locked to ensure his sisters and their families could not access the food without his knowledge. Despite assisting the hired cook to prepare all the food, they ate less regularly, and often informed me of their hunger (Field Diary, 31 March 2014).

While these situations could be considered a consequence of my position within each household, and therefore atypical, there was little evidence in either Kayima or Panguma to suggest such an aberration. These observations, moreover, were

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7 This section has been expanded upon in Bateman, Binns and Nel (2017).
corroborated by numerous participants in this research. A youth leader in Panguma, for example, stated that:

There is a lot of hard work on the farm and the women do a lot of it. We say that women work harder than men here. They do all the weeding and harvesting; they carry the crops from the farm to the town; they clean [pound] the rice; they prepare and cook the food; but still, they only eat once the men have eaten (Participant 1, GFW03, 23 February 2014).

Similarly, a former head teacher in Panguma, in discussing a group of school boys seemingly lazing on a veranda, stated:

For those boys, they only eat once a day, after the rest of their family has eaten, sometimes as late as nine or ten at night. It is no wonder they can’t concentrate on their school work when they are always hungry (KI07, Panguma, 20 February 2014).

While it is difficult to compare these observations to the situation in the 1970s, given Binns’ (1980) focus on the production of food, rather than its consumption, similar inequalities in the allocation of food can be gleaned from his account of ‘a ploughing day in Kayima: 20th June 1974’. In this snapshot, he outlined the role women and children played in the transport and preparation of food, yet his description of its consumption was thus:

The cooked rice was divided into a number of enamel basins and the goat meat and vegetable stew was poured over the rice. All 28 labourers [men] gathered in the barn, seated in groups around basins of rice and stew. After washing their hands, they consumed large amounts of food, eaten with their hands. Feeding went on for over an hour, by which time many of the labourers had fallen asleep, whilst others were engaged in discussion and palm wine drinking…After cleaning the kitchen utensils, the women and children continued weeding the farm, whilst a limited amount of hoeing was undertaken by the labourers (Binns, 1980: 356).

It appears, therefore, that little has changed in the way food is allocated. Rather it indicates that the hierarchy of food distribution evident in the latter study is based on traditional sociocultural notions of gender and age, and is neither reflective of the individual needs of each household member, nor their contribution to household productivity. This, in turn, is consistent with Barrett’s (2010) notion that uneven inter- and intra-household food distribution is a manifestation of the sociocultural limits and prevailing values within a community.

The FAO (2009) definition outlined above articulates access to food ‘at all times’ as the second condition of being food secure, distinguishing transitory or periodic food insecurity from permanent or long-term food insecurity (Pinstrup-
Andersen, 2009). The former is evident in numerous contexts in Sierra Leone, with food shortages occurring throughout the year, for a variety of different reasons. Again, the ethnographic nature of this research meant that I was not immune from the effects of such transitory food insecurity despite, as mentioned previously, my position was atop the food chain, as the following passage from my field diary highlights:

Food has been an issue these past few weeks. There have been no yams, and the bread supply has been unreliable. My host spent more than an hour yesterday morning searching the town for one or the other, but to no avail, thus breakfast, on many occasions, has been little more than a cup of tea. There has been no meat, nor fish, and last season’s rice harvest is all but gone. I am still getting my daily pot of rice, but it seems to be diminishing, and the accompanying ‘sauce’ is now largely devoid of any substance, and some days not present at all… I am constantly hungry, and fear I have lost a significant amount of weight during my time in Kayima. But for all that, as I wrote earlier, I am at the top of the food chain here, so cannot even begin to imagine the plight of those at the bottom (Field Diary, 26 April 2014).

While the above example occurred in April, transitory or periodic food insecurity is most prevalent during July and August, a time commonly referred to as ‘the hungry season’. Although not directly asked, 37 of the 50 households surveyed in Panguma, and 39 of the 50 surveyed in Kayima, referred to the ‘hungry season’ at some point during their survey, with the following statement representative of the general response:

The months before the harvest are the hardest. There is no food for my family to eat. When we harvest in September it is joyous, oh so joyous (Kayima Respondent 13, 19 April 2014).

Binns (1980) illustrates that the presence of ‘the hungry season’ is not a new phenomenon, stating of his fieldwork in the 1970s that:

During July and August, many farm families experience shortages of food, and this time is often referred to as the ‘hungry season’. Rice supplies are low at this time and the farmer depends on crops such as maize and cassava and sometimes imported rice, to stave off hunger (Binns, 1980: 232).

Further, Richards (1986) highlights that ‘the hungry season’ is not exclusive to Panguma and Kayima, nor indeed the Eastern Province, devoting a whole chapter to it in his book *Coping with Hunger*, which explored agricultural practices in the early

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8 | Imported white rice, purchased from the market, rather than locally grown.
9 | I weighed myself on 27 March 2014 in Freetown, before leaving for Kayima, and again on 30 April 2014, upon return. In those 34 days, I had lost approximately 14kg.
1980s in Mogbuama, a medium-sized village in central Sierra Leone. Thus, it is clear that periodic food insecurity is both endemic and enduring in Sierra Leone.

The third element of the FAO (2009) definition refers to access to food, though is not simply concerned with the availability of food in a particular place, but what range of food is open to a person or household, “given their income, prevailing prices, and formal or informal safety net arrangements through which they can access food” (Barrett, 2010: 825). The range of food available has increased since 1974, with a wider array of imported goods now available in both the Panguma and Kayima markets. But as exemplified in Chapter 5, and reiterated earlier in this chapter, expenditure on food has remained stagnant relative to other items of household expenditure across both communities, while in real terms, there has been a marginal increase in the number of households spending a proportion of their income on food in Panguma (from 25 in 1974 to 30 in 2014), and a marginal decrease in Kayima (from 19 in 1974 to 18 in 2014). Further, the diminishing influence of social capital outlined in Chapter 5 may have also resulted in the decline of the ‘informal safety net arrangements’ for food discussed by Barrett (2010) above, a point described by an elderly resident in Kayima, who stated:

In the olden days people were farming just for livelihood, not for commercial purposes. They were farming to ensure enough food for their family, and would help others in the community [with food] if they had any to spare. But now people are trying to farm for commercial gain, they see food as profit, and helping others means less profit (KI 46, Kayima, 11 April 2014).

This was also exemplified by numerous survey respondents, such as Kayima Respondent 18, who stated:

Last year somebody was burning some land, but the fire went out of control and destroyed most of my cash crops. Only small small [a small amount of] coffee was okay…when my rice ran out, I had no money to buy extra because I had no crops to sell, and there is no other way [to access food] (Kayima Respondent 18, 22 April 2014).

While this comment was made in the context of a discussion on the impact of micro-scale shocks on livelihoods, it also hints at lack of safety nets, either informal or formal, from which people are able to access food. Thus for most agricultural households, food security largely remains governed by what they are able to produce, rather than their income and/or formal or informal safety nets.

Finally, the FAO (2009) definition of food security introduces a qualitative dimension, in stating that food should not only be sufficient in quantity, but needs to
be nutritious and meet the dietary needs and food preferences for an active and healthy life. Nutritional and dietary quality in Panguma and Kayima is difficult to assess, as data relating to these indicators was not specifically sought. Further, Pinstrup-Andersen (2009: 6) argues that good nutrition “depends on a set of non-food factors such as sanitary conditions, water quality, infectious diseases and access to primary health care”, and thus nutritional quality is difficult to measure solely on the basis that certain foods are consumed over others. That being said, the prevalent diet in both Panguma and Kayima remains largely undistinguishable from Binns’ (1980: 223) description of it in the 1970s:

Rice is eaten on most days in Kono and Mende households, and is normally boiled and eaten with a soup or stew, which has a palm oil base and includes variable amounts of meat, fish and vegetables such as cassava and sweet potato leaf, chilli peppers, tomatoes and okra.

The only ostensible difference being that meat is now rarely available in either town, save for auspicious occasions. Of the 15 weeks spent between Panguma and Kayima in 2014, red meat was only served on four occasions, and chicken on three, with all but one instance correlating with a major community event. Therefore, if anything, the variety of diet has decreased slightly, which in turn decreases its overall nutritional quality.

The use of the term ‘food preferences’ infers that equal access to food does not necessarily ensure food security, as different food preferences may limit actual food choices for some. A common idiom in Sierra Leone states that a Sierra Leonean has not eaten for the day until they have eaten rice, which indicates a widespread preference for rice over other crops (Ngovo, 2015). Further, a strong preference for local varieties of upland rice, over imported or swamp-grown rice was uncovered in both the historical and present contexts. This means that households could be considered food insecure if they have no local rice, even though they may have access to imported rice. Pinstrup-Anderson (2009) argues, however, that the word ‘preferences’ should be interpreted to mean foods that are consistent with social, cultural, religious and ethical values, rather than a broader interpretation to mean a preference for caviar over sorghum.

Bringing the different elements of the FAO (2009) definition back together, it could be argued that sufficient, safe and nutritious food that meets dietary needs and food preferences for an active and healthy life is not accessible to all people, at
all times, in either Panguma or Kayima. Moreover, the extent to which this situation has improved over the forty year period of this research appears negligible at best, with some indications that it may have even regressed. As discussed throughout this thesis, conflict is a significant source of vulnerability, a point explicated in the context of food security by IFAD (International Fund for Agricultural Development) (2011) who stated that in 2006, for example, 25 out of 39 food emergencies globally were linked to conflict. While the civil war in Sierra Leone clearly had an impact on food security in Panguma and Kayima, the comparison of patterns of food distribution and access between the 1970s and 2014 presented here indicates that food insecurity is far more systemic. At the crux of this issue, then, is not so much an inability to produce enough food, but rather the social, cultural and economic barriers in place that prevent the food that is produced from being distributed evenly to all people, at all times. It is therefore imperative that these barriers are broken down to ensure more equitable access to the food that is being produced. School feeding programmes are an example of attempts to achieve this, and have been implemented in some schools with some success, but not all children attend school, and not all schools have access to these programmes. Thus it could be argued that these programmes perpetuate the unequal access to food by further privileging the needs of some over others.

The other key element to this issue is the amount of food that is lost during and following production. Finding ways of minimising or eliminating damage caused to crops by pests, for example, was one of the key challenges identified in both periods of data collection, while a World Food Programme (WFP, 2008) household survey of food security published in 2008 found that 70 per cent of rural households in Sierra Leone identified crop damage by insects, disease and animals as a type of shock that affected the amount of crops produced and food available to the household. Therefore targeting pest control could significantly improve food security. Similarly, an inability to store and preserve crops post-harvest was identified as a major concern, as highlighted by Key Informant 51, who stated:

In terms of food security, it is not that we can’t produce enough food here, it is that we can’t preserve it. You are witnessing it now, mango season, how many mangos have you seen wasted? The season only lasts for one month, and anything not eaten in that period just spoils (KI51, Panguma, 11 May 2014).
As such, finding more effective ways of storing crops to reduce post-harvest losses through theft, rain damage, pests, and preserving perishable items could also help to reduce the impact of the hungry season, and therefore improve food security.

6.3.3 Increased well-being?

As discussed in Chapter 2, defining the concept of ‘well-being’ is challenging, and assessing it is akin to measuring the immeasurable (MacKain, 2009). A number multi-dimensional models aimed at capturing the various elements of well-being, including the UNDP’s Human Development Index (HDI), the Capabilities Approach, Genuine Progress Indicators, Gross National Happiness, and the Happy Planet Index. While each of these models are useful tools for understanding well-being at the national level, it was argued in Chapter 2 that they lack the local and temporal scales required to assess well-being within the parameters of this research, as they tend to be measured at the national level. As a consequence, they say little about the specificities of well-being in Panguma and Kayima, and they are generally unable to offer insight into the level of well-being in the 1970s, when the timeline for this research began.

In light if these challenges, Scoones (1998), argues that the notion of well-being provides a wider definitional scope for the livelihoods concept. Drawing on Chambers’ (1997a) discussion on ‘responsible well-being’, Scoones (1998) suggests that the SLF allows people themselves to define the criteria for well-being that are important, which can result in a wide range of livelihood outcome criteria. As such, the definition of well-being as a livelihood outcome in the context of this research is guided by the communities themselves, with survey respondents first asked to conceptualise well-being in their own terms, and then whether or not they felt that their well-being had improved. The latter question failed to capture an adequate trend, largely due to the variance in temporal scales used by different respondents, and the insidious impact that the civil war had on the collective well-being of both communities, and indeed the entire country. This, coupled with the absence of a similar line of questioning in the 1974 survey, makes a holistic assessment of change in well-being challenging, but as the following paragraphs show, certain inferences can be made regarding the improvement, or otherwise, of well-being in Panguma and Kayima.
In defining well-being, there was little difference between Panguma and Kayima, with both communities ranking income, food security, health and happiness as the main criteria, while social networks and political agency were also mentioned by some as being a factor (see Table 6.2 for a breakdown of responses). Given the lack of baseline data, it is difficult to ascertain the extent to which these current perceptions of well-being reflect those held in the 1970s. If accepting current perceptions as the yard-stick, however, then it could be argued that levels of well-being have remained much the same, if not slightly regressed, since the original survey in 1974. The previous two sections of this chapter indicate no appreciable change in income or food security, while the previous chapter shows that access to health care has deteriorated in both communities since the 1970s. And, while the intangible nature of happiness is difficult to quantify in either temporal context, it was often expressed in the most recent survey as being contingent on one or more of income, food security and health, as Panguma Respondent 39 embodies:

it [well-being] is about happiness. Myself, when I have enough food and money to keep my family healthy, then I am happy (Panguma Respondent 39, 16 March 2014).

