

**SLUM ECONOMIES: ECONOMIC ACTIVITY HUBS IN INFORMAL
SETTLEMENTS**

A Case Study of Dar es Salaam, Tanzania

This thesis is submitted for the degree of Doctorate of Philosophy at
Cardiff University

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2017

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ABSTRACT

This thesis seeks to provide a better understanding of the informal economy within informal settlements, particularly the importance of agglomeration economies or economic activity hubs (EAHs), within the context of Dar es Salaam, Tanzania. The research seeks to understand the spatial and economic networks of EAHs as their agglomeration processes, socio-cultural dimensions, and other factors or characteristics to determine potential drivers and operations of these economies. This research also examines the potential of GIS and spatial analysis as a tool in researching the informal economy in developing cities. This investigation was conducted through a case study of EAHs in two informal settlements in Dar es Salaam, Keko and Manzese, using a mixed-methods approach.

In many developing cities, urbanisation and growth coincide with a large informal economy, particularly in sub-Saharan Africa. However, despite research suggesting that the informal economy provides an important source of economic opportunity and development, many policies and planning practices still maintain a largely negative perception, resulting in marginalisation of the working poor. Most existing research on the IE has focused on street traders; however there is little research regarding economic activity occurring within low-income settlements. As the contexts in these spaces is very different, there is a gap in existing research regarding the role of clustering economies within the settlements as well as the wider urban economy.

The research reveals that EAHs play an important role in not only informal settlements, but also the wider urban economy and operate with a high degree of specialisation and complex agglomeration processes. These economies are largely misunderstood or simply overlooked by the regulatory environment. A better understanding of the informal economy and the potential of EAHs may enable policy makers and urban planners to use the concept of informality to alleviate the incidence of working poverty in developing cities.

ACKNOWLEDGEMENTS

Without the assistance and support of different parties this thesis could not have been completed. First and foremost, I want to thank my supervisors, Professor Alison Brown and Dr. Thomas Smith. You guided me throughout the course of this research, through the ups and downs, and I am deeply grateful for that. I am also grateful to all the staff and students at Cardiff University who contributed, through assistance or encouragement, in the completion of this research.

I want to also thank Dr. Colman Msoka and Dr. Herbert Hambati, as well as staff at the University of Dar es Salaam and ARDHI University in Tanzania for your assistance in this research. I am also indebted to the numerous entrepreneurs and government officials who participated in this research. It is my sincere hope that this study will contribute to policy changes or at least a better understanding of your voice and interests and the importance of economic activities occurring within unplanned settlements around the world.

Last but not least I want to thank my family and friends who have supported me. To my friends, you helped me through a difficult and trying time and I thank you for that. To my parents: you have been my constant support and motivation throughout my life. Thank you for always being there for me and being the role models that I can only hope to live up to. Thank you all for your wonderful support and encouragement.

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LIST OF ACRONYMS

BEST	Business Environment Strengthening programme for Tanzania
BRELA	Business Registration and Licensing Agency
CBD	Central Business District
CBO	Community-Based Organization
CIUP	Community Infrastructure Upgrading Programme
DART	Dar Rapid Transit
DSM CC	Dar es Salaam City Council
EAH	Economic Activity Hub
GDP	Gross Domestic Product
GIS	Geographic Information System
GNI	Gross National Income
GNP	Gross National Product
GPS	Global Positioning System
IE	Informal Economy
IHSS	Institute for Human Settlement Studies
ILD	Institute of Liberty and Democracy
ILO	International Labour Organization
IMF	International Monetary Fund
IS	Informal Settlement
ISI	Import-Substitution Industrialization
LAEBA	Latin America/Caribbean and Asia/Pacific Economics and Business Association
LGA	Local Government Authority
LGSP	Local Government Support Programme
MAS	Movement towards Socialism
MKURABITA	Property and Business Formalization Programme
MLHSD	Ministry of Lands, Housing and Human Settlements Development
NBS	National Bureau of Statistics
NEM	New Economic Model
NEP	New Economic Policy
NGO	Non-Governmental Organization

NHSDP	National Human Settlements Development Policy
NLP	National Land Policy
NPES	National Poverty Eradication Strategy
SCP	Sustainable Cities Programme
SDP	Sustainable Dar es Salaam Project
SSA	Sub-Saharan Africa
SUDPF	Strategic Urban Development Planning Framework
TANU	Tanganyika African National Union
TRA	Tanzanian Revenue Authority
TZS	Tanzanian Shillings
UCLAS	University College of Lands and Architectural Studies
UDSM	University of Dar es Salaam
UN	United Nations
UNDP	United Nations Development Programme
USD	US Dollars

Chapter 1: Introduction

1.1. Introduction

This study is motivated by an observation of the prevalence of the urban informal economy (IE) within Dar es Salaam and a lack of existing research regarding spatial understanding of the IE or agglomeration economies occurring within informal settlements. It is situated within wider concerns amongst academics, professionals, and international policy-makers on the effective management of the urban environment in cities within developing countries and the extent of exclusionary practices towards the IE. Recent research has begun to highlight the usefulness of GIS technologies in development research but it has not been utilised as a way to understand the spatial distribution of the IE or economic activity within informal settlements. There is an abundance of literature on the IE related to street traders but little attention has been given to the economic activity taking place within informal settlements or its role within wider urban and global economic networks.

1.2. The Research Problem

In many world regions, urbanisation was a product of economic modernisation and the shift from agrarian to industrial modes of production, but it is argued that in sub-Saharan African cities, urbanisation has been decoupled from economic growth (Turok & McGranahan 2013). Most cities in the developing world are characterised by a large informal economy; however, this is particularly prevalent in sub-Saharan Africa where the urban poor rely on informal commerce as a major source of jobs (Brown et al 2010). According to the ILO (2005), sub-Saharan Africa has the highest percentage of the working poor of any developing region. The widespread prevalence of the IE is caused by rapid urbanisation, political upheaval, and uncoordinated governance (Brown et al 2010). Limited job availability has resulted in self-generated informal activity. Despite the prevalence of the IE and the economic support it provides to many urban inhabitants, existing policies and planning practices still respond to the IE with a largely negative perception (Bromley and Mackie 2009; Mackie et al 2014).

A significant body of research on the IE has focused on street traders, informal entrepreneurs that are amongst the visible in developing country cities because they operate in public spaces or on streets. However, there is a lack of research regarding economic activity occurring within informal settlements. Traditional planning and urban development policies have taken an unwelcoming or neglectful attitude towards informal settlements, often trying to either exclude them from planning strategies or demolish and redevelop them (Kombe 2005). However, an increased understanding of the economic activity occurring within informal settlements has shown these settlements to be a source of “economic development, entrepreneurship and self-employment” (Debrah 2007:1063). While there has been some research on the economic activity and livelihoods in informal settlements, a large gap exists in the understanding of the role of clustered economies within these settlements, their networks and links to the wider urban economy, which this thesis explores.

1.2.1. Current Policy and Conceptualisation of the IE

Over the years, there have been many attempts to define and conceptualise the IE in order to better understand the phenomenon and find a ‘solution to the problem’. According to Feige (1990), the term “informal economy” refers to economic activities that are “excluded from the benefits and rights incorporated in the laws and administrative rules covering property relationships, commercial licensing, labour contracts, financial credit and social security systems.” The term ‘informal economy’ is defined to include both businesses that operate outside formal regulation systems, and workers without secure contracts (Chen 2012).

The conceptions and beliefs surrounding the IE have changed drastically since Keith Hart adopted the term in the 1970s (Debrah 2007). The initial focus shifted from trying to explain the terminology and the concept of two dual economies, to understanding the phenomenon, until finally the concept was transformed into a tool used by academics and governments for poverty alleviation and policy making. Early debates regarding the IE characterised the concept as either ‘marginalist’ or

'structuralist'. According to Meagher (1995), the 'marginalist' characterisation considers the informal market as "peripheral," or existing on the outskirts of society, only capable of meeting basic needs for survival. However, Meagher (1995) argues that informal economic activity is rising in the developing as well as the developed world as a result of its dynamic nature under stressful economic conditions. It is this dynamism that causes some authors to see the IE as a potential sector of economic growth that competes with the formal sector (Portes and Castells 1989).