Thus, there appears to have been little improvement in the four community-defined criteria of well-being since the 1970s, and, therefore, it could be reasoned that there has been little improvement in well-being itself over that time-frame.

Table 6.2: Breakdown of responses to question asking what constitutes well-being?

<table>
<thead>
<tr>
<th>Well-being Factor</th>
<th>Panguma</th>
<th>Kayima</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>34</td>
<td>32</td>
<td>66</td>
</tr>
<tr>
<td>Food Security</td>
<td>27</td>
<td>31</td>
<td>58</td>
</tr>
<tr>
<td>Health (Physical)</td>
<td>23</td>
<td>18</td>
<td>41</td>
</tr>
<tr>
<td>Happiness</td>
<td>20</td>
<td>16</td>
<td>36</td>
</tr>
<tr>
<td>Social Networks</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Political Agency</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

(Source: Author’s Field Research)

In addition, as stated above, there was a large variance in the temporal scale used by respondents when assessing change in their well-being. While this was largely determined by the age structure of the households surveyed, it was also often linked to shocks. For some, the war from 1991 to 2002 was mooted as the point of reference, and not surprisingly, most who did so felt that their well-being had
improved since it ended. But many others identified more localised shocks, such as crop failure, injury, illness or crime as the catalyst for change in their well-being, and thus the time elapsed since that shock generally determined their perception of change in well-being. Panguma Respondent 14 (26 February 2014), for example, discussed taking responsibility for his brother’s wife and children following his death in 2005, lamenting the associated emotional and financial hardship, but suggesting that his well-being, and that of his family, had improved considerably with the passing of time. Whereas Kayima Respondent 26 (24 April 2014) told of major crop thefts during the 2013 harvest, which had led to reduced access to food, loss of income, and increased stress, all of which he felt contributed to a decreased sense of well-being. So, while questioning respondents about change in well-being failed to draw out any explicit trends, it highlighted that vulnerability is implicit to well-being within these communities. The extent to which vulnerability has changed was discussed in greater detail in the previous chapter, and will be revisited in the following section.

6.3.4 Reduced vulnerability?
As with income, vulnerability has been discussed at length elsewhere in this thesis, but similarly warrants reiteration in the context of livelihood outcomes. While there is no evidence to suggest a return to conflict similar to that which caused such devastation in the 1990s, the recent Ebola epidemic in 2014/2015 highlighted that rural livelihoods remain imminently vulnerable to large-scale shocks in Sierra Leone. But such shocks would test the resilience of livelihoods in even the most developed countries, and thus perhaps the most telling indication of sustained vulnerability in Sierra Leone is that smaller, more localised shocks, such as death or illness in the family, and the damage or loss of crop production due to pests, fire or theft, continue to have such a dramatic and lasting impact on people’s livelihoods. As evident in the plethora of examples discussed in Chapter 4, the nature and frequency of these shocks is remarkably similar to the 1970s, and the fact that there has been little change in the coping strategies implemented in order to mitigate such challenges, once again highlights that there has been no discernible reduction in vulnerability in Panguma or Kayima.

6.3.5 More sustainable use of natural resources?
As Scoones (1998) intimates, rural livelihoods generally rely on the natural resource base to some extent, and thus its sustainability is vital in assessing livelihood
outcomes in rural areas over time. Indeed, Chambers and Conway (1991) argued that not undermining the natural resource base is a key criteria of sustainable livelihoods. The concept of sustainability, in itself, is difficult to define, but in relation to natural resources in the context of this research, it is taken to mean the ability to maintain or improve the natural resource base upon which livelihoods depend (Chambers and Conway, 1991). In one sense it could be argued that this has been achieved, as households in Panguma and Kayima are still able to utilise the natural resource base in much the same manner as they were in 1974, in order to generate a livelihood. In contrast, however, there are indications that there is now greater pressure being placed on the natural resource base as a result of these practices. As with income and vulnerability, natural resources have been discussed at length elsewhere in this thesis, but a number of points are worth reiterating here in order to support this argument.

Upland rice farming remains the primary contributor to livelihoods for most households in Panguma and Kayima, and is still being practiced in much the same way as it was in 1974. Vast tracts of bush are still being slashed and burned in Panguma and Kayima every year. A reduction in fallow periods, a perpetual scarcity of seed, and increasing population in Panguma, all of which were discussed in Chapter 5; along with risk aversion strategies discussed earlier in this chapter, including farming geographically distinct plots, and re-purposing the previous year’s farm for secondary crops, indicate that these practices are diminishing the natural resource base, and therefore are not sustainable in the long-term. Further, anecdotal evidence of greater climate variability discussed in Chapter 4 and 5, raises further questions about the sustainability of upland rice farming, as it is intrinsically tied to traditional rainfall patterns.

Agricultural diversification, such as the greater utilisation of wetlands, and increased emphasis on permanent cash crops, could be seen as having improved the natural resource base. Swamp farming, for example, has been actively promoted by central government to help reduce slash and burn agriculture, which they posit will reduce the rate, and therefore impact, of climate change. It is also considered more sustainable by agricultural households themselves because swamps do not require fallow, are less reliant on climatic patterns, require fewer labour inputs and are more receptive to high-yield rice varieties. As discussed earlier in this chapter, however, households engaged in swamp farming are generally doing so collectively as part of FBOs in addition to, rather than instead of, upland farming. It could be argued,
therefore, that the greater utilisation of wetlands, while a more sustainable practice, has not actually contributed to a more sustainable use of the natural resource base as it has not led to a reduction in more traditional forms of agriculture. Some may even argue that it is placing greater pressure on the natural resource base, as it has led to an increase in the amount of land being cultivated.

The livelihood diversification strategies outlined earlier in this chapter do not appear to incorporate greater sustainability of the natural resource base either. The depletion of diamonds due to increased mining activity is a clear example of this. Though as shown in Chapter 4, this was more a consequence of large-scale mining, corruption, and war, this chapter has indicated that small–scale ‘mining farmers’ have also played a role. Despite the example of the mining industry, new forms of livelihood diversification brought about by the rapid increase in technology, are also depleting the natural resource base. Phone charging centres, for example, generally run poorly maintained generators for up to 16 hours a day, using large amounts of fuel, which is a scarce community resource in both Panguma and Kayima, while the proliferation of Okada is also having a similar effect on fuel consumption. Forest and fishing stocks, too, have been reduced by households in pursuit of livelihood diversification.

Ultimately, it does not appear as if the use of the natural resource base for livelihood accumulation is any more sustainable now than it was in 1974, indeed in some instances, it could be argued that it has become less sustainable. This is largely a consequence of the perpetual vulnerability that exists in Panguma and Kayima, in that it fosters a sense of opportunism. As with all livelihood assets discussed in Chapter 5, households experiencing poverty and/or facing local crises are prepared to utilise whatever natural resources are available to them in order to generate a livelihood in the present, even if it means the depletion or exhaustion of that resource for future use. This enables resilience, but generally comes at the expense of sustainability. As Panguma Respondent 36 articulated, however, rural households throughout Sierra Leone feel that they have little choice, because the reality is that if they do not utilise the natural resources they have available now, sadly, they may not have a future:

We have been told slash and burn [agriculture] is bad, but without it we can’t grow enough food for our families. It is our children, and their children, that will have to face the problems we have created, but this is our only chance to
survive. Without farming there is no other chance (Panguma Respondent 36, 15 March 2014).

6.4 Conclusion
This chapter has encapsulated the final two components of the SLF – livelihood strategies and livelihood outcomes. It has argued that while changes in the structure of livelihood assets, and in the transforming structures and processes that influence access to them, have led to some change in the livelihood strategies employed, there has ultimately been little change in the outcomes that these strategies have facilitated. Agricultural intensification, extensification and diversification, generally motivated by risk aversion, have enabled remarkable resilience and the ability to ‘bounce back’ from shocks, and adapt to trends and seasonality, while some households have been able to diversify their livelihoods to incorporate non-agricultural activities, and thus further spread the risk. Despite this, however, income levels remain similar, food insecurity persists, and there does not appear to have been any discernible improvement in well-being, sustainable use of the natural resource base, or a reduction in vulnerability. The implications of this will be discussed in greater depth in Chapter 7, the final chapter of this thesis, in which all the components of the SLF will be brought together, and contextualised within the broader themes outlined in Chapter 2. In doing so, it will attempt to answer the research questions underpinning this thesis, and explore potential solutions to the stagnation of change outlined here.
Conclusion: The more things change, the more they stay the same?

7.1 Introduction
As stated in Chapter 1, this thesis is essentially about development, which was broadly conceptualised as ‘positive change over time’. More specifically, this thesis is about change over a 40 year period in Panguma and Kayima, two small towns in the Eastern Province of Sierra Leone. In 1849, French novelist and journalist Jean-Baptiste Alphonse Karr quipped ‘plus ça change, plus c’est la même chose’, which is generally translated to mean ‘the more things change, the more they stay the same’ (Karr, 1849). Paradoxical in nature, this statement can be taken to mean that change is inevitable, and therefore is the only constant in life, or conversely, that seemingly significant change often only serves to more deeply embed the status quo. As the preceding chapters have revealed, the situation in Sierra Leone in a general context is eerily reminiscent of Karr’s sentiment in both of these senses. On the one hand, change has been constant and at times dramatic over the 40 year period of this research, but on the other, many of the problems that plagued development in the 1970s sadly still persist. The same is true for rural livelihoods at the local level, with
some change evident in the vulnerability context, transforming structures and processes, assets and strategies that contribute to them, but ultimately little change to the sum of these parts.

This chapter will begin with a brief summary of the above argument in relation to the findings discussed in Chapters 4, 5 and 6, leading into a more detailed discussion of the reasons why the changes that have occurred have not translated into improved livelihood outcomes in Panguma and Kayima. In doing so, it will identify some of the key priorities for uplifting livelihoods in these communities in the future, some of the challenges that will need to be overcome if these are to be achieved, and the role that different agents, including government, non-government organisations (NGOs), civil society and the households themselves, could possibly play in these processes. This chapter will then evaluate the contribution that this research makes to the broader themes discussed in Chapters 2 and 3, with particular consideration given to the retrospective longitudinal application of the Sustainable Livelihoods Framework (SLF), and its ability to improve our understanding of long-term change, but also its broader significance in terms of understanding rural livelihoods and development both in Sierra Leone and elsewhere. Finally, this chapter will consider the potential for further research.

7.2 Continuity and change in Sierra Leone
In relation to this thesis, the essence of the statement ‘the more things change, the more they stay the same’ was perhaps most starkly illustrated in Chapter 4, which straddled the nexus of transformation and vulnerability to explore the broader context in which rural livelihoods exist in Sierra Leone. Beginning with a broad overview of Sierra Leone’s post-independence political economy, it highlighted significant, and often dramatic, political and economic change as the country transitioned from fledgling democracy into a one party state. This period was characterised by authoritarianism, patronage, cronyism and corruption; the centralisation of power through the abolition of local councils; the decline of the mining and agricultural industries, which led to economic stagnation; and the collapse of the state security, education, health and the justice sectors. By the end of the 1980s, Sierra Leone was essentially a ‘failed state’ being propped up by external support from international financial institutions such as the World Bank and the IMF.
The outbreak of civil war in 1991 was, in part, a response to the political and economic changes outlined above, but was also a catalyst for change in its own right. After two decades of one party rule, a series of coups, and a flirtation with democratic elections, saw leadership of the country change hands five times over the 11 year span of the war, while the political influence of rural Sierra Leoneans was further destabilised as local ‘big men’ were targeted by the RUF. Economically, the war also expedited change, with legitimate diamond exports becoming almost non-existent, while the bulk of agricultural land was not cultivated as most of the rural population were either on the run or living in displacement camps. Physical change was even more dramatic, and remains the most visible representation of war induced transformation, with more than 340,000 houses destroyed, along with countless public buildings including schools, hospitals, markets, and court barriers and infrastructural facilities such as transport, communication and electrical networks. The brutal nature of the war also prompted a shift in the psyche of the population, with most civilians touched in some way, and often traumatised by the violence and destruction.

Further changes have occurred in the post-war period. Democracy has been restored, as demonstrated by three peaceful multi-party presidential and parliamentary elections, and the decentralisation of power through the re-establishment of local councils and chiefdom administrations. This, in conjunction with a relatively successful disarmament, demobilisation and reintegration (DDR) process, improved civil society, increased attention from the international community, and the collective lived experience of the population has significantly reduced the risk of further outbreaks of conflict. Economically, agriculture and food security have been prioritised in government policy, and some steps have been made towards a more equitable and transparent distribution of the benefits of the country’s natural resource endowment, while international aid surged following the end of the 11-year civil conflict (Kargbo, 2012b).