Employment issues in developing countries, including sub-Saharan Africa, have continued to trouble governments over the last few decades. Poverty is extensive, and government policies and research on the subject tend to focus on the formal sector of the economy, despite the fact that large sections of the population earn a living through the informal sector (Debrah 2007). Some academics, such as Terence Jackson (2012) argue that the IE is a more appropriate form of development in Africa, as it is closer to the local community culture. The Western influence on the formal economy acts as a barrier by encouraging conformist behaviour, rather than individual economic growth. In African cultures and tribes, individual entrepreneurship, as found in the IE, is encouraged over that of formal entrepreneurial activity (Jackson 2012). As a result, the informal economy of Africa is much larger than that of the formal economy.

Because of the high proportion of the working poor, many sub-Saharan African countries, including Tanzania, are attempting to transform the informal sector by formalising it through registration in order to create legitimate economic activity. The Human Settlement Development Policy, Land policy, and the Land Act are the major strategies for the government of Tanzania in addressing the regularisation of informal settlements (Kombe 2005). However, the context of Western development cannot be applied in sub-Saharan Africa. The cultures, histories and environments are significantly different; therefore existing Western planning and development policies have not worked in these regions. A new conceptualisation of the IE that fits the context of the region is necessary in order to alleviate the high levels of working poor.

1.2.2. IE Within Informal Settlements

Research on the IE, particularly street trading, has focused on the streets and markets of the urban centre and yet much IE activity takes place in the informal settlements of the developing world cities. The contexts in these spaces is very different and there is a clear need to investigate the IE within informal settlements, and the extent to which clustering, or economic activity hubs (EAH), adds value to individual enterprise and the urban economy.

Despite the prevalence of the IE in cities of the global south, and research on its scale and economic contribution (Chen 2012; Lyons et al 2012), there is a significant gap in knowledge about spatial drivers that affect the location and growth of the IE, and the clusters or hubs of economic activity found in informal settlements. There has been early work on the spatial distribution of street trading in Latin America, but this is not recent. In addition, there has been research on the clustering economies found within 'slums', such as the work by Benjamin (2004), highlighting the economic opportunities for the working poor that clusters of small firms have provided in Indian cities. In Mumbai, for example, the slum of Dharavi is a major centre for the recycling industry. There is existing literature on both the spatial distribution of street trade and the existence of economic opportunities within informal settlements; however research on cluster economies within informal settlements is limited, especially in African cities. There is a need to understand the spatial distribution of economic activity within informal settlements and the importance of clustering and proximity in order to better understand the economic relationships and processes that provide employment and opportunities to, what is probably, a significant percentage of the working poor.

This thesis thus examines 'economic activity hubs' (EAHs) – **the agglomerations of informal economic activity within low-income and informal settlements** – a spatial phenomenon which appears to be important, but is as yet poorly understood. The thesis examines the extent to which spatial clustering permits economic

specialisation in specific sectors or skills, allows/provides economies of scale by increasing accessibility to consumers and resources, or provides social and economic support, e.g. for childcare or to cover emergencies such as illness. The traditional theory of the IE argues that it is developed out of necessity and a means of survival. More postmodern debates argue that the IE is developed as a means of economic opportunity, as a response to local and global economic structures with extensive links to the formal sector (Cross 1998; 2000). This research seeks to provide a better understanding of the processes involved within EAHs and determine the potential importance of such agglomeration economies either as a means of survival or economic opportunity through case studies of EAHs within two informal settlements in Dar es Salaam.

1.2.3. The IE of Dar es Salaam

Much of the existing literature regarding the conceptual understanding of the IE focuses on South America, creating a bias in current theories and therefore adding further value to this study in terms of developing understanding derived from the African context. Dar es Salaam was chosen for this research to examine and illustrate the situation of informal settlement growth and management in a sub-Saharan African city. Dar es Salaam is an appropriate focus for the research because of the scale of informal settlements, and because some knowledge exists about the composition and scale of the IE (ILD 2005). The city of Dar es Salaam is the largest and most populated city in Tanzania. Since its independence, the development of the city has been difficult as a result of rapid population growth and lack of resources necessary to meet the population demands (Kironde 2000). Estimates suggest that 70% of the population of Dar es Salaam lives within informal settlements (World Bank 2012) and 98% of businesses are informal (ILD 2005). In addition it has been suggested that Dar es Salaam could be Africa's next megacity (Boyle 2012) with a current population of about five million and a growth rate estimated between 4.5 and 8% per annum over the last decade (World Bank 2012).

Academics and professionals fear that continued urban sprawl, escalating poverty and deterioration of the built urban environment are leading to an urban crisis in Dar es Salaam (Kombe 2005). The formal economic sector cannot provide employment opportunities for the rapidly growing population in the city; therefore, the rapid urbanisation decoupled from economic growth has been stipulated as a cause for the growth of the IE and informal settlements within Dar es Salaam (Turok and McGranahan 2013; UN Habitat 2010; World Bank 2002). Planners and policy-makers in Tanzania are actively trying to find solutions for the rapid growth of the IE and informal settlements, a significant phenomenon shaping urban growth, but existing planning models and guidelines have proven unsuitable to handle the city's increasing urban challenges and concerns (Kombe 2005). Although the cities of sub-Saharan Africa must be different due to environmental and cultural differences, Dar es Salaam's substantial IE must share characteristics with the IE and informal settlements of other cities. Therefore, it acts as a representative case study to research EAHs.

1.3. Research Objectives

The overall aim of this research is to provide a better understanding of the IE within informal settlements, particularly the importance of agglomeration economies (EAHs), within informal settlements and their role within the wider urban economy. The term 'economic activity hub' (EAH) has been adopted for the purposes of this thesis to identify a specialised sectoral agglomeration operating within an informal settlement. The research seeks to understand how EAHs emerge, and how they function, including spatial, economic, and socio-cultural characteristics. This research also seeks to examine how GIS technology can provide analytical tools to analyse spatial characteristics of EAHs.

The detailed objectives of the research are thus:

1. *To examine and develop the concept of an Economic Activity Hub (EAH) – as a basis for understanding the concentration of informal economic activities found in informal settlements of low-income cities – by examining both debates on the economic rationale of the informal economy, and discussions on the spatial characteristics of local economies.*

There is no current definition or concept of EAHs, as this is a largely unstudied phenomenon, particularly in African cities. In order to develop the concept, the research will examine existing debates regarding the IE – the definition and explanatory theories to determine the processes that drive the creation and change of the IE and what factors might influence its' geographies and spatial clustering. The review will also examine the global and modern neoliberal conceptions of the informal economy, examining the regional dynamics of the IE to explore different processes of formation. Existing literature examining the geography of the IE and local economies may provide insight into potential spatial drivers and characteristics of economic activity within informal settlements. Agglomeration economies and economic networks may help in determining the driving factors and operations processes of spatial clustering that might influence EAHs. The analysis of these existing debates and discussions will help in the development of the concept of EAHs for the research.

2. *Through a case study of EAHs in two informal settlements in Dar es Salaam, Keko and Manzese:*
 - a. *Through a spatial analysis to provide a visual representation of the spatial and economic networks of EAHs, both to determine potential drivers and operations of these economies, and to examine the potential of GIS and spatial analysis as a tool in researching the spatial patterns of informal economic activity in developing cities;*

The spatial patterning and processes of the IE have largely been ignored as this activity is seen as random and unorganised, simply utilising whatever space is

available (Augustijn-Beckers et al 2011). However, research on spatial clustering in the informal settlements of India has shown that these economic processes are more complex than previously believed. Recent research has also highlighted the usefulness of GIS analysis in development research by mapping out growth patterns of informal settlements in Dar es Salaam (Augustijn-Beckers et al 2011) but this has not yet been applied to informal economic activity. The use of GIS technology in this research may provide insight into the spatial structure and operations of EAHs.

- b. To deepen the understanding of EAHs through examining EAH agglomeration processes, the socio-cultural dimensions of EAHs, the wider economic linkages and value chains of the EAHs, and policy drivers influencing their formation;*

The formation and operations of EAHs cannot be fully understood by spatial analysis alone. Qualitative analysis will be added to the spatial analysis, as it is necessary to provide a more detailed understanding of EAHs, making this research unique. The research will seek to understand why EAHs emerge, e.g. as a choice or constraint. Rapid urbanisation decoupled from economic growth may proliferate the prevalence of EAHs within informal settlements in Dar es Salaam due to necessity, or EAHs may act as a potential economic driver pulling people to the settlements in search of economic opportunity. Perhaps entrepreneurs choose to operate informally in order to increase profit and avoid regulation as suggested by the structuralist theory. On the other hand, they may have had no choice as a result of limited employment opportunity and strict government regulation as suggested by de Soto's (1989) theory of the IE. The research will also seek to understand how they function, including: social, economic, cultural, ethnic, political and spatial characteristics. Finally the research will examine the economic linkages and value chains associated with the EAHs in order to understand their contribution to broader economic networks, both within the urban economy and the global economy.

- 3. Through the analysis to refine the concept of EAHs, and contribute to the concept of informality to provide policy-makers with a greater understanding of the phenomena.*

Traditional policies in planning and development have marginalised informal and micro-entrepreneurs, with displacement and exclusion increasing their vulnerability (Bromley and Mackie 2009; Brown et al 2010; Mackie et al 2014). Informal settlements are often characterised by lack of basic services and infrastructure, which may also hinder the growth and development of the EAHs operating within them. By examining the role and contribution of EAHs, it may be possible to refine the concept of the IE within informal settlements and provide policy-makers and urban planners with a better understanding in order to assist the growth and development of EAHs, potentially alleviating the incidence of working poverty in sub-Saharan African cities in the future.

1.4. Structure of the Thesis

The remainder of the thesis is ordered as follows: Chapter 2 discusses the existing theoretical resources in order to provide a clear understanding of existing knowledge surrounding the topic and situate the study within the existing body of literature by identifying current gaps and provide a basis upon which the research is structured. Chapter 3 provides the overall research approach and methodology that will guide the study. Chapter 4 examines the historical, locational, and political context within which the research is situated. Chapters 5 and 6 present the spatial and qualitative analysis and findings from the research. The overall conclusion of the research and recommendations resulting from the findings are presented in Chapter 7.

Chapter 2: A Review of the Literature

2.1. Introduction

This review examines existing academic debates surrounding the primary themes of this research, particularly relating to the informal economy (IE) and its spatial distribution and characteristics. By examining literature around these subjects, the review will serve as a basis for identifying gaps in the analyses of economic activity in informal settlements, and for defining and developing the concept of economic activity hubs (EAHs). The literature provides important contextual information for the understanding of EAHs; however, as this spatial phenomenon has not been previously examined, this literature review will also establish the framework for detailed analysis through the case studies.

The literature review is structured into four main sections, each examining important themes relating to a contextual understanding of EAHs. Section 2.2 focuses on the broader 'informal economy' – its definitions and explanatory theories in order to examine potential drivers of EAH formation. This section will also focus on the global and modern neoliberal conceptions of the IE, examining the regional dynamics of the IE to explore different processes and global value chains. This chapter aims to explore potential causes of EAH formation by providing a better understanding of the IE and to understand the potential relationships with the formal economy as well as the reasons behind avoidance of government or formal regulation. The review seeks to understand potential formation processes of EAHs within a modern neoliberal context and what is unique about their formation in sub-Saharan African cities. The review will make connections between the literature on the informal economy, its conceptualisations and economic and political drivers, and the existing literature on its geography. In doing so, the research seeks to make the case that this emerging sector is an increasing phenomenon, becoming more widely accepted and indispensable for the economy as a whole, particularly in developing countries.

Section 2.3 examines the geographies and spatial clustering of the informal economy (IE) and the factors that influence the formation of agglomeration economies in order to define the concept of economic activity hubs (EAHs). As there is little

existing literature on the spatial geography of cluster economies within informal settlements, the review will include debates on the spatial geographies of street traders, examining the drivers of locational choice, e.g. spatial characteristics and adaptive capacity in order to provide an understanding of the characteristics of EAHs. As part of understanding the spatial characteristics of the IE and EAHs, it is necessary to examine literatures on economic enterprises with locational drivers, focusing on clustering and agglomeration economies, as well as economic networks and value chains. As there is a gap in the existing literature regarding the spatial dimensions of the IE, particularly with reference to the IE and agglomeration economies and value chains, the literature review thus draws on wider literature on economic clustering and value chains, in order to help define that gap in relation to the IE. An improved understanding of the geography of the IE is important in providing insight for policy makers in understanding the economic growth potential of these hubs.

Due to the nature of the research, it was also necessary to provide an understanding of informal settlements. Section 2.4 examines the definition of informal settlements, and characteristics as mixed use spaces for living and work, that might provide insight into the characteristics of EAHs. Much of the literature identifies the importance of underlying social networks and identities in both formal and informal economic processes as well as informal settlements, and therefore EAHs as well, Section 2.5 will examine the relevance of social capital to informality. The final part of the review, Section 2.6 defines the concept of EAHs used in this research. By defining EAHs, the research thus identifies the gaps that need was examined in the research to develop an understanding of the concept. Section 2.7 provides a chapter summary, outlining key concepts that guide the fieldwork and contribute to the definition, identification, and understanding of EAHs, which this research seeks to provide.

2.2. Conceptualising the Informal Economy

This review presents a background on the IE in order to provide context for economic activity hubs (EAHs), or agglomerations of small-scale or micro-enterprises within

informal settlements. The review does not make the assumption that all micro-enterprises in informal settlements are informal, but rather that the most relevant literature describing the small-scale, flexible operations, and social support networks that characterise many enterprises within informal settlements is made up of a body of work on the IE, which now examines economic, regulatory and social dimensions of the IE in a globalised world economy. Due to the informal nature of EAHs within the study area of Dar es Salaam, it was necessary to examine and understand the IE in order to understand the factors that influence the formation and operation of EAHs.

The nature of the IE makes it a difficult concept to define coherently and analyse statistically. A plurality of definitions and methodologies for measuring the phenomenon exist, resulting in a range of theoretical perspectives, as well as political policies and actions based on various studies and limited data. A more modern perspective illustrates a changing conceptualisation of the phenomenon, particularly in the duality between the informal and formal. Moving away from the dualist ideology of separation between the informal and formal economies, studies in developing and developed countries have found that the two often work together and both play an important role in the wider urban economy. Although much of the literature discusses the formal and informal economy as polar opposites, this research recognises that in practice there is often a continuum of degrees of informality; for example, micro-enterprises or small-scale businesses may not be formally registered, but may pay fees to the municipality, implying partial acceptance of their activities.

Modern conceptualisation of the IE has led to a growth of literature, particularly with relation to the political and economic aspects of the informal sector. Less clear from the literature, is the extent to which spatial agglomerations of small-scale and micro-enterprises, such as those found in informal settlements, enhance individual enterprise and make significant contributions to the wider urban economy. Understanding the IE and the processes that result in its shaping and formation will assist in understanding the processes that shape and form EAHs.

2.2.1. The Nature and Role of the Informal Economy

Defining the Concept

The following section examines theories in the literature defining the phenomenon known as the informal economy (IE) in order to develop an understanding of economic activity hubs (EAHs) and examine the processes that drive their creation. Due to the plurality and heterogeneity of the phenomenon, informality has many conceptual inconsistencies (Sindzingre 2006). Multiple definitions and theories have emerged in an effort to measure the phenomenon statistically and understand it coherently, though the literature highlights the failure in determining a consistent definition, illustrated by the wide range of terms used to refer to the phenomenon: shadow economy, black market, underground economy, untaxed, and the informal sector (Andrews et al 2011; Castells et al 1989; Schneider 2005; Sindzingre 2006). All of these definitions and terms have come to be referred to heterogeneously as the 'informal economy', generally understood as unregulated economic activities, either legal or illegal, and unregulated employment arrangements, existing outside of formal or government regulations (Sindzingre 2006).

The core commonality of the IE definitions is the importance placed on the formal-informal dualism. This dualism is associated with the model of economic dualism; a two-sector model developed by Arthur Lewis is his analysis of unlimited labour migrating over time from agricultural, or traditional, employment to industrial employment, or capitalism (Lewis 1954). According to Lewis (1954), poor, traditional economies of developing countries could be transformed into modern, capitalist, or 'formal economies' with the right economic policies and resources. During this process, the traditional or 'informal sector' would be absorbed into the formal economy. However, this optimistic view regarding the informal economy gave way to the growing concerns regarding persistent and widespread unemployment during the 1960s and 70s (Chen 2012). As a result, the International Labour Organisation (ILO) began implementing 'employment missions' in developing countries, the first sent to Kenya in 1972. The ILO report (1972) found that the informal sector had not

only persisted, but had also multiplied and included large enterprises within both the informal and the formal sector.