Significant change has clearly occurred in Sierra Leone over the 40 year period of this research, yet despite an ever shifting political and economic landscape, the dramatic upheaval caused by the war, the physical and emotional scars it left, and the surge of international aid and compassion in its aftermath, a number of issues persist. Poor governance and corruption among state, district and local level administrative bodies, characteristic of the pre-war political economy, have not been
quelled by the restoration of democracy, and as such remain pervasive. Further, adequate safety nets to cushion shocks have failed to materialise within this broader context of change. Subsequently, the main sources of vulnerability identified by agricultural households in Panguma and Kayima in 2014, are remarkably similar to those observed in 1974. Crop loss as a result of pests, fire or theft, household health shocks resulting in the incapacitation or death of one or more household members, and limited access to key resources, particularly labour, but also seeds, tools and fertilisers, were considered the main constraints to improving livelihoods. While these issues may have been exacerbated at times by the political and economic change outlined above, and they were certainly more prominent during the war, and in its immediate aftermath, their persistence over the forty years of this research suggests that the broader transforming processes and structures have perpetuated, rather than directly caused, vulnerability in rural Sierra Leone.

Chapter 5 was more local in scope, assessing the assets upon which peoples livelihoods are constructed in Panguma and Kayima, but in essence followed a similar narrative to Chapter 4. While there clearly has been some change in access to the different capitals over the 40 years of this research, and there are temporal and spatial variations to such change, improved access to any one form of capital was generally found to be contingent on existing access to at least one other form of capital, and thus positive change in one dimension was generally offset by negative change in another. Improved availability of education, for example, has been facilitated by the introduction of senior secondary schools in both communities, but access is dependent on the household possessing sufficient financial capital to pay school fees and purchase the requisite school materials. In addition, these households also face reduced access to labour, as more young people first pursue education, and then seek livelihood opportunities outside of their home towns, effectively balancing out any improvement to household human capital accrued through the attainment of higher levels of education. In theory, this should be compensated for by increased earning power that comes with education, though in Sierra Leone this rarely transpires, as explicated by high levels of youth unemployment, and thus the seemingly significant change in local education provision has resulted in limited change to either human or financial capital among households in Panguma and Kayima. Numerous other examples exhibiting similar patterns are interspersed throughout Chapter 5, and thus the changes in the availability of, and access to, the
various livelihood assets indicates a fluidity in, rather than the growth of, the overall asset base. This argument, in turn, further illuminates the premise that ‘the more things change, the more they stay the same’ with respect to livelihoods in Panguma and Kayima.

Chapter 6 explored the livelihood strategies adopted by households in Panguma and Kayima, given the broader context of transformation and vulnerability discussed in Chapter 4, and the availability and accessibility of livelihood assets discussed in Chapter 5, before culminating in a discussion of livelihood outcomes, which essentially constitute the sum of all these parts. Once again, both continuity and change were uncovered. While livelihoods in Panguma and Kayima are still predominantly based on the traditional agricultural practices that were observed in 1974, a number of subtle changes were detected. For example, agricultural land is now being used more intensively as the re-use of the previous year’s rice farm for secondary crops has become more common, and in turn, fallow periods have reduced. It has also become more common for farmers to farm plots geographically distinct from each other, in order to reduce vulnerability to crops caused by pests, fire or theft, and there has been a notable decline in the sale of surplus crops due to the loss of key periodic markets, and the deterioration of the transport network. In addition to these changes to upland farming practices, agricultural diversification has also intensified, with swamp farming, and cash crop production, while certainly not new, becoming more widely practiced.

Perhaps the most overt change in livelihood strategies between the two cohorts of study was the different embodiment of livelihood diversification. While the agricultural and mining sectors remain inextricably linked in Panguma, and to a lesser extent in Kayima, fewer agricultural households are now actively engaged in mining activities to supplement their livelihoods, while there has also been a decline in hunting and handicrafts in the post-war period, and the closing of the sawmill in Panguma has reduced opportunities in the formal sector. In their place, however, the rapid growth of new technologies in the post-war period has created numerous opportunities for non-agricultural livelihood diversification, including the sale of mobile credit, the provision of phone-charging services, the facilitation of electronically transferred remittances, the provision of security for key infrastructure such as mobile phone masts, entertainment facilities showing films and sports, and the provision of transport using okada [motorcycle taxis]. Other forms of livelihood
diversification, such as blacksmithing, carpentry, fishing and petty trading appear to have remained relatively steady between the 1974 and 2014 surveys.

Changes in the livelihood strategies employed by households in Panguma and Kayima indicates an ability to adapt to changes in the other dimensions of the livelihoods framework, and demonstrates resilience to the omnipresent vulnerability to which they are exposed. They also reinforces the importance of local indigenous knowledge within livelihoods systems, an idea popularised by Binns (1980) and Richards (1985), among others, and aligns with the view put forward by Hill (1970) and Popkin (1979) that peasants make astute and rational decisions in pursuit of their livelihoods. Ultimately, however, improved livelihood outcomes have failed to materialise in Panguma and Kayima as a result of these changes. Income levels remain similar, food insecurity persists, and there does not appear to have been any discernible improvement in well-being, sustainable use of the natural resource base, or reduction in vulnerability, such that once again, we are reminded of Karr’s (1849) words, ‘the more things change, the more they stay the same’. Attention will now turn to the reasons why seemingly significant change in each dimension of the livelihoods framework has not translated into improved livelihood outcomes.

This section has briefly summarised the continuity and change within livelihood systems in Panguma and Kayima over the forty year period covered by this research. In doing so, it has essentially addressed the first four, and first part of the fifth, research questions, outlined in Chapter 1, which were:

1. What have been the main transforming structures and processes in the political economy of Sierra Leone since independence in 1961?
2. What impact did the civil war have on livelihoods, and to what extent is it responsible for the current state of vulnerability in Panguma and Kayima?
3. How has the availability of, and access to, livelihood assets changed in Panguma and Kayima over the forty year period of this research?
4. How have households in Panguma and Kayima adapted their livelihood strategies to cope with the transforming structures and processes, vulnerability context, and change in access to assets, addressed in the previous three questions?
5. Have the changes detected in answering the previous four questions led to improved livelihood outcomes in Panguma and Kayima over the 40 year period of this research?
The following section will address the second part of the fifth research question, which asks why the changes that have been detected in each of the other dimensions of the SLF in Panguma and Kayima have not translated into improved livelihood outcomes.

7.3 Why has change not translated into improved livelihood outcomes?

7.3.1 Lack of growth in the overall livelihood asset base

As discussed in Chapter 5, and reinforced in the previous section, there has clearly been some change in access to, and the influence of, the various capitals depicted in the asset pentagon of the SLF over the forty year period of this research. It was argued, however, that this change has generally represented a fluidity between the different capitals, rather than any growth of the overall asset base. Given that livelihood strategies adopted, and therefore the outcomes of these strategies, are largely contingent on an agricultural household’s asset portfolio, the lack of growth in the overall asset base is one of the key reasons that there has been limited improvement in livelihood outcomes in Panguma and Kayima between 1974 and 2014. Many of the reasons for this lack of growth, contribute to the limited improvement in livelihood outcomes more broadly, and thus will be considered in the following sub-sections.

7.3.2 Pervasive corruption

Despite dramatic changes in Sierra Leone’s political economy over the forty year period covered by this research, corruption has remained a beacon of consistency throughout. Since Albert Margai took office in 1964, corruption has been a hallmark of successive political regimes, particularly in relation to the governance of the mining industry, but has stretcher beyond the preserve of the political and economic elite to permeate everyday interactions between ordinary Sierra Leoneans. During the 2014 field research it was rare, for example, to witness residents travelling beyond their home town without being pressed for some form of bribe, be it from police and/or immigration officers at official checkpoints, local chiefs and/or councillors seeking *kola* (gifts), or groups of youths collecting ‘donations’ for road repairs which they claimed to be making. Further, bribes, gifts and/or favours are widely expected by teachers and school officials, health workers and hospital staff, and judges, court and government officials, for the routine discharge of their duties. There was also
plentiful evidence of local mismanagement of development initiatives in both Panguma and Kayima. The current executive of the Agricultural Business Centre (ABC) in Kayima, for example, argued that the previous executive was, in part, liable for its precarity, as its members utilised the funds and equipment provided by the project donors for extraneous purposes, while Key Informant 13 (Panguma, 15 March 2014) gave similar reasons for the failure of a community swamp farming initiative in Panguma.

The extent to which corruption has become entrenched in Sierra Leone is evident in Transparency International’s ‘Corruption Perceptions Index 2015’, which ranked Sierra Leone 119th out of 167 countries, while their ‘Global Corruption Barometer 2010/2011’ found that some 71% of the population reported paying a bribe in 2010 (Pring, 2015). This pervasive nature of corruption in Sierra Leone means that it has not only acted as a handbrake for development at the macro-scale, but has also seriously hindered local-scale community development efforts, manifesting in an inability to generate the growth of livelihood assets, and the failure to effectively implement initiatives aimed to improve livelihood strategies. Corruption at all levels, therefore, is a significant contributing factor to the lack of improvement in livelihood outcomes. Yet most participants in this research viewed corruption as an external process affecting them, but one in which they neither participate, nor have any control over. ‘Everyday’ forms of corruption described above were generally perceived as a part of the cultural fabric of Sierra Leone, and have therefore become accepted practice.

Corruption at the local level, however, can not be extricated from the developmental status of Sierra Leone in a broader sense. At the national level, corruption exists because many elites view the state as an institution to be captured for self-enhancement, and networks of patronage as a means for strengthening their control over such institutions. Consequently, local-level agents of the state such as teachers, police and immigration officers, and health workers are often underpaid, or not paid at all. The pervasive corruption detected at the local level is a function of this and could, therefore, be considered as a coping strategy to mitigate missing public salaries. In the context of the SLF, then, corruption could be viewed as a livelihood strategy, and could actually be contributing to improved livelihood outcomes for some at the local-scale. The point remains, however, that corruption is having a negative impact on the livelihood outcomes of the majority of households.
surveyed in this research, because they lack the means to capture these institutions for their own benefit, yet are forced to participate in them as clients because they have become so entrenched as the ‘rules of the game’.

7.3.3 Cultural, social, physical and economic barriers to livelihood resources

Continued adherence to traditional hierarchies based on gender, age, social and economic status, has hindered the equal distribution of resources within both Panguma and Kayima. The discussion on food security in Chapter 6.3.2 is a prime example of this, highlighting that a large part of the food insecurity that persists in both communities is a consequence of such hierarchies. Gender and age were shown to be contributing factors to intra-household food insecurity, with adult males consuming an inequitable share of household food resources, and children often only eating one meal a day. Inequitable access to livelihood assets was also a common theme in Chapter 5. The discussion on social capital, in particular, highlighted the influence that social and cultural standing has on access to land and labour, with local chiefs and big men, and those with links to them, generally able to command both land and labour readily compared to the majority of households. In addition, female headed households are further disadvantaged, as they have limited customary land rights. Membership of cultural groups such as Poro and Sande (men’s and women’s secret societies), and other formal and informal groups was also found to impact on access to the various livelihood assets. In a tangible sense, financial capital, the most transferable livelihood asset, was clearly the key determinant for access to education and health care, and indeed most other livelihood assets. More broadly, this argument can be extended nationally, with poor mobility due to the condition of the roads, and a lack of transport options, creating physical barriers to resources that are more abundant in other places, and the ability to sell agricultural surplus in more lucrative markets.

Lack of mobility in a more figurative sense is the key issue in the context of this argument, in that people and households are largely unable to move within this hierarchical structure. Both Panguma and Kayima remain relatively patriarchal, eligibility for chieftaincies is restricted to members of the ruling families, and are predominantly filled by males, while most other social and cultural groups, even households units, are organised and governed hierarchically based on gender, age and social and economic status. As argued in Chapter 4, evidence of social capital
detected in both communities largely served to perpetuate unequal access of other livelihood assets, rather than act as a substitute for them which, again, highlights the existence of these hierarchies, but also the lack of mobility within them. This lack of mobility makes it extremely difficult for people to challenge the prevailing hegemony which, in turn, further perpetuates the inequitable distribution of livelihood assets, and ultimately prevents the improvement of livelihood outcomes for the majority of people. As with the everyday forms of corruption discussed in the previous section, these traditional hierarchies are very much ingrained in rural Sierra Leone and, as a consequence, are difficult to break down. Ways in which this might be achieved will be discussed in section 7.4.3.

7.3.4 Lack of community capacity building

Another reason that livelihood outcomes have not improved is the lack of capacity building within development initiatives that have been implemented in Panguma and Kayima. As mentioned earlier, corruption was only partly blamed for the precarity of the ABC in Kayima, with the current executive also arguing that the Ministry of Agriculture, Fisheries and Food Security (MAFFS), the government ministry responsible for the implementation of the project, and the Italian Program for Food Security (FSCA) and the Food and Agriculture Organisation (FAO), who provided financial and technical support respectively, had failed to build capacity within the community to sustain the project. As discussed in Chapters 4 and 5, some of the machinery and equipment promised never materialised, but for that which did, the training provided for its correct use and maintenance ranged from limited to non-existent, and therefore it was generally misused and poorly maintained. In addition, while there is a small mechanical workshop in Kayima, the users lacked the knowledge and parts to repair the ABC machinery when it inevitably broke down, and consequently most of it was out of commission just four years after the project was first implemented. The ABC in Dodo, close to Panguma, was similarly afflicted, with the majority of its machinery unusable at the time of this fieldwork in 2014 due to inadequate training and maintenance, and insufficient capacity for repair.