In 1993, the International Conference of Labour Statisticians (ICLS) defined the 'informal sector' as employment or production that occurs within unincorporated and/or unregistered enterprises (Chen 2012). However, in 2003, this definition was expanded to include informal employment in both formal and informal enterprises (Chen 2003). The International Labour Office (ILO), the International Conference of Labour Statisticians (ICLS) known as the Delhi Group, and the global research and activist group 'Women in Informal Employment: Globalising and Organising' (WIEGO) have been working together to expand the statistical definition of and incorporate specific types of informal employment within the informal sector (Chen 2012). Distinctions are made between an enterprise-based definition of the 'informal sector' that includes:

- Private unincorporated enterprises, or enterprises owned by individuals or households with no legal financial separation between production activities and other activities of the owner,
- Enterprises producing goods and services, including possible households or domestic or personal services, that are meant for sale or barter,
- Enterprises with employment size is below a certain amount based on national criteria, and/or they are not registered under national legislation, and/or their employees are not registered, and
- Enterprises in the non-agricultural sector, which includes "secondary non-agricultural activities of enterprises in the agricultural sector" (Husmanns 2003: 4).

The broader employment-based definition of the 'informal economy' includes both the 'informal sector', and 'informal employed' defined to include:

- i) Informal self-employment, which according to Chen et al (2006: 2) includes any "employers in informal enterprises, account workers in informal enterprises, unpaid family workers, and members of informal producer's cooperatives", and
- ii) Informal wage employment, which includes "employees without formal contracts, worker benefits, or social protection employed by formal or

informal enterprises/employers or by households” (Chen et al 2006; Chen 2012).

Both definitions assist in understanding EAHs, potentially explaining the various types of activity within an EAH, whether it is enterprise-based or employment-based and its role within the EAH.

In the past, various methodologies were used to quantify informal activities (Bromley 2000; Sindzingre 2006). However, the compilation of data on a worldwide level reveals many obstacles in statistically measuring the phenomenon and its trends (Charmes 2012). In order to better measure the informal economy, methodologies for collecting data are still being developed. As a result of the work done by the ICLS, ILO, and WIEGO, countries are now beginning to collect relevant data in order to measure the informal economy based on the agreed statistical definition (Charmes 2012). Recent efforts to define and measure informal employment have uncovered an increasing amount of data at the national level in all regions, suggesting a phenomenon that is fully embedded within prevailing economic structures and not a transient event. Moreover, its scale is significant: according to Chen et al (2006), informal enterprise-based employment comprises a larger portion of the informal economy than wage employment in developing countries, ranging between 60-70% of informal employment. However, the literature does not fully debate degrees of formality, and – importantly for this research – does not examine whether EAHs within informal settlements might account for the development of enterprise-based informal employment or whether this form of informal employment accounts for the increase of IE activity within developing country cities.

Based on the various definitions of the IE, the IE can be generally understood as any unregulated economic activity operating outside of formal or government regulations. The general definition of the IE as economic activity operating outside formal or government regulation helps in understanding the processes of EAH formation for the purposes of this research. The distinction between enterprise-based and employment-based definitions might help in examining the types of enterprises and employment within EAHs. In addition, the explanatory theories

regarding the IE, such as dualism, should be examined as potential drivers of EAHs, whether as a constraint in the inability to join the formal sector, or potentially as a choice in providing more economic opportunities or increasing income. The literature does not examine whether agglomeration economies or informal settlements account for the larger number of enterprise-based informal employment or the increase in informal-formal linkages and needs to be examined within the research in order to account for the role of EAHs both within the IE and in the wider urban economy.

Perspectives on Informality: Schools of Thought

The following section examines the explanatory theories regarding the informal economy (IE), the reasons for its formation as well as its relationship with the formal economy in order to provide insight as to the processes that drive the creation of EAHs and their link to the wider urban economy. Theories regarding the IE affect the understanding of the relationship between the formal and informal sectors and influence government and planning policy.

There are four dominant schools of thought regarding the causes and nature of the informal economy: the Dualist school, the Structuralist school, the Legalist school, and the Voluntarist school (Chen 2008). In addition, a more recent theory popularised by the American academic John Cross (1998; 2000) based on his research in Mexico advocates economic “pluralism”, or the recognition of the coexistence of the informal and formal economies. All five schools of thought have their own conceptions about the informal economy, as well as ideas to accommodate it (Chen 2008). These theories could provide insight as to the drivers of EAH formation, providing a better understanding of the relationship between EAHs and the formal economy, exploring their link to the wider urban economy, as well as potential reasons for avoidance of formal or government regulation.

i. Dualist school of thought

The dualist school of thought is one of the earliest theoretical approaches to the IE and is largely out-dated, but provides several insights that may assist in conceptualising EAHs. This approach identifies the IE as a necessity in order to provide employment to those who could not find employment within the formal sector. The ease of entry into informal employment and the ideal of enterprise-based self-employment continue to draw unskilled workers to the informal sector. However, the dualist theory approached the IE as a binary, or dual, phenomenon that operates separately from the formal economy.

The dualist school of thought is based on the foundational model created by Lewis (1954), which explored the existence of two economies, the traditional, or 'informal' and the capitalist, or 'formal'. Lewis' development model argued that 'informal' economies would gradually move into 'formal' employment as agricultural productivity continued to decline in favour of industrialisation. However, this theory was proved incorrect as the informal sector continued to grow and formal employment could not meet the needs of workers. In the 1970s the ILO popularised the dualist school of thought, asserting that the informal economy is a disadvantaged section of society that exists as a means of survival for the poor and unemployed. It is distinct and separate from the formal economy and provides income for the poor and financial security in times of crisis (ILO 1972; Tokman 1978). These informal activities share common features, such as: ease of entry; reliance on indigenous resources; family ownership of enterprises; small scale of operations; labour-intensive and adapted technology; skills acquired outside the formal school system; and unregulated and competitive markets (Bromley 1978; ILO 1972).

The ILO report (1972) on Kenya, which first defined the term 'informal sector' was important in that it was the first time that an authoritative organisation had conceptualised informal economic activity. Although ideas have since moved on, the report argued that the cause of informal activity and exclusion from modern economic opportunities was due to two imbalances between 1) population and

industrial employment growth, and 2) skills and the structure of modern economic opportunities. According to the ILO (1972) these imbalances were a result of both external and internal causes. The 1972 study found that global influences had begun to create a desire for 'modernisation'. While these influences were not seen as negative, the rising expectations for modernity of a newly urbanising workforce did not have the means to attain such modernisation (ILO 1972). Internal imbalances were also noted within the study, finding that the expansion of urban areas had occurred at the expense of rural and other regions, creating wider gaps between regions and various groups within the population (ILO 1972). These imbalances have resulted in a lack of employment opportunities, in turn causing expansion of the informal sector.

Theorists (Hart 1973; ILO 1972) argue that workers within the informal sector earn less than their equivalents within the formal sector, and that those working within the informal sector would enter the formal sector if there were no barriers. Therefore, informal activities had little or no links to formal activities and operated as a distinct sector of the economy. According to Hart (1973), the primary difference between formal and informal activities was essentially based on 'wage-earning' and 'self-employment', with most informal workers assumed to be self-employed, as well as the instability associated with informal employment. Hart (1973) noted in his research on Ghana that urban wage earners were experiencing a decline in income, while commodity prices continually rose. As a result, debt among the poor was rampant, with many working in multiple jobs or overtime. Hart (1973) argues that capitalism offers a 'means of salvation' from this lifestyle and that should the chance arise, these informal sector workers would happily join the formal sector.

Dualist theorists argued that the governments should create more employment opportunities in order to alleviate the expansion of informal activities. The ILO (1972) advised developing country governments actively to promote the formal sector by "redistributing incomes, assets, and employment opportunities" (Gerry 1987). By providing employment opportunities, credit, and skills training to informal business operators, as well as basic infrastructure and social services, it was thought that

informal activities would gradually be absorbed into the formal sector. Multiple factors such as the massive scale of urban growth, and the lack of local government resources, and misconceptions about the role of the informal sector prevented this scenario from taking place in many countries.

The central point of the dualist position was that the informal sector had a developmental role as a way to provide income to the poor and unskilled members of society who could not find employment within the formal sector (Dana 2011). The ease of entry into the informal sector, along with skills learned outside formal education, and the ideal of self-employment continued to attract workers, despite the instability and high-risk labour (Bromley 1978; Hart 1973; ILO 1972). This theory is largely out-dated, having been overtaken by subsequent theoretical perspectives, though the basic premise of the IE's formation out of necessity and consequent attraction to the ideal of self-employment could be considered as a potential driver to the formation and growth of EAHs.

ii. Structuralist school of thought

The structuralist school of thought examines the flexible nature of the IE operating outside regulation, and the linkages between informal and formal sectors. However, these linkages may allow political and economic forces to marginalise the poor, e.g. when formal companies decrease production costs by outsourcing work to informal operators who earn lower wages. On the other hand, the IE potentially offers greater income for small-scale agglomeration economies due to low production costs and the ability to specialise their business. Therefore, informal workers may choose to operate informally within EAHs, rather than join the formal sector as a way to generate more income.

The structuralist school emerged as an alternative and more nuanced approach than the dualist school of thought. For example, Portes and Castells (1989) argue that informal activities are an integral component of urban economies, and can often generate more income than the equivalent employment in the formal economy.

Structuralists argue that, while some informal activities may be a result of desperate need for subsistence, the informal economy is a group of relationships of production and exchange, but not a synonym for poverty (Portes and Castells 1989). Roberts (in Portes et al 1989) defines the informal economy as “a set of economic activities often, but not exclusively, carried out in small firms or by the self-employed, which elude government requirements such as registration, tax and social security obligations, and health and safety rules.” By reducing input and labour costs, informal activities are able to increase the competitiveness relative to firms and businesses operating within the formal sector (Portes and Castells 1989).

Structuralists argue that informal activities are linked throughout many levels of society and the formal economy, a sharp contrast to the dualist perspective (Moser 1978; Portes and Castells 1989). Rather than two separate economies existing within one society, there are a series of complex interactions, which create a distinct economic structure (Portes and Castells 1989). Multiple studies have found linkages between formal and informal activities. In a study of Guadalajara, Roberts (in Portes et al 1989) found that several manufacturing industries in the formal sector subcontracted work to smaller shops within the informal sector. In this way, the larger industries were able to avoid unnecessary overhead costs and taxes. In Bogota, Moser (1977) found that the informal and formal sectors worked in synchronicity with one another to create a retail market known as the Plaza San Juan. Here, informal shops sell local goods to other locals and have become integrated into the urban economy of Bogota (Moser 1977). Even in developed countries like the U.S., work is often contracted out to illegal immigrants, making such work informal (Sassen-Koob in Portes et al 1989). These findings contribute to the theorisation of EAHs later in the research.

Structuralists find that formal companies often take advantage of informality: the operating costs are low compared with the tax and social security obligations of formal activities; entry to small-scale entrepreneurship may be much easier than in the formal economy; and local relationships provide flexible access to “labour, credit, and economic information” (Roberts in Portes et al 1989). The small-scale activities

associated with the informal economy have provided a more flexible form of activity that provides relief from the impersonality of bureaucracies (Portes and Castells 1989). As a result, capitalists deliberately promote the acceptance of informal trade as a way to drive down production costs (Long-Solis 2007). Structuralists, therefore advocate policies to protect worker's rights and prevent future exploitation (Moser 1978).

The structuralist theory has provided many insights into the IE; however, the approach still largely views the IE as a form of survival that requires an external solution, rather than examining the possible solution the IE offers in itself by providing employment when the formal sector cannot meet increasing population demands. The advantages described within the structuralist theory, such as the flexibility of working outside of the formal sector as well as the minimisation of production costs are probably key features of EAHs within informal settlements. The linkages between the formal and informal sector need to be examined within EAHs, which draw on unskilled or low-cost labour within EAHs. Thus lack of government regulation potentially allows for greater earnings as a result of specialisation within small-scale agglomeration economies, though this is not discussed in the literature and will also need to be examined.

iii. Legalist and Voluntarist perspectives

The legalist and voluntarist proponents share the perspective that informal workers operate within the IE to avoid taxes and regulation, but do so for differing reasons. According to the legalist perspective, informal workers operate informally as a result of the constraints placed on them by government regulation, making it difficult to join the formal sector. The voluntarist perspective argues that informal employment is chosen as a way of avoiding taxes and government regulation. Rather than a result of punitive or inappropriate regulation, informal entrepreneurs choose to operate outside of the formal sector in order to retain the income lost from benefits associated with the formal sector such as health care or social security. This voluntary choice of operating informally provides a further context for understanding

the drivers of EAHs as IE workers choose a way of earning income outside the formal sector.

The legalist school is based on the work of economist Hernando de Soto developed during his studies in Peru in the 1980s. De Soto (1989) argues that the informal sector is a response to excessive costs and barriers imposed by government regulation, which prevents micro-entrepreneurs from formalisation, stifling the industrious potential of entrepreneurs (Chen 2008; de Soto 1989). As a result of excessive government rules and procedures, many micro-entrepreneurs choose to operate informally in order to avoid costs and time associated with government registration (de Soto 1989).

In a study of Lima, Peru, de Soto (1989) found that opening a textile factory in the formal sector was much more difficult and costly than to start an informal micro-enterprise. It took his team almost an entire year to obtain a legal business license and cost over thirty times the average monthly minimum wage (de Soto 1989). The results of the study found that costly and time-consuming bureaucratic procedures acted as barriers, preventing the people from joining the formal market (de Soto 1989). The study found that within Lima, 56% of all businesses, 86% of public transport, and 60% of grocery retailing was carried out through the informal sector (de Soto 1989). Overall, the informal sector produces almost 40% of the country's GDP, but the businesses within the sector have limited access to formal property ownership or the business licenses necessary to formalise (de Soto and Orsini 1991). Ray Bromley (2000) echoes de Soto's concerns in his study of street vending and the regulations preventing formalisation. Bromley (2000) argues that street vending regulations are incremental and in many developing countries are not understood by either the vendors or government officials, making formalisation almost impossible.

De Soto (1989) argues that the only way to reduce the expansion of the informal sector in countries such as Peru is to change the legal system by simplifying current regulations. The legal institutions must "lower the cost of producing and obtaining wealth and to give people access to the system so they can join in economic and

social activity and compete on equal footing” in order to create a “modern market economy” (de Soto 1989). By simplifying bureaucratic procedures, governments would encourage informal workers to join the formal sector and create an even more competitive market. However, according to Bromley (2000), regulatory reform would be difficult and time-consuming. In addition, many of the wealthy (operating formal businesses) do not desire such changes, as it would create competition within the formal market.

De Soto’s approach has been widely influential in government policy development, in many countries including Tanzania (Kyessi and Kyessi 2007; Kyessi and Sekiete 2014; Meagher 1995). It has also, however, been widely critiqued, on the basis that his theories are too generalised and oversimplify the causal relations of legalisation, tenure security and poverty alleviation, which constitute his argument (Gilbert 2002; Otto 2009). According to Otto (2009: 179), experts in the areas of land tenure and development studies such as Bruce, Quan, and Payne found his theories “full of sweeping generalisations that oversimplify or are even misleading.” These experts argue that de Soto has ignored empirical literature regarding previous efforts made towards the goals he advocates and new research studies have refuted his central argument (Otto 2009).

The Leiden project, a comparative socio-legal research project that examines the potential and effects of de Soto’s initiatives through case studies in eight countries in Asia, Africa and Latin America, was undertaken by a group of Dutch researchers in 2003. The study examined how de Soto’s initiatives for land tenure legalisation evolved in the context of national laws, to what extent they contributed to land tenure security, whether they reached the poor, and to what extent they resulted in economic advantages (Otto 2009). The study found that: land registration is insufficient to provide legal security; land regularisation programmes are utilised by wealthier social classes while the poor are excluded, and land registration fails to realise its promise to the poor of increased access to credit as their key to economic growth (Otto 2009). Other field studies have also refuted de Soto’s claims, concluding that: de Soto’s initiatives do not work in environments where legal and

administrative institutions are not very effective as in many developing countries; that many poor people prefer informality to formalisation for social, economic, and political reasons, and that legalisation often does not lead to increased access and use of formal credit (Gilbert 2002; Otto 2009). Although the literature on IE formalisation is limited as most legislation attempts based on the legalist solution have failed, similar reservations are likely to apply to the effectiveness of formalising the IE and EAHs.