The recurrent use of the ABC example here is not intended to specifically single out its shortcomings as a project, but rather to provide continuity with the earlier section on corruption. In reality, it is representative of the lack of capacity building evident in any number of post-conflict development initiatives in Panguma.
and Kayima. The Financial Services Association (FSA) in Panguma, and Community Bank in Kayima, are cases in point. Like the ABCs, they have the potential to significantly improve livelihoods, but have fallen well short of that potential because of a failure to, in the words of Key Informant 62 (Kayima, 30 May 2014), “sensitise the community to formal banking systems”. Consequently, as discussed in Chapter 5, the majority of households surveyed had limited understanding of the services offered by these banking institutions, and because of this, were extremely reluctant to make use of them. While the ABCs and banking institutions were still in operation, there was evidence of numerous other development initiatives which had ceased, in part because insufficient attention was given to the capacity of the local people to sustain them (see Box 4.1 in Chapter 4 for further example). Further, as noted in Chapters 5 and 6, both Panguma and Kayima have resident MAFFS agricultural extension officers, but they are largely ineffective due to a lack of resources and knowledge.

This failure to build capacity within Panguma and Kayima reiterates a point made by Binns (2009b) regarding the importance of knowing when to engage and dis-engage when planning and implementing development initiatives in Africa. He suggests that in order for development initiatives to be sustainable, outside actors and agencies need to ensure that sufficient momentum and expertise have been acquired locally before they withdraw, but also ensure that their withdrawal comes before the local actors and agencies involved become overly reliant on their presence. Unfortunately, it appears that this balance has rarely been achieved by outside actors and agencies in Panguma and Kayima, and consequently the increased international attention in Sierra Leone in the post-war period has been largely ineffective in improving livelihood outcomes in these two communities. Thus, building capacity within both communities to ensure that existing and future development initiatives and local organisations can be sustained is crucial for any such improvement to be achieved.

### 7.3.5 Omnipresent vulnerability

As stated in Chapter 4, and reiterated earlier in this chapter, livelihoods in Sierra Leone exist in a state of omnipresent vulnerability. While households in Panguma and Kayima have demonstrated a remarkable capacity to bounce back from vulnerable situations, the constant threat of shocks, trends and seasonality has
significantly hindered the long-term improvement of livelihood outcomes in a number of ways. Most obviously, persistent vulnerability has limited both the availability of, and access to, various livelihood assets at different times, which has resulted in the lack of growth in households’ overall asset base which was discussed in Chapter 5. This inability to grow the asset base has subsequently limited the livelihood strategies open to households, and has therefore been detrimental to generating improved livelihood outcomes.

Large-scale shocks such as the civil war, the Ebola epidemic and weather events, and broad trends such as climate change, have undoubtedly had an impact on household access to the various livelihood capitals, and therefore the livelihood strategies available. Households in Panguma and Kayima have demonstrated a remarkable capacity to bounce back from large-scale shocks, and adapt to trends and seasonality, but the persistence of vulnerability to small-scale shocks outlined in Chapter 4, and reiterated earlier in this chapter, has significantly hindered the improvement of livelihood outcomes. The inability to mitigate against these small-scale shocks is, therefore, one of the key reasons why there has been limited improvement in livelihood outcomes over the forty year period covered by this research.

7.3.6 Resilience as opposed to development?

As discussed in Chapter 2, resilience, which was defined as the capacity of a system to experience stresses and shocks “while retaining essentially the same function, structure, feedbacks, and therefore identity” (Walker, et al., 2006: 2), is a key concept within livelihoods approaches to development. In this sense, resilience can be seen as a response to the omnipresent vulnerability discussed in the previous section. To this end, Chapter 6 highlighted a remarkable resilience among households in Panguma and Kayima to ‘bounce back’ from the shocks, trends and seasonality that continually afflict them, but as this chapter continues to argue, livelihood outcomes have shown little improvement over the 40 year period of this research. Given that the definition above conceptualises resilience as the return to, or maintenance of, a previous state, rather than its improvement, it is unsurprising that the resilience among households in Panguma and Kayima has failed to translate into improved livelihood outcomes. Resilience, therefore, while vital to livelihood systems, and indeed survival, does not equate to development, in that, by definition, it does not
constitute ‘positive change over time’ as its end point is a previous state. In some senses, resilience could even be considered counter-productive to development, an argument that will now be further unpacked.

A key element of resilience among agricultural households in Panguma and Kayima has been the risk aversion strategies that they have adopted. Like resilience itself, risk aversion is not a bad thing, as it has enabled households to mitigate the impact of shocks, trends and seasonality, but it has also helped cultivate a reluctance to take calculated personal risks aimed at improving long-term growth and prosperity, which in turn has led to a crippling reliance on external support, and ineffective implementation of long-term plans. Panguma Respondent 41 neatly encapsulates this point, stating:

I want to plant a groundnut garden this year. I want to plant 200 cups\(^{10}\), and if I have a good year, I will be able to harvest maybe 1500 cups…I will reserve 200 cups from the harvest to plant again next year, then some of what is left I will keep for eating, and the rest I will sell…I will use some of the profits to pay for the school fees of my children, and what is left I will use to start a pineapple garden next year, which will provide income for many years to come…That is what I want to do, but it is very hard to start. I have the land, and I can do some of the work, but I have no money for seed and labour. I do not want to involve myself in the bank, I just want to involve myself in farming. I engage myself in agriculture without involving the bank. So I need help from away [outside Panguma] to get started…there is no other way (Panguma Respondent 41, 16 March 2014).

These comments highlight that while the capacity for long-term planning exists, an unwillingness to take on personal risk, which is understandable given the context of vulnerability, severely limits the ability to implement it. Risk, therefore, has become a catch-22, in that it could significantly increase vulnerability if a shock were to occur in the short-term, but without it, long-term improvement is unlikely.

Somewhat paradoxically, the lack of personal risk appears to reduce perceptions of accountability, which in turn results in decision making that prioritises short-term outcomes over long-term outcomes. This was evident in the comments of Key Informant 58 who, when asked why he was using a rice-tiller provided to a

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\(^{10}\) A ‘cup’ is a standard unit of measure for seed and food crops in Sierra Leone. This originated in the post-colonial era and was traditionally known as a ‘butter cup’, based on the ‘Bluebrand’ margarine cans that, once emptied of their imported contents, were used as the smallest measuring unit for rice and other dry goods. The use of ‘butter cup’ as a unit of measure ceased in the 1990s, when different brands of imported margarine, which came in containers of different sizes, broke the monopoly that the British Bluebrand variety had enjoyed (Ferme, 2001). The use of ‘cups’ as a unit of measure, however, has persisted, and is now generally measured using a small aluminium can (Author’s Field Research, 2014).
farming co-operative in Kayima for hauling firewood out of the bush, rather than its intended use, stated:

We do not know what will happen tomorrow, so we need to make use of the resources we have for today. As long as I can provide for my family today, I will have the opportunity to worry about how I will provide for them tomorrow, tomorrow. But if I cannot provide for them today, there might not be a tomorrow. What use is a functional rice-tiller, if I am not here when the rice needs to be tilled? (KI 58, Kayima, 25 May 2014).

A similar rationale was evident in numerous interactions, across multiple spheres, during the course of this research, highlighting a propensity for short-term action, despite the previously stated capacity for long-term planning. While this attitude is largely a consequence of the poverty-induced hand-to-mouth existence that most households live under in Panguma and Kayima, it is exacerbated by the lack of personal accountability. In the situation identified above, for example, Key Informant 58 would be less likely to misuse the rice tiller if he were personally liable, either through ownership, or rental deposit, for its continued functionality. This point is further explicated by the fact that natural capital, particularly land, which the majority of households surveyed claimed some form of ownership over, has undergone little change compared with other forms of capital.

Another issue concerning the prominence of resilience within livelihoods approaches is that being resilient can simply perpetuate the cycle of vulnerability outlined in the previous section. If households only seek to bounce back to a previous state, rather than improve their livelihoods, they will remain vulnerable to the small-scale shocks that persist, as nothing gets better to progressively counter them. Development, on the other hand, emphasises positive change, which results in improved livelihood outcomes, and therefore should reduce the impact of such shocks when they arise (Frerks et al., 2009).

7.3.7 Lack of safety nets

Another key issue preventing improvement in livelihood outcomes is the lack of safety nets available during times of vulnerability. While many households are able to draw on some form of social capital to access food in times of hardship, there are limited formal safety nets available in either community. This exacerbates the situation highlighted in the previous section, in that the cost of failure when taking personal risk is disproportionately high without the ability to fall back on formal safety nets. It also means that a poor harvest, for whatever reason, can take years to
recover from because there are no safety nets to smooth out the troughs, and therefore households are forced to start from an even lower base in the following annual farming cycle. The formal and informal safety nets that do exist tend to be contingent on social capital, in that access requires membership of, or association with specific social and/or religious groups, schools, etc. The World Food Programme (WFP) school feeding programme, which is available in some schools in Panguma, is a prime example in that only those who are able to attend school have access to it. Similarly, a local church group in Panguma had implemented an informal food bank, whereby members could access food in times of hardship. Access to the food bank, however, was contingent on membership of the church in the first instance, and also required the member to have made regular contributions to the food bank, thus marginalised members of the congregation, those most often in need, were excluded.

7.4 What are the key priorities and challenges for future development in Panguma and Kayima?
Thus far, this chapter has addressed the first five questions underpinning this research. Drawing on this, particularly the discussion in the previous section outlining why change within each of the other dimensions contributing to livelihood systems has not translated into improved livelihood outcomes, this section will address the sixth research question, which sought to identify some of the key priorities and challenges for improving future livelihood outcomes in Panguma and Kayima. These, unsurprisingly, are framed as the converse of the problems identified in the previous section, and include promoting growth of the overall asset base, breaking down corruption, breaking down cultural, social, financial and physical barriers to resources, building community capacity, reducing vulnerability, moving beyond the resilience discourse, and generating safety nets for times of hardship. Each of these will now be discussed in turn, and exemplified with potential local-scale interventions, and the role of various stakeholders within them. It must be stressed, however, that the subsequent sub-sections do not constitute an exhaustive discussion of potential solutions to the problems highlighted by this research. Rather, in keeping with the people-centred, participatory nature of livelihoods approaches, it is envisaged that they will provide a framework for discussion with the communities themselves, from which more concrete solutions could be generated.
7.4.1 Promoting growth of the overall asset base

As noted in section 7.3.1, one of the key contributing factors to the limited improvement in livelihood outcomes over the forty year period covered by this research is the general lack of growth of the overall asset base. Promoting growth of the asset base is considerably complex, as there are various interconnected forms of capital involved, and thus an exhaustive discussion here is not possible. As stated in Chapter 2, however, financial capital tends to be the most versatile of the livelihood assets because it can be transferred into each of the other types of capital, and can lead to the direct achievement of livelihood outcomes, such as purchasing food or paying for training (Shivakoti and Shrestha, 2005). Despite this versatility, Serrat (2008) argues that financial capital tends to be the least available livelihood asset of the poor, particularly in rural areas, a factor which is very much evident in Panguma and Kayima, as contextualised in Chapter 5. Given this duality of versatility and scarcity, measures aimed at promoting the growth of financial capital appear to be the most logical starting point to promoting growth of the overall asset base.

One way of improving access to financial capital could be the further expansion of cash crops, such as coffee and cocoa. As noted in Chapter 6, the growing of cash crops has steadily increased in both communities, as NGOs such as the World Food Programme (WFP) have promoted them as a source of income from which food can be purchased at times of shortage (WFP 2008, 2009). Further expansion could generate more household income which, in turn, might be used to improve access to other livelihood assets such as education (human capital), tools (physical capital) or land (natural capital), and therefore contribute to growth of the overall asset base. Similarly, improving crop yields through the use of higher yielding varieties, or more intensive use of swamp land, could lead to a marketable surplus which, again, could generate additional income and ultimately contribute to growth of the overall asset base. In addition, greater efficacy of the FSA in Panguma, and Community Bank in Kayima, could be crucial to improving access to financial capital. Measures aimed at achieving this will be discussed in sections 7.4.4, 7.4.6 and 7.4.7.

While improving access to financial capital is the most logical starting point to promoting growth of the overall asset base in the context of this research, it is certainly not the only way. Many of the measures outlined in the following sections, could contribute to growth of the asset base, in addition to their stated functions. Breaking down social, cultural, economic and physical barriers to resources, as
discussed in section 7.4.3, for example, could lead to growth in all of the various capitals making up the overall asset base. Similarly, community capacity building, as discussed in section 7.4.4, essentially seeks growth in the overall asset base through improving human capital. As such measures are addressed elsewhere, this section will now turn its attention to some of the other priorities and challenges for future development in Panguma and Kayima which were identified by this research.

### 7.4.2 Breaking down corruption

As noted earlier, breaking down the cultural acceptance of corruption, and addressing corruption at all levels, is of critical importance in the pursuit of improved livelihood outcomes. Breaking the corruption chain is a key element in the UN’s Sustainable Development Goals (SDGs), with its importance encapsulated within Goal 16 which, in part, seeks to substantially reduce corruption and bribery, as well as promote access to justice and effective, accountable and transparent institutions (UN, 2015b).

Addressing corruption on a national scale in Sierra Leone is an immense undertaking, and one which is well beyond the scope of this thesis, although the Organisation for Economic Co-operation and Development (OECD, 2015) does provide useful guidelines for reducing corruption in a general sense. They suggest, for example, that improving governance frameworks at all levels of government through the implementation of a public integrity strategy, close scrutiny of high risk areas such as public procurement and large-scale infrastructure projects, and adequate regulation of political party and electoral campaign funding to avoid undue influence and policy capture by narrow private interests, is critical in preventing corruption in countries at all levels of development. The OECD (2015) also states that these measures need to be complimented by parallel efforts to detect and sanction corrupt behaviour, and highlight effective international cooperation; the provision of adequate resources to enforcement institutions; effective institutional frameworks that encourage reporting; and a strong civil society and free media acting as a watchdog of the public and private sector.

Some of these measures can be adapted to help break down corruption, and create a culture of integrity, at the local level in Sierra Leone. Local councillors and chiefs in Panguma and Kayima, for example, need to work towards improving the governance frameworks within their institutions, provide an effective mechanism for reporting corruption within each community, and strengthen the lines of
communication between themselves and the general public. For their part, the general public need to demand accountability from their political leaders, civil servants, and themselves. This could be done collectively through the establishment of formal or informal groups aimed at strengthening civil society, or at the household or individual level through simple actions such as refusing to pay or accept bribes, and reporting any corrupt behaviour experienced or witnessed within the community. To this end, the rapid growth of communication technology in both Panguma and Kayima could be harnessed to improve links between residents and media outlets in larger centres, and to provide a conduit for reporting corrupt practices without fear of reprisal.

In terms of improving livelihood outcomes, measures aimed at reducing corruption at the local level would promote more effective use of public resources and revenue, which in turn could lead to greater agricultural productivity, improve deficient social programmes, and help reduce vulnerability, inequality and, ultimately, poverty.Externally funded projects such as the ABC discussed earlier in this section, for example, could be run more efficiently within a transparent and accountable governance framework. In addition, local efforts to eradicate corruption have the potential to attract a greater share of external aid, as NGOs and government agencies place greater emphasis on transparency and accountability in the implementation of development initiatives.

The biggest barrier to breaking down corruption in Panguma and Kayima, however, is the widespread acceptance of corrupt practices as part of everyday life. As discussed earlier in this chapter, there is a general abhorrence of corruption in both communities, but it is largely perceived to be the preserve of the financial and political elite, and something over which the majority of people feel they have very little influence. Breaking this hegemonic attitude, therefore, is a key challenge that needs to be overcome if corruption is to be successfully confronted at the local level.

7.4.3 Breaking down cultural, social, physical and economic barriers

As discussed in section 7.3.3, the inequitable distribution of resources is often based around traditional hierarchies based on gender, age and social and economic status. Breaking down these barriers, therefore, is crucial to achieving a more equitable distribution of resources. As with corruption discussed above, however, this is an extremely challenging proposition because such hierarchies are so entrenched in socio-cultural norms that there is limited will among the oppressed to affect change,
and even less among those who they privilege. Breaking down these barriers at the community level, therefore, will likely require external inputs in the first instance, and should focus on education as a conduit.

Intra-household food insecurity is the most overt manifestation of gender and age bias presented in this thesis, and is therefore a useful mechanism for highlighting how education could be used to help break such hierarchies down. Community education programmes may be the best way forward in making household members aware of such insecurity, and then motivating them to pay particular attention to the nutritional requirements of women and children. Equitable distribution of food resources could then be incorporated within the school curricula, which would help imbed the messages delivered through community education programmes, but also introduce the concept of equity in practical terms at a young age. More broadly, education could be used to model equity within the community, by making it universally accessible to both boys and girls. Breaking down the inequitable access to resources as a result of social, cultural and economic status, is more complex, and perhaps requires a longer-term approach. That being said, it is difficult to look beyond improved education that incorporates freedom and equity as the most probable solution, as the power of knowledge can be used to challenge the status quo, and shape the social limits that define what is possible (Hayward, 1998; Gaventa and Cornwall, 2001).

In terms of breaking down physical barriers, improvement to feeder roads would significantly increase access to livelihood resources. Recent improvement to the main roads between Freetown and Kenema, and Freetown and Koidu, have dramatically enhanced mobility between the national and provincial capitals, but as discussed in Chapter 5, the roads from Kenema to Panguma, and Koidu to Kayima, are in extremely poor condition. Improvement to these roads would reduce transport time and cost and, in doing so, increase access to agricultural resources, and also enhance market integration, enabling agricultural households in Panguma and Kayima greater access to more lucrative markets (Casaburi et al., 2013). In addition, improved feeder roads would enable better access to other key resources located in the larger centres, such as healthcare facilities and training institutes. Road construction, however, is an expensive undertaking, and some studies suggest that it can actually have a detrimental impact on development. Chambers (1988), for example, argued that the extension of roads and infrastructure in remote rural areas
can have mixed effects on livelihoods, while Porter (1995, 2002) suggests that road construction can have negative flow-on effects in terms of service delivery, market isolation and the marginalisation of social capital networks for communities, especially women, that remain off-road. As such, appropriate local consultation and technology must be incorporated within the planning and construction of improved feeder roads to mitigate any detrimental impacts, and ensure that their sustainability does not become reliant on external support (Padrosa, 2009).

**7.4.4 Building community capacity**

Longley and Maxwell (2003) argue that it is largely through capacity building and reducing vulnerability that livelihoods approaches have the potential to lead to long lasting impacts. Deficiencies in capacity building and omnipresent vulnerability were identified as key reasons why there has been limited improvement in livelihood outcomes in Panguma and Kayima over the 40 year period of this research. It stands to reason, therefore, that building capacity and reducing vulnerability, such that the knowledge and skills to drive and maintain sustainable long-term development exists, are of vital importance to improving future livelihood outcomes in Panguma and Kayima. Capacity building, in particular, could help promote self-sufficiency by reducing reliance on outside sources for finance and expertise, and in turn help the community to identify and manage new development initiatives.

As discussed throughout this thesis, and reinforced in section 7.3.4, there are numerous examples of failed or suboptimal development initiatives in Panguma and Kayima, largely because of a failure to build capacity among the local populations. While not advocating for the resurrection of these failed initiatives, lessons can certainly be learned from them, and utilised in initiatives that are still operational. Existing development initiatives, such as the ABCs and community banking institutions, are an effective place to begin building capacity, as they already have a framework and infrastructure in place, and therefore require fewer inputs than implementing a new project, or restarting a failed one. To this end, initial capacity building efforts should focus on improving the local governance structures and institutional knowledge for existing development initiatives and local organisations, and should then focus on the specific capabilities required for each. The efficacy of the ABCs and other small-scale agricultural mechanisation projects, for example, would be greatly enhanced by improved governance structures in conjunction with
basic mechanical training, and the provision of materials and equipment, to ensure that the machinery provided is adequately maintained and repaired. Similarly, the efficacy of the FSA in Panguma and Community Bank in Kayima, would benefit from more transparent governance, and better community engagement.

As noted in section 7.3.3, both Panguma and Kayima have resident agricultural extension officers, but they were relatively ineffective due to a lack of resources and knowledge. Capacity and expertise among MAFFS extension officers, therefore, needs to be improved, to enable them to work more closely with agricultural households to improve crop yields. To this end, the introduction of high yielding rice varieties on both upland and swamp farms could be a useful intervention. While there have been attempts to introduce high yielding rice varieties in the past, they were largely met with reluctance as people did not like the taste. As discussed in Chapter 6, however, the 2014 field research detected an increasing willingness to eat non-indigenous rice varieties within both Panguma and Kayima.

Beyond local governance structures and specific development initiatives, a number of low-input strategies could be implemented in Panguma and Kayima to improve the capacity of individuals and households to plan and manage their livelihoods in the future. Oxenham et al. (2002), for example, argue that record keeping is a fundamental element of improving livelihood outcomes, because it provides a platform for more informed planning and management decision making. Very few agricultural households in Panguma and Kayima, however, keep any record of their activities, due largely to low levels of literacy and numeracy. In order to build capacity in this area, participatory research methods used in this research, including proportional piling and community mapping, could be adapted to help agricultural households develop simple data notebooks based on pictorial or diagrammatic illustrations, and learn simple enumeration techniques (Minae et al., 2002). They could then record basic inputs, outputs, consumption and sales, and use this data to inform future agricultural decisions, assist with long-term planning, and possibly access micro-credit. Similarly, a series of financial literacy workshops could be held in each community to help agricultural households incorporate financial considerations within their decision making processes. The Community Bank in Kayima, and FSA in Panguma, would also benefit from improved financial literacy within the community, as it may encourage greater engagement with formal banking systems.
The key challenges to community capacity building include getting the communities to buy into these processes, and ensuring that once implemented, the capacity built is transferred, and not simply cultivated by a select few to form a new layer of elite. The ideas presented here do not constitute an exhaustive inventory of the potential for capacity building in Panguma and Kayima, but rather highlight some relatively low-input local-scale responses to some of the key deficiencies highlighted by this research. One commonality to each, however, is that they involve some form of education, and thus improving the formal education system is crucial to sustainable long-term community capacity building. As with large-scale corruption, it is beyond the scope of this thesis to identify solutions to the systemic failure of the education system in Sierra Leone. That being said, local level implementation of universal primary and secondary education for both boys and girls, improved teacher training, and the incorporation of practical skills such as record keeping, budgeting and governance, as well as vocational skills such as tool-making and mechanics, within the formal education system would contribute to sustainable long-term community capacity building in Panguma and Kayima.

7.4.5 Reducing vulnerability
As discussed in Chapter 4, and highlighted earlier in this chapter, vulnerability is omnipresent in both Panguma and Kayima. While the impact that large-scale shocks such as the civil war, and the more recent Ebola epidemic, have on livelihoods is a dramatic representation of this, agricultural households in Panguma and Kayima identified local-scale shocks such as unexpected crop loss due to pests, fire or theft, and family health shocks resulting in the incapacitation or death of one or more household member, as their main sources of vulnerability in the 2014 survey. Further, there has been little improvement in terms of safeguarding against these types of shocks over the forty year period of this research. One way of improving livelihood outcomes, therefore, is eliminating or reducing these local-scale sources of vulnerability which, in turn, will enable greater resilience when large-scale shocks, trends and seasonality threaten livelihoods.

Agricultural households in Panguma and Kayima generally rely on traditional forms of pest control such as fences, traps and scaring techniques, but the persistence of the problem over the forty year period of this research would suggest that these have largely been ineffective. Introducing more effective pest control measures has
the potential to significantly enhance yields which, in turn, would help reduce vulnerability, improve food security, generate income and increase well-being. The existing crop protection paradigm, however, relies heavily on synthetic agrochemical pesticides and insecticides, and has only had a minimal impact on crop production in Africa due largely to the fact that subsistence agriculturalists, who constitute the majority of the agriculture sector in Africa, are often unable to afford or access these imported chemicals (Grzywacz et al., 2013). It is therefore imperative that any pest control measures introduced to Panguma and Kayima are low-cost, easily accessible, and sustainable in the long-term.

One such method for repelling pests is the use of locally available pesticidal plants, such as *Tephrosia vogelli*, as an alternative to synthetic chemicals (Belmain and Stevenson, 2001). Such plants grow in the wild across SSA, but can also be cultivated in human-influenced locations, and are used as crude materials that require only limited processing that is both feasible and economically viable for most small-scale farmers (Dubey, 2011). According to Grzywacz et al. (2013), the positive impact of pesticidal plants on agricultural livelihoods in SSA has been compelling in southern and eastern Africa, and they have provided additional ecosystem benefits beyond pest control, including improvements to soil fertility, and providing increased animal fodder. Belmain and Stevenson (2001) suggest that there has been a long history of similar plants being used for pest control in the West African country of Ghana, while Key Informant 69 (11 June 2014), an agricultural officer with MAFFS, mentioned the pesticidal properties of a tree indigenous to Sierra Leone as a potential avenue for more effective pest control in the future. Targeted cultivation of such plants and trees in Panguma and Kayima, therefore, could significantly reduce crop-losses which, in turn, would reduce vulnerability. This could also promote an avenue of livelihood diversification for agricultural households to process and market the natural pesticides. Finding more effective ways of trapping or repelling larger pests such as cutting grass, rats and birds, or improving access to the resources required to enhance traditional trapping, fencing and scaring techniques, could also help to significantly reduce crop-losses.

Crop production is also significantly impacted by post-harvest loss, primarily as a result of labour-intensive harvesting and processing methods, and poor storage facilities. Another way to reduce vulnerability, therefore, is to improve these processes and facilities. Initiatives such as the ABCs provide a useful framework for
this, in that they aim to improve post-harvest efficiency through the provision of community resources, including rice threshers, rice mills, drying floors and storage facilities. However, as mentioned earlier in various places in this chapter, the ABCs, and other initiatives like them, have been relatively ineffective due to poor governance, and limited capacity to maintain the equipment and facilities provided. To this end, the capacity building outlined in the previous section would go some way to improving the situation. Beyond existing frameworks, improving storage facilities to ensure that they are dry, pest-proof, and lockable, would result in decreased crop loss, and therefore reduced vulnerability (FAO, 1997). In the long-term, harnessing renewable energy sources, particularly solar, to create a reliable electricity supply in Panguma and Kayima should be prioritised to further improve storage facilities. As will be discussed later in this section, significant progress has been made towards a reliable electricity supply utilising solar energy in Panguma since the 2014 field research was undertaken, which could be used as a blueprint for Kayima.