The voluntarist school of thought argues that informal workers deliberately choose to work within the informal sector in order to avoid taxes and government regulation (Chen 2012). However the voluntarist theory does not consider informality to be a response to bureaucratic restrictions, but instead sees informal entrepreneurs as deliberately choosing to operate illegally in order to benefit from the aversion of government taxation and regulation associated with formal entrepreneurship (Chen 2012; Maloney 2004). According to Maloney (2004), the informal labour markets of developing countries actually function better than most realise, and these workers have voluntarily joined the informal sector because “they would not obviously be better off in the formal jobs for which they are qualified.” Working within the informal sector is optimal for many workers based on their preferences, level of human capital, and the labour productivity of the formal sector (Chen 2012; Maloney 2004).

According to Maloney’s (2004) findings from Mexico, transition data suggests that the workers who voluntarily joined the informal sector also gained by leaving wage-employment. By working within the formal sector, employees enjoy benefits such as health care and other protections, but these benefits come at a cost to the worker, lowering their earned wages. In addition, health care in developing countries is often inefficient and lacking in quality (Maloney 2004). Self-employed micro-entrepreneurs are able to avoid costs and taxes by working outside the formal sector, even though it may cost them some benefits (Maloney 2004). Maloney (2004) argues that by eliminating these inefficiencies in health care and other benefits will reduce the incentive for workers to join the informal sector.

However, Maloney's argument does not consider the existing involvement of the State or formal economic actors within the IE. In a critique of the voluntarist arguments, Chen (2012) suggests that the voluntarist theory does not recognise the linkages between the formal and informal sectors. Rather, this theory argues that by avoiding taxes, regulations, and other costs, informal enterprises create an unfair advantage compared to formal firms (Chen 2012). As a result, these informal enterprises should be absorbed into the formal sector in order to increase the tax base for the country and reduce unfair competition to formal business (Chen 2012). Maloney (2004) believes that by increasing the size and productivity of the formal economy, the standard of living for workers will increase throughout the economy over a long-term period. By doing so, there will be fewer incentives to join the informal sector, gradually causing it to decline over time.

The advantages described by the legalist and voluntarist schools provide some insights into the formation processes of EAHs, which may result partly in response to inappropriate and unattainable regulations and standards, but the legalist perspective is difficult to apply to this research due to its basis in the government policies in Peru. However, government restrictions as well as costs to the informal operators associated with formalisation within Dar es Salaam should be examined in order to determine whether they affect the creation of EAHs within informal settlements as a way of avoiding a difficult formalisation process. The voluntarist theory provides an interesting point of view to the study of EAHs as a creation by self-employed micro-entrepreneurs as a way to earn a higher income than would be possible working within the formal sector, particularly in a city like Dar es Salaam where such a large portion of the economy is informal.

iv. John Cross and the Pluralist school of thought

The pluralist theory proposed by John Cross and others (Cross and Morales 2007) argues for a more accepting attitude in response to the IE and coexistence of the formal and informal sectors rather than exclusion. According to the pluralist theory, the IE is integral to the structure of urban economies and has many attributes that

contribute to economic development: the IE alleviates excess unemployment, resulting in overall economic growth; the IE meets market demands of income groups that cannot be met by the formal sector; and the IE offers a way to meet the ideal of self-employment and avoidance wage-employment or loss of control associated with formal sector employment. The IE and EAHs offer the potential for more flexibility within the wider urban economy and an opportunity for specialisation within employment sectors. Based on the pluralist theory, informal workers may choose to operate within EAHs due to these advantages, and the acceptance of the IE and EAHs could provide a solution to increase economic productivity.

Cross (2000) argues that the informal sector is a solution for development where the formal sector has failed, a rational response to current postmodern economic structures. Previous theorists maintained the modernist belief, envisioning economic development through a technocratic process of efficiency and control of industrial processes (Cross 2000; Cross and Morales 2007). The modernist belief was based on the celebration of the 'Euro-American' value system and the global economic system that followed the Fordist/Keynesian economic order (Brenner and Theodore 2002; Cross 2000) – a system emphasising the “centralisation of production and distribution in the hands of mega-corporations built around the theory of economies of scale” (Cross 2000: 34). However, this approach did not allow for flexibility and innovation and failed to absorb the burgeoning urban workforce (Cross and Morales 2007). As a result of better communications allowing the rapid movement of goods and capital, firms were able to outsource and internationalise elements of the production chain leading to a postmodern phase of development (Cross and Morales 2007). While this meant that some costs of production and labour were hidden within the informal economy, it also gave IE operators scope for agency and control of their work (Cross and Morales 2007). In contrast, postmodernism is seen as a movement by the individual to regain control that has been lost to mass production and industrialism promoted by the modernist ideal, which provides greater flexibility and advantages within the economy by offering “multiple layers of reality” through the acceptance of the IE (Cross 2000).

Cross accuses modernist theorists of 'formalism' or "the tendency to analyse the 'problems' of the informal sector as if it were a bad copy of the formal" (Cross 2000: 43). For years, there has been a debate on how to best 'solve the problem of informality'. In their study of street vending in Mexico, Cross and Morales (2007: 7) found that the modernist approach was to "ban or over-regulate street vendors while also redesigning urban spaces so that street vending could no longer exist". While this was successful in developed countries where some employment choices exist, developing countries have had varying success due to lack of alternative sources of livelihoods and the resulting evasion or resistance of informal workers, or street vendors (Cross 2007). A prevailing philosophy is formalisation through the creation of more formal salaried jobs as well as registering informal enterprises and regulating informal jobs (Chen 2012). Through formalisation, members of the IE would gradually begin to move over to the formal sector, which should stop its rapid growth. However, the philosophy of formalisation raises many questions as to whether it is a viable option, such as: where and how will salaried jobs for IE workers be created; can developing governments afford the necessary skills training for informal workers to obtain formal working positions, and how will they solve the problem of informal enterprises that seek to avoid taxes and other regulations?

Unlike the other perspectives, postmodernists such as Cross (1998) view the difference between formality and informality as a mix of costs and benefits, both with their own advantages and disadvantages, and advocating co-existence rather than exclusion. Cross (2000: 47) further argues that the attempts to "formalise the informal sector will threaten the very factors that made it successful." The pluralist view in the debate of informality argues that the informal sector should be promoted and embraced rather than formalised. In the 20th century, radical reformists and populists argued that the informal sector provides a relief from modern capitalism and industrialism, allowing for the preservation of both the environment and the humanity (Gerry 1987).

Pluralist theory thus sees the re-emergence of street vendors as a postmodernist response to exclusionary economic development, and an attempt to regain control

and individuality in livelihoods that has been lost to the formal sector's mass-production and large firms (Cross 2007). Self-employment and small firms are a way to avoid wage-employment and the loss of control associated with it (Cross 2007). In addition, informal entrepreneurs provide a market for various income groups that cannot be met by formal businesses (Anand 2009). A study by Jayant Anand (2009) in Citlallicalli, Mexico found that formal supermarkets and informal retailers were able to coexist by meeting the demands of different income groups. In some cases, such as Belo Horizonte in Brazil, the municipal government has introduced policy initiatives promoting flexibility in regulating street vendors in recognition of their importance in ensuring food security for the urban poor (Rocha and Lessa 2009).

In the United States, policy makers once saw street markets as an important tool to alleviate problems of unemployment but these were later removed to make way for capitalist ventures such as shopping centres (Cross 2007). Today, these markets are again playing an important role in the economy by offering independence and entrepreneurship with low operating costs for low-skilled workers (Cross 2007). These 'micro-businesses' within the informal sector help alleviate excess unemployment and improve economic growth (Cross 2007). Therefore, rather than seeking a solution to integrate the formal and informal economies, Cross (2007) and other advocates of the pluralist theory suggest that policy makers create ways for these two sectors to "intersect while existing side-to-side".

The formation of the IE within developing countries as a postmodernist response to over-regulation and the failings of the formal sector provides another explanation for the development of EAHs. In addition, self-employment or the creation of micro-enterprises gives workers the opportunity to retain control of their own livelihoods by operating outside the formal sector, and to consolidate the economic sector in which they work. Were governments to accept these EAHs by enabling the informal sector, the informal and formal sectors might better coexist and increase economic productivity for both sectors as well as the GDP on a national level. There is a need to examine whether workers choose to operate, or at least justify or analyse their own current operation within EAHs as a result of unemployment within the formal sector,

as a result of economic opportunities arising from market demands within EAHs, or potentially as a way to retain control in a growing economic sector, or indeed a combination of all of these factors. It is also useful for this research to examine the value chains in which EAHs operate, in order to determine their contribution to the wider urban economy, and to assess the pluralist approach that acceptance of the IE and the coexistence of the formal and informal sectors benefits the wider urban economy.

2.2.2. Regional Dynamics of the Informal Economy

Globalisation and the IE

Globalisation has been identified by the literature as a key driver of urbanisation and, therefore, the growth of the informal economy (IE). While Section 2.2.1 of this literature review suggest integral and complex relations between the formal and informal sectors, the globalisation literature suggests that distinct regional differences may influence the growth of the IE. The following section thus examines the global influences and regional dynamics affecting the characteristics of the IE in order to explore the wider role of economic activity hubs (EAHs) and identify further gaps in the literature. The literature identifies two ways in which globalisation to some extent depends on informalisation despite a largely negative view of globalisation and its affects on the IE with particular concern for the inability of small-scale and micro-enterprises to compete with large firms (Carr et al 2000; Yuzon 2005). The IE offers a solution to the negative affects of globalisation by providing income opportunities for uneducated and unskilled labour as well as those who have been displaced and cannot find work in the formal sector; and providing cheap goods and labour during times of high inflation as a result of globalisation. This review will now examine both the positive and negative affects of globalisation in order to explore wider influences on the growth and formation of the EAHs.

For the purposes of this review, the Todaro and Smith (2012: 564) definition of globalisation will be employed – a “process by which the economies of the world become more integrated, leading to a global economy and, increasingly, global

economic policy making”. The term ‘globalisation’ can elicit different responses. Globalisation is an exciting idea suggesting new business and trade opportunities or even the rapid growth of knowledge and innovation leading to new technologies; however, the idea also raises concerns about the further expansion of inequalities both within and across countries. Todaro and Smith (2012) point out that countries such as the US and those in Europe have gained international dominance while developing countries are left behind. In addition, environmental degradation may be further enhanced and social and cultural identities may be forgotten. Globalisation can be both beneficial as well as detrimental, and those in the informal sector of developing countries are at the highest risk of being affected by it. Therefore, this section will examine not only the positive and negative aspects of globalisation, but also how it affects the informal economy and its development.

It is important to note that there is a difference between ‘globalisation’ and ‘internationalisation’. ‘Internationalisation’ refers to the expansion of economic activities across the globe and is not a new phenomenon as it began with colonisation during the 17th century (Gereffi 1999). ‘Globalisation’ refers to the integration between globally dispersed economies (Gereffi 1999). With the establishment of the World Trade Organisation (WTO) in 1995, the integration of the global economic system was permanently fixed in history (Sachs and Warner 1995). The WTO supervises and liberalises international trade by providing a framework for negotiating and formalising trade agreements and then enforces adherence to those agreements (Sachs and Warner 1995). The integration of world economies can have a positive outcome in some situations. For example, China and India have used globalisation as an opportunity to develop at a much faster rate than other developing countries (Lyons et al 2008; Todaro and Smith 2012). According to Biles et al (2007), the globalisation of food retailing should theoretically provide small-scale agricultural producers in developing countries, such as Mexico, with opportunities to reach new markets and international supply networks that were never before possible. The growth of ‘export-oriented industrialisation’ has made globalisation and development synonymous for many countries (Gereffi et al 2001). The growth of national production systems across national borders through foreign direct

investment (FDI) and international subcontracting has only deepened the integration of the world economy (Gereffi et al 2001).

Carr et al (2000: 124) argue that there are three particular areas of concern associated with increasing global market relations: 1) “transnational mobility of capital and relative immobility of labour”, 2) “transnational mobility of large companies and relative immobility of small and microbusinesses”, and 3) “the restructuring of production and distribution into global value-chains” or ‘global assembly lines’. Carr et al (2000) argue that the increasing separation among income groups can be clearly recognised in globalisation – notably that those with high incomes, or ‘capitalists’, have an advantage over those who do not possess the means to easily “move across borders”, or ‘labour’. As a result, employers can take advantage of ‘labour’ which can easily be substituted by labour in other nations (Carr et al 2000). Therefore, capitalists continue to make money while economic competition lowers labour costs, and puts pressure on governments to lower labour standards to attract foreign direct investment. This polarisation of society as a result of globalisation has been a growing concern in Bolivia (Schroeder 2007). As a result, many Bolivians have rejected globalisation while others embrace it, leading to tensions within society as well as the government (Schroeder 2007).

Yuzon (2005) and Carr et al (2000) argue that micro-enterprises are at a disadvantage compared with large transnational companies. Most micro-enterprises have no way of competing in the global market (Carr et al 2000; Yuzon 2005). The only way to compete is to reach a viable scale attained through extensive networking, or the creation of agglomeration economies (Carr et al 2000; Yuzon 2005). Information technology impacts the flexibility in the production process and can increase the distance between the global networks, resulting in greater international competition (Carr et al 2000; Yuzon 2005). For example, the liberalisation of banks and multinational corporations taking over small or rural banks results in the constriction of credit and loans, leading to higher production costs and lower profit margins for micro-enterprises (Yuzon 2005). Finally, the informal sector does not have the protection of government legislation and reforms (Yuzon 2005). Small-scale and

informal enterprises are often ignored in terms of policies and services and often have to pay bribes to government officials in order to continue their micro-enterprises (Yuzon 2005). The informal sector is hit the hardest by economic shocks of globalisation; however, the IE may be flexible enough to respond positively to the effects of globalisation.

According to Yuzon (2005), the informal sector 'absorbs' any 'victims' of globalisation, such as displaced workers, uneducated and unskilled workers, or the educated who cannot find work. The informal sector provides income opportunities when there are no available jobs in the formal sector (Yuzon 2005). For example, Whitson (2007) argues that following the economic crisis in Argentina in 2002, rates of informal work rose to record rates. The lack of employment opportunities in the formal sector and an increase in probationary work were a result of the flexibilisation strategy employed in global supply chains (Whitson 2007). In addition, the informal sector acts as a 'safety net' for the formal sector (Yuzon 2005). Globalisation can often result in high-inflation and real-income fluctuation for formal employment. The informal sector provides cheap goods and labour that help reduce the impact caused by globalisation and can provide additional income opportunities within the formal sector (Yuzon 2005). The informal sector also assists the poor households by expanding purchasing abilities beyond the formal sector, contributing to the overall economy (Yuzon 2005). Therefore, despite the negative impact globalisation might have on the IE, there is also a positive attribute that must be examined.

As a result of the effects on the informal sector, some recent protection policies have been developed for micro-enterprises and their workforce. The ILO has established labour standards as a guide to worker protection and widely promoted the 'decent work' agenda (Carr et al 2000). In addition, the creation of trade unions of informal economy workers, such as the Self-Employed Women's Association (SEWA) of India, Textile, Clothing, and Footwear Union (TCFUA) in Australia, and UNITE in Canada have begun organising workers to argue for and provide their own protection and build international alliance and advocacy among informal workers (Carr et al 2000). Roberts (2005) argues that, while there are negative impacts of globalisation, it has

inadvertently promoted greater awareness among governments and international organisations to the need for changes in social policy, as well as the spread of information of rights among 'low-income populations'.

The literature has provided context regarding the role of globalisation and its effects on the informal economy and provided insight into potential connections between globalisation and the formation of EAHs. Globalisation depends on the IE as a way of 'absorbing' displaced workers or unskilled labour and provides cheap goods and services to help reduce high inflation caused by globalisation. The IE is also an incubator of small-scale innovation and flexible production processes. This could explain the development of EAHs both as absorbing the excess of labour made unemployed as a result of globalisation processes, and as an economic opportunity in meeting the market demands of flexible production processes, and allowing the self-determination of their workforces. However, globalisation can also exacerbate polarisation among income groups, and puts micro-enterprises at a disadvantage. Globalisation may cause an increase in the emergence of agglomeration economies in developing countries as specialisation by small-scale or micro-enterprises in local markets might provide international firms with a source of cheap goods and labour. On the other hand, it might decrease the occurrence of agglomeration economies within the informal sector because these micro-businesses cannot compete with international firms.