Persistent food insecurity is another significant source of vulnerability in Panguma and Kayima which, as discussed in Chapter 6, is not necessarily a consequence of not enough food being produced, but rather an inability to distribute what is produced equitably amongst all people and at all times (Sen, 1983). The inequitable distribution of food to all people is largely the result of deeply engrained hierarchies based on gender, age, and social and economic status which, as discussed in section 7.4.3 will be difficult to overcome. The inequitable distribution of food across time, however, is partly due to an inability to preserve seasonal foods, and therefore short-term gains could be more achievable. Bananas, for example, are plentiful in January, and mangoes over-abundant in April and May, such that many are simply left to rot on the ground, yet many households face severe food shortages just a few months later in July and August. Basic technologies such as solar drying tents, air dehydrators and greenhouse-type dryers have been used to preserve perishable food in other parts of Africa (see Figure 7.1), and have been found to be effective, portable, cheap, easy to use and hygienic, and have resulted in the significant minimisation of post-harvest food losses (Belessiotis and Delyannis, 2011; Ameko and Achio, 2013). The implementation of similar technologies in Panguma and Kayima, in conjunction with the improvement of storage facilities discussed in the previous paragraph, could significantly reduce post-harvest loss.
which, in turn, could result in decreased seasonal food insecurity, and ultimately reduce vulnerability.

![Figure 7.1: Example of a basic food drying facility in Sierra Leone (Source: Author’s Field Research)](image)

The other key element to reducing vulnerability is improving local healthcare facilities, and making healthcare more accessible, to minimise the incidence, and therefore impact, of household health shocks. Since the field research for this thesis was undertaken in 2014, there have been reports of significant development at Panguma Hospital, including the installation of a solar farm, which not only provides electricity for the hospital, but the whole town, the improvement of hospital buildings, the acquisition of a new ambulance, and more frequent and longer-term residencies of foreign doctors (KI06, via WhatsApp, 26 January 2017). Unfortunately, as noted in Chapter 3, I was unable to visit Panguma during my follow-up visit to Sierra Leone in January 2017, and so was unable to assess the impact of these improvements in the context of this research, but communication with people on the ground in Panguma suggests that they have significantly improved both the quality of, and access to, healthcare in the town. In contrast, there has been little improvement in either the quality of, or access to, healthcare in Kayima. As such, the interventions in Panguma could potentially be replicated or adapted to provide a blueprint for uplifting healthcare in Kayima.
In addition to improving the quality of, and access to, healthcare in Panguma and Kayima, other measures could be taken to reduce the incidence of household health shocks, and therefore reduce vulnerability. Improving nutritional awareness, for example, needs to be given top priority in Sierra Leone, in the way that HIV/AIDS education programmes in southern African countries have helped to raise the profile of the disease and its causes (GEMR, 2013). As discussed in Chapter 6, school feeding programmes have been implemented in some parts of Sierra Leone, but these are not widespread, and only an estimated 77 per cent of girls and 74 per cent of boys in rural areas actually attend primary school (WFP, 2011). Furthermore, serious attention should be given to raising the nutritional status of pre-school age children, in light of Sierra Leone’s appallingly high under-five mortality rate. In addition, improving access to safe drinking water and adequate sanitation is vital in reducing vulnerability induced by household health shocks.

7.4.6 Moving beyond the resilience discourse

Eliminating or reducing sources of vulnerability is not always possible, in which case mitigating the impact of the shocks when they do occur is critical. This is difficult to achieve within the resilience discourse as it does not necessarily promote the growth of livelihood assets, nor strategies that generate improved livelihood outcomes, but rather emphasises coping strategies that perpetuate and reinforce the status quo. Moving beyond the resilience discourse, or fostering a more proactive form of resilience that accepts and adapts to change, therefore, is crucial to the attainment of improved livelihood outcomes, and therefore development (Dovers and Handmer, 1992). As with breaking down socio-cultural hierarchies, however, encouraging a shift in local perceptions is extremely challenging as risk aversion and reactive resilience are deeply engrained in livelihood systems in Panguma and Kayima.

Given that section 7.4 of this chapter seeks to identify the key priorities and challenges for improving future livelihood outcomes in Panguma and Kayima, development that promotes ‘positive change over time’, rather than resilience, is inherent within many of the measures mentioned in the subsequent sub-sections, and therefore could contribute to changing local perceptions. Keeping basic records and improving financial literacy (discussed in 7.4.4), for example, could promote more effective long-term planning, and encourage agricultural households to engage with community banking institutions. This, in turn, could result in a greater willingness
among agricultural households to take calculated risks, and foster accountability, which as discussed in section 7.3.6, are both key factors in promoting and sustaining improvements in livelihood outcomes. For their part, the FSA in Panguma, and CB in Kayima, need to adapt their products to local livelihood patterns to make them more attractive to agricultural households. For example, the majority of agricultural households in Panguma and Kayima would be unable to make a repayment on loans until after crops have been harvested in September/October, yet they would be expected to make monthly repayments throughout the term of the loan within the current micro-credit framework.

Measures aimed at reducing vulnerability discussed in the previous section could also, if successful, help to shift local perceptions beyond the resilience discourse. Extended periods with limited incidents of localised shocks, for example, would reduce the expectation of vulnerability, and enable agricultural households to think and plan longer-term. However, completely eliminating vulnerability anywhere is near impossible, and in communities such as Panguma and Kayima, even reducing it is a long-term prospect. Consequently, creating safety nets for agricultural households to access when shocks, trends and seasonality do impact upon their livelihoods, may be a more effective means of encouraging them to take calculated risks, as the consequences of failure would not be as severe. Potential measures aimed at providing such safety nets will be considered in the following section.

As argued in Chapter 4, large-scale shocks such as Sierra Leone’s civil war, and the more recent Ebola epidemic, have generally perpetuated the vulnerability context in rural Sierra Leone, rather than being the direct cause of it. That being said, there is no doubt that such events, when they do occur, have a dramatic impact on the livelihoods of the rural population. As such, the conditions that led to such impacts cannot be extricated from a discussion on reducing vulnerability. To this end, it is imperative that the factors that contributed to the outbreak and prolongation of the war are addressed, such as corrupt and dysfunctional governance, a lack of transparency within the extractive industry, and limited opportunities for young people; and those that contributed to the spread of Ebola, such as the slow institutional response, uninformed local perceptions, and the inability of the healthcare system to cope, are addressed. While much of this must be addressed more broadly, people at the local level can contribute to transformation through active participation in civil society.
7.4.7 Generating safety nets

As noted in section 7.3.7, the lack of formal safety nets in Panguma and Kayima has contributed to the lack of improvement in livelihood outcomes. The incapacity of the state has left a gap in welfare provision, which neither Panguma nor Kayima have managed to fill as of yet. The implementation of some form of local welfare system, in lieu of the state, where vulnerable households can access resources in times of hardship, could go some way to improving livelihood outcomes by reducing vulnerability and, as mentioned above, encouraging calculated risk. Community and household food security, for example, might be strengthened through the establishment of community-based cereal banks, particularly for rice, which households could draw upon during the hungry season. Such a model has proved to be popular in Sahelian countries where support has been received from governments and NGOs (Plan, 2015). Other examples of community-generated safety nets could include a tool library, to ensure all households have access to the minimum tools required for agricultural work; and free clinics to provide basic health care to the most vulnerable members of the community.

In some respects, community-generated safety nets would simply formalise existing social capital networks, and attempt to free them of the social, cultural, economic and physical barriers discussed in section 7.3.3, to make them universally accessible. Safety nets could help promote equity which, as discussed in Chapter 2, is one of the key concepts within livelihoods approaches to development. One of the key challenges, however, would be generating the will for equity among those who benefit from inequity (i.e. the elite within the community). Without support from them, and access to the networks that contribute to their social capital, there is little chance of community-based safety nets gaining any traction, let alone contributing to improved livelihood outcomes in the long-term.

7.5 Implications for livelihoods research and the SLF

This section addresses the final two questions underpinning this research, which move beyond the case-studies themselves, and seek to identify the benefits and limitations of adding a longitudinal dimension to livelihoods research, and on the balance of such, questioned whether there is any value in doing so. As discussed in Chapters 2 and 3, the addition of a longitudinal dimension to this research attempts to address the deficit of such within the corpus of livelihoods research. As the
previous section summarises, however, little change was detected in livelihood outcomes in Panguma and Kayima over a long period of time, and thus it could be argued that the same conclusions might have been reached had this research followed the prevailing livelihoods research and practice of assessing a snapshot of livelihood systems within these communities in the current context. But the application of the SLF to a specific context over a long period of time has added value to this research in a number of different ways, and in doing so, addressed some of the critiques of the SLF, and livelihoods approaches more broadly, that were discussed in Chapter 2.

First, the application of the SLF over a long period of time has provided a better understanding of systematic transformation due to long-run changes, rather than simply focusing on short-term adaptation, and has helped to identify the events or forces that have led to existing social institutions, structures and processes, rather than treating them as ahistorical. Incorporating an analysis of the broader political economy within the livelihoods approach, as advocated by Scoones (2015), has also aided this, as it has enabled a greater understanding of the political dynamics and economic forces that have influenced people’s livelihoods over time, and helped draw out processes of power and politics more explicitly at the local scale. This, in turn, helps to address the underrepresentation of social structure, power and politics in the SLF described by Moser and Norton (2001), Small (2007) and Johnson (2009), and summarised in Chapter 2.

Secondly, the longitudinal application of the SLF has captured the dynamism in the livelihoods assets over time, rather than viewing them as static which, as Reed et al. (2013) have argued, is symptomatic of livelihoods approaches. This proved particularly useful as it identified subtle shifts between each of the capitals, and a lack of growth in the overall asset base, whereas a snapshot approach would have simply picked up deficiencies in the current asset base of agricultural households in Panguma and Kayima. Understanding the dynamism in livelihood assets over time provides a heightened awareness of the trade-offs which people make between each of the capitals, and the external factors which lead them to do so.

And thirdly, the longitudinal application of the SLF has enabled the assessment of often complex long-term consequences of livelihood adaptations, and has provided a better understanding of the long-term impact that shocks have on livelihoods. The contemporary development discourse of Sierra Leone is dominated by the brutal civil war and the reconstruction efforts that followed. While the conflict
undoubtedly had major implications for rural livelihoods, and indeed continues to do so, the addition of a longitudinal dimension to this research has highlighted that the persistence of small-scale shocks has had equal, if not greater, ongoing long-term implications for livelihoods in Panguma and Kayima. While a more traditional snapshot application of the SLF would have likely picked up the impact of such small-scale shocks, it would not have picked up their long-term persistence.

The common factor to each of the points made in the previous paragraphs is that the addition of a longitudinal dimension has enabled an assessment of ‘change over time’ which, as discussed in Chapter 1, is the very essence of development. Ultimately, the change, and perhaps more crucially the lack of change, that was uncovered through the assessment of livelihoods across time, provides insight into why the change that has occurred in other dimensions of the SLF has not translated into improved livelihood outcomes, and has therefore indicated what change might need to occur if livelihood outcomes are to be improved in the future. Thus, this research not only provides valuable long-term insights on livelihoods in Panguma and Kayima, but also highlights the important contribution that the addition of a longitudinal dimension can make to livelihoods research in a broader sense. This, given that few other examples exist, signifies one of the key contributions of this research.

While these benefits suggest that the addition of a longitudinal dimension can add significant value to livelihoods research, this thesis has also highlighted a number of challenges. These challenges primarily relate to methodological constraints involved in reconciling data collected by different researchers at different times, and within different ontological, epistemological and methodological paradigms. As noted in Chapter 3, differences detected in longitudinal research undertaken over several decades could be attributable, in part at least, to these differences in research perspectives (Crow, 2014). In this instance, one of the key findings was a lack of change in livelihood outcomes, thus two different researchers, with different perspectives and methodological approaches, largely observed the same things at two different points in time. This, however, will not always be the case, and so finding ways of reconciling data collected for different reasons, at different points in time, remains one of the key challenges to a retrospective application of the SLF.

Despite these challenges, however, this research has highlighted that temporal dynamism can be achieved using the SLF through the retrospective application of it
to a longitudinal context. Thus, it is argued that the lack of temporal dynamism inferred by Bryceson (1999), O’Laughlin (2002) and Reed et al. (2013) in Chapter 2, is more a consequence of the way that the SLF is used, rather than any deficiencies in the framework itself. As such, rather than advocating changes to the SLF, this research concurs with Hinshelwood (2003) suggesting the need for more critical flexibility in its use. As Scoones (2015) argued, livelihoods approaches were never intended to offer a new meta-theory for development, but rather start at an appropriate local level, and focus on particular problems. Like development interventions, therefore, the SLF should be adapted to the local context and research parameters in which it is being applied, rather than rigidly and uncritically adopted in its entirety.

One critique of the SLF that this research does not address is its implicit romanticism of poverty and inequality. As noted in Chapter 2, Butler and Greenstein (1999) argue that by emphasising capabilities and assets, rather than deficiencies, the SLF implies that the poor should simply use what they have more effectively to escape poverty, and thus conveys an acceptance of the status quo. In the context of this research, this is reinforced in section 7.3.6 which argues that while resilience is important, it does not constitute development in and of itself, a point exemplified by the fact that there has been little positive change in livelihood outcomes over a 40 year period. Placing greater emphasis on the importance of ‘improving’ livelihood outcomes within the SLF, is needed to help push it beyond a model that appears resigned to resilience, to one which promotes ‘positive change over time’.

7.6 Contributions of this research to development practice, policy and theory

Thus far, this chapter has addressed each of the research questions posed at the beginning of this thesis and, in doing so, it has highlighted the achievement of the research aims. To recap, this research aimed to evaluate continuity and change in the rural livelihoods of Panguma and Kayima over a 40 year period, in order to identify some of the key challenges and priorities for future rural development in Sierra Leone. It also sought to address the perceived lack of temporal dynamism in livelihoods approaches to development, and more specifically the SLF, by exploring the potential benefits and limitations of using it within retrospective longitudinal research. In light of these aims, the key objectives of this research were to expand on the understanding of rural livelihoods in Sierra Leone, and in post-conflict societies in a more general sense; to inform policy on rural development in Sierra Leone,
particularly that which pertains to the improvement of livelihood outcomes in rural areas; and contribute to the broader debates around the use of livelihoods approaches within development research and practice. These objectives essentially highlight the contribution this research makes to development practice, policy and theory, and as such, their fulfilment will be discussed in greater depth in this section.

This study, the work of Tony Binns (1980), and his more recent collaboration with Roy Maconachie (Binns and Maconachie, 2005; Maconachie and Binns, 2007a, 2007b, Maconachie et al., 2007), collectively represent the only longitudinal research undertaken on livelihoods in Panguma and Kayima. As such, one of the key contributions of this research is that it has enhanced our understanding of livelihood systems within these two communities. The identification of some of the key priorities and challenges for future livelihood development in Panguma and Kayima could be incorporated into existing development initiatives, or perhaps form the basis for future development initiatives (as discussed in the following section), and thus this research could have implications for development policy and practice at the local scale in these communities.

In addition to these local scale implications, this research has the potential for wider applicability. The livelihood systems in Panguma and Kayima discussed in Chapters 4, 5 and 6, while not entirely homogenous, can generally be referred to simultaneously. The priorities and challenges identified for future development in Panguma and Kayima, therefore, could be adapted to other rural communities within Sierra Leone, and could inform policy on rural development in Sierra Leone more broadly. While wider applicability is not unique to this research, and indeed could be listed as a contribution of almost any case-study, the longitudinal nature of this research enhances the significance of such a claim. As discussed in Chapter 2, longitudinal studies which explore livelihoods in rural African communities are extremely rare, such that this research adds a distinctive perspective to our understanding of long-term processes of continuity and change in rural livelihood systems in a more general sense. Lessons drawn from these case studies could also, therefore, inform rural development policy and practice in rural communities to a greater or lesser degree in other parts of West Africa, Africa, and possibly even other parts of the developing world.

In particular, this research could help us better understand rural livelihoods and development, and therefore inform development policy and practice, in post-
conflict scenarios. As outlined in Chapter 2, there is a growing nexus between conflict and development theories, which seeks not only to elucidate the impact that conflict has on development, but to better understand the complex relationships between conflict and development. Longley and Maxwell (2003) argue that an understanding of livelihoods and the broader political economy prior to conflict is essential to understanding livelihoods in conflict and post-conflict situations. The 40 year period covered by this research is situated within a broader analysis of Sierra Leone’s political economy, and encompasses the country’s brutal civil war, and thus considers both livelihoods and political economy before, during and after the war. As such, this research provides an insight into the role of livelihoods, and development more generally, in the causation and cessation of conflict, and reconstruction after it, and in doing so, provides a unique empirical contribution to the emerging nexus of conflict and development theories referred to above.

The other key theoretical contribution which this research makes is, as discussed in the previous section, the implications that it has for the SLF, and livelihoods approaches in a more general sense. In essence, this research represents an empirical exemplification of Scoones’ (2015) call for livelihoods approaches to development to embrace a political economy perspective that sees local and wider structural change as part of the same analysis, and Murray’s (2002) argument that livelihoods approaches need to understand changes over a much longer timescale than they have in the past. While it was initially envisaged that this theoretical contribution might manifest in structural changes to the most widely applied of livelihoods approaches, the SLF, this research has shown that it is not so much the framework that needs to change, but rather the way in which it is applied. In this sense, this research concurs with Hinshelwood (2003) in suggesting the need for more critical flexibility in the way the SLF is applied, and has contributed to the attainment of such by presenting a methodological and analytical approach aimed at more explicitly drawing out the temporal dynamism, and processes of power and politics, inherent within people’s livelihoods. In doing so, it has helped to address some of the key critiques levelled at livelihoods approaches over the past two decades.

This research has also made a number of methodological contributions. As noted above, there have been very few longitudinal studies on livelihoods in an African context, so this research contributes to longitudinal methodologies in a broader sense. More specifically, the retrospective application of the SLF used in this
research highlights a particular methodology for incorporating a temporal dimension within a livelihoods approach, and in doing so, provides an empirical embodiment of Murray’s (2002) argument that that a longitudinal dimension can be achieved through a retrospective reconstruction of change over time. This research also contributes to methodologies of conceptualising well-being. Building on Chambers’ (1997a) discussion of ‘responsible well-being’, and Scoones’ (1998) suggestion that the notion of well-being provides a wider definitional scope for the livelihoods concept, this research empowered the people themselves to define well-being, and whether or not it had improved as a livelihood outcome. While taking this approach to well-being was not without its challenges, and clearly needs further refining, it did enable some inferences to be made regarding the improvement, or otherwise, of well-being in Panguma and Kayima, where other methods could not.

Finally, if development is conceptualised as ‘positive change over time’ as outlined in Chapters 1 and 2, then an appreciation of the lack of development in Panguma and Kayima over a long period of time could, in itself, be considered a key contribution of this research. Chapter 6 showed that there has been little improvement in livelihood outcomes over the 40 year period of this research, despite the changes detected in each of the various components of the SLF that were outlined in Chapters 4 and 5, changes which included the intervention of external development actors and initiatives. Thus, the limited improvement in livelihood outcomes could, in part, be considered ‘failed’ development, rather than just a lack of development. This research, therefore, contributes to the broader development literature, by illuminating some of the reasons why development interventions fail to translate into ‘positive change over time’.

**7.7 Future research possibilities**

Section 7.5 highlighted the value in adding a longitudinal dimension to livelihoods research, and that doing so retrospectively, adds flexibility which, in turn, enables the impact of specific interventions on livelihoods to be assessed. To this end, the 2014 field research was undertaken at the time of the emergence of the Ebola epidemic, which provides a unique opportunity to explore the impact that the outbreak had on livelihoods in Panguma and Kayima. As such, during the recent follow-up visit to Sierra Leone in January 2017, preliminary data on the impact of Ebola on livelihoods was collected in Kayima, with the intent of comparing it to the results from the 2014
field research. Unfortunately, as noted in Chapter 3, this visit was cut short due to bereavement, and so data collected in Kayima was unable to be replicated in Panguma. That being said, assessing the impact that Ebola had on livelihoods in Panguma and Kayima, and in Sierra Leone more broadly, remains a key part of the future research agenda.

Future research could also take on board the methodological challenges outlined earlier in this chapter, in order to continue refining methods for incorporating a longitudinal dimension within livelihoods research, and thereby improving its value. Such refinement could be combined with the potential post-Ebola research outlined in the previous paragraph so as to extend the temporal contexts of the existing study, or alternatively, might be implemented in different places using different temporal contexts. Another approach could be to incorporate a more systematic longitudinal application of the SLF over a defined period of time. This could, for example, involve the annual collection of livelihoods data from the same households, over a ten year period.

As discussed in Chapter 3, and again in section 7.4 of this chapter, it is envisaged that this research could be extended to incorporate an ‘action research’ component. This would involve using the conclusions reported in this chapter as a framework for discussions with the local communities in Panguma and Kayima in order to identify and then implement appropriate interventions, and assess their impact on livelihoods over time. Such an assessment could incorporate a more systematic longitudinal application of the SLF, as discussed above, as opposed to the retrospective application employed in this research. Essentially, this approach would shift the focus of this research from assessing continuity and change in the rural livelihoods of Panguma and Kayima, in order to identify some of the key priorities and challenges for future rural development in Sierra Leone – to analysing community-defined interventions aimed at addressing those priorities and challenges and thus, hopefully, promoting ‘positive change over time’ to people’s livelihoods in Panguma and Kayima.

7.8 Final reflections: where to from here…?
In 1976, not long after Tony Binns returned from the field research in Panguma and Kayima upon which this research is based, Ross Coggins (1976) wrote *The Development Set* (see Appendix E), a poem satirizing the contradictions within the
development ‘industry’. In this poem, he is particularly scathing of the inability of the ‘development set’ to translate good intentions into meaningful development:

We discuss malnutrition over steaks
And plan hunger talks during coffee breaks.
Whether Asian floods or African drought,
We face each issue with open mouth.

We bring in consultants whose circumlocution
Raises difficulties for every solution -
Thus guaranteeing continued good eating
By showing the need for another meeting.

... It pleases us to be esoteric -
It’s so intellectually atmospheric!
And although establishments may be unmoved,
Our vocabularies are much improved.

More than forty years later, his critique still retains a contemporary feel.

This thesis began by broadly conceptualising development as ‘positive change over time’, and has concluded, somewhat depressingly, that there has been little such development in Panguma and Kayima over the 40 year period covered by this research. In the words of Karr (1849), ‘plus ça change, plus c’est la même chose’ – the more things change, the more they stay the same. While this chapter has identified a number of priorities and challenges for future development in Panguma and Kayima as a result of this research, in line with Coggins’ (1976) critique, writing about them, and discussing them at conferences and meetings, does not actually constitute development. Section 7.6 outlines the key contributions this research makes to development policy and theory, and highlights the potential contribution that it could make to development practice at the local-scale. But the question remains, how might it contribute to development in a more tangible sense?

The answer may lie in the concept of action research outlined in the previous section. The longitudinal and ethnographic nature of this research has cultivated long-term relationships in both communities which, in turn, have resulted in the accrual of social capital between the researchers and the local communities. The concepts of obligation, trust and reciprocity embedded within such social capital can, as Narayan (1997) argues, be harnessed to achieve individual and community objectives. In a sense, this thesis is the manifestation of an individual objective resulting from this social capital, whereas its contribution to tangible local-scale development would
constitute a reciprocal community objective. Building on this social capital through action research is, therefore, imperative in translating the theoretical and policy-based contributions of this research into tangible local-scale development.

This process, to an extent, has already begun. As noted in Chapter 3, one of the key aims of the follow-up visit to Sierra Leone in January 2017 was to disseminate the findings of this research within each community, and to work with participants in exploring potential avenues of social transformation that have emerged from it. As mentioned, this process was cut short due to a family bereavement, but initial discussions in Kayima indicated a strong willingness among the community to engage. Moreover, this visit incorporated the initiation of a project which seeks to improve educational capacity and food security in Kayima through the construction of a nursery school at the primary school, and a community garden at the secondary school. It is important to acknowledge that this project is in its infancy, and therefore its efficacy in terms of affecting change is unknown. It is also important to acknowledge that it is not a direct result of the findings of this research, nor am I the main instigator of it. Rather, the project is being driven by Tony Binns, and funded by the efforts of many at the University of Otago, and the wider Otago community. That being said, the project did emanate from a focus group discussion held during the 2014 field research (FG01, Kayima, 25 January 2014), in which local teachers outlined the priorities for education in the town, and has drawn on the field experiences of this research in a broader sense. As such, it is an example of the potential of this research to contribute to development in a more tangible way.

It is not the intention of these final reflections to naively position myself, or this research, as a paragon of altruistic endeavor, or the ‘great white hope’ to cure all ills. As discussed in Chapters 1 and 2, development is a highly complex and contested concept, difficult to define, and even more challenging to achieve. Indeed, this research has clearly shown that many of the factors contributing to the lack of improvement in livelihood outcomes in Panguma and Kayima are systemic and deep-seated throughout the country, and will therefore require more than local-scale action research to be broken down. These final reflections, thus, simply represent one way in which this research, which has sought to understand livelihoods in Panguma and Kayima over a forty year period, could contribute to development in these communities in a tangible way. It is my genuine hope that the most significant contribution this research makes is that, in some small way, it leads to ‘positive
change over time’ in Panguma and Kayima. This, after all, is the very essence of development.
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Appendix A
Anonymised list of participants
# List of Key Informants

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<tr>
<th>KI#</th>
<th>Place</th>
<th>Position</th>
<th>Date</th>
</tr>
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<tbody>
<tr>
<td>KI01</td>
<td>Panguma</td>
<td>Teacher/Okada Rider</td>
<td>15 February 2014</td>
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<td></td>
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<td>04 March 2014</td>
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<tr>
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<td>15 February 2014</td>
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<td>16 May 2014</td>
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<td>KI03</td>
<td>Panguma</td>
<td>Carpenter</td>
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<td>Local Chief</td>
<td>17 February 2014</td>
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<td>Panguma</td>
<td>Saw Miller</td>
<td>18 February 2014</td>
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<td>Panguma</td>
<td>Youth Co-ordinator</td>
<td>18 February 2014</td>
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<td>26 January 2017</td>
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<td>Panguma</td>
<td>Former Head Teacher</td>
<td>20 February 2014</td>
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<tr>
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<td>Tongo</td>
<td>Cold Room Chair</td>
<td>21 February 2014</td>
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<td>Tongo</td>
<td>Eastern Radio Manager</td>
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<td>Tongo</td>
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<td>21 February 2014</td>
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<td>Tongo</td>
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<td>21 February 2014</td>
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## List of Focus Groups

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Appendix B
Household Survey
Household Structure (fill out for each household member participating in survey)

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14. Household absences

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15. Where is your farm? (direction/time/distance from home)
16. How big is your farm? (acres/number of bushels/approximation to local landmarks, e.g. School field)
17. What are the main factors that limit the size of your farm?
18. Who owns the land? If not you, how is it allocated, and how do you pay for it?
19. Do you own any other land? (plantation/garden etc.)
20. What crops do you grow?
21. Where do you get your seed from?
22. Can you outline your annual farming cycle? (what jobs do you do, and when do you do them)
23. What time of the year do you work hardest on your farm? (use proportional piling)
24. Which crops take the most time and effort?
25. Do you have any access to agricultural extension facilities? If yes, what services are available, and how often do you use them?
26. Do you hire any labour?
27. Is it difficult to find labour? Why/why not?
28. Has migration to cities exacerbated the labour situation?
29. What tools/implements do you use on your farm?
30. What machinery do you use on your farm?
31. Do you have any storage facilities for your crops? (where/describe)
32. Can you estimate your crop yields from last year? (use proportional piling)
33. What crops do you rely most on for cash and why? Subsistence and why?
34. At what time of year is food scarcest?
35. Who do you sell surplus crops to? (which markets, institutions, individuals)
36. Do you go to the markets yourself? Why/why not? What are the major challenges?
37. Do you sell any crops to miners?
38. Have you benefitted in any other way from mining?
39. Have you ever engaged in any mining? If so, give details (where/time of year/length of time/when stopped/why stopped etc.)
40. Has the impact of mining changed in the time you have been here?
41. Do you think mining is a good or a bad thing? (costs and benefits for household/community/country)
42. Do you own any livestock?
43. Other than agriculture, what other activities contribute to your livelihood?
44. Do you ever receive remittances from friends and/or family members?
45. What was your household income last year?
46. What have you used that money for? (what are the major household costs)
47. On what will you spend any income from this year on?
48. Do you have an account with the Community Bank or FSA? If yes, have you ever taken out a loan?
49. Do you own any transport?
50. What impact have new technologies had on household/community? (e.g. mobile phones/okada)
51. Discuss the importance of tribal systems, chiefdom, religious, and other formal and informal networks for your household, and the impact they have on your livelihoods?
52. What impact have NGOs, private sector, and different levels of government had on your livelihood, and has this impact changed over time?
53. What are the main sources of vulnerability for your livelihoods?
54. What have been the biggest challenges for your household/livelihoods in the past 10 years?
55. What strategies have you used to overcome these challenges?
56. Were you farming here before the war?
57. Did you stay in the town during the war? If yes, what were your experiences, and how did it impact on your livelihood? If no, what were your experiences, where did you go, for how long, and how did you generate a livelihood?
58. What have been the biggest challenges you have faced since the war ended?
59. Was it easy/hard to start farming again after the war? Why?
60. How would you collectively define well-being?
61. Using that definition, has the wellbeing of your household improved since the war ended?
62. What are the key concerns/challenges/priorities for the future? What would help improve your livelihood in the future?
Appendix C
Themes covered in interviews and focus groups
Given the number of interviews and focus groups held in the course of this research, the diverse positions of the participants, and high degree of flexibility adopted within the semi-structured participatory approach, listing the questions asked in each interview and focus group is not possible. It is equally challenging, however, to produce a generic interview or focus group schedule to cover them all. As such, this appendix lists some of the key themes that were explored within these methods. Questions within these themes were adapted depending on the position of the person or group involved, the institution they represented, and the way the interview or focus group progressed. The hospital manager in Panguma, for example, was asked about changes to the hospital over time, changes due to conflict, and future plans for the hospital; whereas the market chair was asked questions specifically relating to the market, including the range of goods available, their origin and cost, and changes to these profiles over time and as a result of conflict. Themes were explored more broadly or specifically depending on the person or group being interviewed as well. Local chiefs and councillors, for example, were asked about livelihood structures in the community in a general sense, whereas a tele-centre owner, or group of okada riders, were asked for specific details of their livelihood.

**General themes for interviews and focus groups in Panguma and Kayima**

1. General demographics of the town (population, age structure, gender structure etc.)
   a. Change to demographics over time.
   b. Change to demographics due to conflict.
2. Livelihood structure of the town (what do people do here? General income levels, living expenses etc.)
   a. Change to livelihood structure over time.
   b. Change to livelihood structure due to conflict.
3. Facilities and infrastructure in the community (e.g. healthcare provision, schools, markets, banking facilities, roads, industry etc.)
   a. Change to facilities and infrastructure over time.
   b. Change to facilities and infrastructure due to conflict.
5. General impact of the war on the town/community, and people’s livelihoods.
6. Personal experiences of the war.
7. Government assistance during the war and post-conflict, and the efficacy of any interventions.
8. NGO assistance during the war and post-conflict, and the efficacy of any interventions.
9. Impact of mining on the town/community, and on people’s livelihoods.
   a. Change to the impact of mining over time.
   b. Change to the impact of mining due to conflict.
10. Specific development projects implemented in the town, and their success or failure.
11. Other transforming structures and processes that have impacted on development in the town/community.
12. Sources of vulnerability.
13. Key development challenges for the town/community.
General themes for interviews with government and NGO officials in Freetown

1. Statistical information on Panguma and Kayima, their respective chiefdoms and districts, the Eastern Province, and the country as a whole (population demographics, climate, economy, industry etc.)
2. General policies in place around rural livelihoods, rural development, sustainability, food security and post-conflict reconstruction in Sierra Leone.
3. The extent to which these policies have been implemented around the country, and their success in meeting their objectives.
4. Specific initiatives that have either been implemented or are being implemented, in the Eastern Province, particularly in Panguma and Kayima, and their success in meeting their objectives.
5. Main constraints and challenges to implementing the above policies and initiatives in Sierra Leone generally, and the Eastern Province more specifically.
6. Future priorities for policy and intervention in rural livelihoods rural development, sustainability, food security and post-conflict reconstruction in Sierra Leone (specific plans for Panguma and Kayima where possible).
7. Policy documents relating to any of the above themes.
8. Anything else that the person being interviewed felt was relevant.
9. Other people or groups that could be relevant to my research.
Appendix D
Ethics Information
Dear Professor Binns,

I am again writing to you concerning your proposal entitled “Post-conflict reconstruction of rural livelihoods in the Eastern Province of Sierra Leone”, Ethics Committee reference number 13/227.

Thank you for your email of 1 October 2013, providing the letter of support and approval from Professor Paul Tengbe, the HOD of Geography at Fourah Bay College, University of Sierra Leone.

On the basis of this response, I am pleased to confirm that the proposal now has full ethical approval to proceed.

Approval is for up to three years from the date of this letter. If this project has not been completed within three years from the date of this letter, re-approval must be requested. If the nature, consent, location, procedures or personnel of your approved application change, please advise me in writing.

Yours sincerely,

[Signature]

Mr Gary Witte
Manager, Academic Committees
Tel: 479 6256
Email: gary.witte@otago.ac.nz

c.c. Professor S J Fitzsimons, Head, Department of Geography
Rural Livelihoods in Sierra Leone: Longitudinal Insights from Panguma and Kayima

INFORMATION SHEET FOR PARTICIPANTS

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you and we thank you for considering our request.

What is the aim of the project?
This project is being undertaken as part of the requirements for a PhD at the University of Otago. The main aim of this project is to explore the impact of time and conflict on rural livelihoods and rural development in Panguma and Kayima, in the Eastern Province of Sierra Leone.

What type of participants are being sought?
The participants in this study are mainly local people from Panguma and Kayima, including community leaders, farmers, miners and traders, as well as officials from the national and provincial governments, NGOs and community groups.

What will participants be asked to do?
Should you agree to take part in this project, you will be asked several questions about rural livelihoods and rural development in Panguma/Kayima. The amount of time involved may vary, but discussions may last up to one hour. Please be aware that you may decide not to take part in the project without any disadvantage to yourself of any kind.

What data or information will be collected and what use will be made of it?
Information about rural livelihoods and rural development in Panguma/Kayima will be collected. If participants agree, the interview will be audio-taped to assist the researcher in interpreting the information provided. The tapes will be destroyed at the completion of the project.

The data collected will be securely stored in such a way that only those mentioned below will be able to gain access to it. Data obtained as a result of the research will be retained for at least 5 years in secure storage. Any personal information held on the participants [such as contact details, audio or video tapes, after they have been...
transcribed etc.] may be destroyed at the completion of the research even though the data derived from the research will, in most cases, be kept for much longer or possibly indefinitely.

The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve your anonymity. You are most welcome to request a copy of the results of the project should you wish.

This project involves an open-questioning technique. The general line of questioning includes rural livelihoods and rural development in Panguma and Kayima. The precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops. Consequently, although the University of Otago Human Ethics Committee is aware of the general areas to be explored in the interview, the Committee has not been able to review the precise questions to be used.

In the event that the line of questioning does develop in such a way that you feel hesitant or uncomfortable you are reminded of your right to decline to answer any particular question(s) and also that you may withdraw from the project at any stage without any disadvantage to yourself of any kind.

Can participants change their mind and withdraw from the project?
You may withdraw from participation in the project at any time and without any disadvantage to yourself of any kind.

What if participants have any questions?
If you have any questions about our project, either now or in the future, please feel free to contact either:-

Jerram Bateman
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University Telephone Number: +64 3 479 8772
Email Address: jerram.bateman@otago.ac.nz

Tony Binns
Department of Geography
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Etienne Nel
Department of Geography
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This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph 03 479 8256 or email gary.witte@otago.ac.nz). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.
Rural Livelihoods in Sierra Leone: Longitudinal Insights from Panguma and Kayima

CONSENT FORM FOR PARTICIPANTS

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage. I know that:-

1. My participation in the project is entirely voluntary;

2. I am free to withdraw from the project at any time without any disadvantage;

3. Personal identifying information [audio-tapes] will be destroyed at the conclusion of the project but any raw data on which the results of the project depend will be retained in secure storage for at least five years;

4. This project involves an open-questioning technique. The general line of questioning includes information about rural livelihoods and rural development in my town. The precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops and that in the event that the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind.

5. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve my anonymity.

I agree to take part in this project.

............................................................................. ..........................................................
(Signature of participant) (Date)

.............................................................................
(Printed Name)

This study has been approved by the University of Otago Human Ethics Committee. If you have any concerns about the ethical conduct of the research you may contact the Committee through the Human Ethics Committee Administrator (ph 03 479 8256 or email gary.witte@otago.ac.nz). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.

11 As discussed in Chapter 3, informed consent within this research was predominantly obtained verbally, with research assistants asked to convey the content of the ‘Information Sheet’ in the participants’ preferred language, before explicitly asking for their consent as per this form.
Appendix E
The Development Set
The Development Set

By Ross Coggins

Excuse me, friends, I must catch my jet
I’m off to join the Development Set;
My bags are packed, and I’ve had all my shots
I have traveller’s checks and pills for the trots!

The Development Set is bright and noble
Our thoughts are deep and our vision global;
Although we move with the better classes
Our thoughts are always with the masses.

In Sheraton Hotels in scattered nations
We damn multi-national corporations;
injustice seems easy to protest
In such seething hotbeds of social rest.

We discuss malnutrition over steaks
And plan hunger talks during coffee breaks.
Whether Asian floods or African drought,
We face each issue with open mouth.

We bring in consultants whose circumlocution
Raises difficulties for every solution –
Thus guaranteeing continued good eating
By showing the need for another meeting.

The language of the Development Set
Stretches the English alphabet;
We use swell words like “epigenetic”
“Micro”, “macro”, and “logarithmic”

It pleasures us to be esoteric –
It’s so intellectually atmospheric!
And although establishments may be unmoved,
Our vocabularies are much improved.

When the talk gets deep and you’re feeling numb,
You can keep your shame to a minimum:
To show that you, too, are intelligent
Smugly ask, “Is it really development?”

Or say, “That’s fine in practice, but don’t you see:
It doesn’t work out in theory!”
A few may find this incomprehensible,
But most will admire you as deep and sensible.

Development set homes are extremely chic,
Full of carvings, curios, and draped with batik.
Eye-level photographs subtly assure
That your host is at home with the great and the poor.

Enough of these verses – on with the mission!
Our task is as broad as the human condition!
Just pray god the biblical promise is true:
The poor ye shall always have with you.

(Coggins, 1976)