Processes of globalisation and political pressure are constantly changing the conceptions and contexts of the IE, and therefore the agglomeration economies, or EAHs, that develop from such internal or external pressures. While in several cases like China, where globalisation has been said to be synonymous with development (Gereffi et al 2001), this does not appear to be the case in sub-Saharan Africa (Turok and McGranahan 2013). The following section will therefore examine the existing theories behind the lack of development and economic growth in sub-Saharan Africa, where the IE has filled a gap by providing livelihoods for the majority of the urban workforce.

Urbanisation without Economic Growth: The Case of Sub-Saharan Africa

During the 1960s and 1970s, many newly independent African countries experienced rapid urban growth. Many African nations received aid from former colonial powers, increasing the population at a historically rapid pace while economic development could not be sustained (Fox 2012). Rural-urban migration began to increase rapidly as people sought a better lifestyle, and colonial controls on the movements of rural populations were lifted. However, due to political instability as well as poor education, policies and institutions could not meet the needs of such large populations, resulting in an increase in the IE. “With globalisation comes the inherent push for urbanisation” as global socio-economic progress becomes more important than quality of life (Fay and Opal 2000: 24).

As newly independent countries struggled with the legacy of post-colonial economies, little was done to develop the educational and economic capacity of the African population, and rapid urbanisation took place as previous harsh controls restricting the movement of rural populations were lifted (Acemoglu et al 2001; Fay and Opal 2000). Based on this ‘post-colonial’ debate, African countries were typically ‘under-urbanised’ compared to relative economic growth as a result of colonial “repression of rural-urban migration” (Fay and Opal 2000: 3). During the 1960s, most countries expressed a positive vision of the future and the potential for industrialisation based on extensive natural resources (Fay and Opal 2000). Then, between 1975 and 1995, the average African country’s urban population grew by 5.2% every year, while the GDP fell at a rate of 0.66% per year (Fay and Opal 2000). The governments of these countries could not have met the needs created by such rapid population growth. As a result, “up to two thirds of African urban dwellers live in informal settlements with inadequate transport, water, sanitation, electricity, and health services” (Fay and Opal 2000: 2).

Sub-Saharan Africa’s low rate of economic development has been attributed to a range of factors including bad government policies, corrupt institutions, political instability, poor education, underdeveloped financial systems, and insufficient

infrastructure (Easterly and Levine 1997; Sindzingre 2005). Easterly and Levine (1997) believe the ethnic diversity, caused by the disintegration of already diverse ethnic regions by colonial powers, contributed to the lack of economic development associated with urbanisation. Easterly and Levine (1997: 1241) argue that “ethnically fragmented economies may find it difficult to agree on public goods and policies” and “may be politically unstable”. Nigerian social scientist, Claude Ake (1996) found that much of the political instability and conflict among various ethnic groups and nationalities occurred following independence from Europe. Such ethnic polarisations result in the acceptance of sub-optimal economic policies and postponed economic stabilisation (Easterly and Levine 1997). Such was the case in Ghana during the 1980s. Ethnic tensions resulted in overpricing of cocoa through the desire to control the market and led to peak informal market premiums (Easterly and Levine 1997). In 1982 the ‘black market’ exchange rate of cocoa was 22 times the official exchange rate (Wetzel 1995). However, the rising prices of cocoa resulted in a decreased demand for exports from Ghana, decreasing from 19% of the total GDP in 1955 to 3% by 1983 (Easterly and Levine 1997).

Urbanisation is a global process and driven by advances in technology that supported a growth in industrialisation and demand for labour that fuelled rural-urban migration. In many regions of the world, particularly Latin America and Asia, rapid urbanisation has typically been associated with economic development. However, this has not been the case in sub-Saharan Africa, where urbanisation appears to have been decoupled from economic growth (Fox 2012; Turok and McGranahan 2013). A growing population in major cities in low and middle income countries means the relationship between urbanisation and development has become a major policy concern and many global development organisations, such as the World Bank, have begun to recognise the role urbanisation plays in economic and social progress (Turok and McGranahan 2013). China is considered a prime example of how urbanisation can fuel industrialisation and agglomeration economies while increasing living standards (Turok and McGranahan 2013). This promotes the argument that it is not urbanisation that stimulates and sustains growth, but rather the form it takes and whether it provides an efficient facilitating environment (Turok and McGranahan

2013). In sub-Saharan Africa, there have been no similar studies of agglomeration but there have been attempts to measure the link between African urbanisation and development (Turok and McGranahan 2013). Many of their findings have been contradictory and four out of seven found that there is no relationship between urbanisation and development in Africa, while three say there is some (Turok and McGranahan 2013).

Turok and McGranahan (2013) argue that there is not simple linear relationship between urbanisation and economic growth and that the development effects of urbanisation and the magnitude of agglomeration economies are very variable. The conducive nature of institutional settings and the investments in public infrastructure are major factors in whether urbanisation will promote economic growth; however in the case of Africa, economic decline and de-industrialisation combined with external structural adjustment policies weakened the state institutions and resulted in increased informality (Turok and McGranahan 2013). Some argue that sub-Saharan Africa is an example of a region where rates of urbanisation do not positively correlate with the growth of economic opportunities and development, a phenomenon known as “over-urbanisation” (Fox 2012). Some scholars, such as Gallup et al (1999) even assert that recent population growth is negatively correlated with a country’s potential for economic growth. Populations are growing most rapidly in countries that are not experiencing economic growth, resulting in massive inflows of people into urban areas (Gallup et al 1999). However, the recent recognition that urbanisation is relevant to socioeconomic development is significant as many African governments have strong anti-urban sentiments due to the large numbers of informal settlements (Turok and McGranahan 2013).

Over-urbanisation can be defined as ‘urbanisation without industrialisation’, when population growth in an urban area outgrows the job market and the capacity of its infrastructure (Davis 2004). The classic Harris and Todaro (1970) model of urban development argued that ‘over-urbanisation’ occurs when expectations rather than actual earnings influence migrants from rural areas. Government interventions and wage subsidies raise these expectations and result in increases in urban

unemployment (Harris and Todaro 1970). Fox (2012) argues that both the classical and Harris-Todaro urbanisation models have produced ambiguous results, which could be a result of the focus on economic incentives for migration or the omission of the informal sector as an important variable. African countries have proven an anomaly when examining the typical push and pull factors of urbanisation. According to Turok and McGranahan (2013: 475), 'push' factors, such as rural droughts, ethnic conflicts, etc., may have resulted in the premature urbanisation of many African countries rather than the "pull of economic opportunities". Fay and Opal (2000) found that urbanisation in African countries occurs even during periods of negative economic growth. They found that the informal sector provides a valuable source of income for many rural-to-urban migrants that economists have previously overlooked.

There is a great deal of controversy as how to deal with rapid urbanisation and the associated urban poverty. Some argue that sub-Saharan Africa should try to move towards industrialisation and the export of manufactured products (Sachs and Warner 1995). Others, such as Wood and Mayer (2001) argue that countries like Tanzania along with many others in sub-Saharan Africa cannot diversify and industrialise although their natural endowments include abundant natural resources, but due to the lack of skilled labour and education, there is little chance of developing manufacturing for export, apart from "unskilled labour-intensive primary processing activities" (Sindzingre 2005: 296). Economic policies and reforms have proven ineffective in sub-Saharan Africa and been held responsible for underdevelopment (Easterly and Levine 1997; Sindzingre 2005). International financial institutions and state owned enterprises established in these countries have proven an impediment on economic growth (Sindzingre 2005).

Chinese foreign direct investment into sub-Saharan Africa has grown rapidly as China has joined with other industrialised countries that seek to draw on the continent's natural resources (Kaplinsky et al 2009). In China's attempt to increase dominance in the global economy, they have chosen to import raw materials from sub-Saharan Africa because "Africa is a good environment for Chinese investment because it's not

too competitive” (Hilsum 2005 cited in Kaplinsky et al 2009). Kaplinsky et al (2009) have found that China has been actively forging economic links with fragile states such as Sudan and Angola in an attempt to evade pressures by the global community to enhance transparency and better governance. Therefore, despite an increase in the export of natural resources, many sub-Saharan African countries do not benefit from these foreign direct investments.

In addition, many political regimes following independence viewed privatisation ambivalently. As a result, an economic structure was created from informal activities coexisting with formal activities made up of international financial institutions and state-owned enterprises (Sindzingre 2005). These micro-enterprise and agglomeration economies need to be examined as a potential growth model in order to determine how to relieve some of the problems of under-development in sub-Saharan Africa. EAHs may potentially offer livelihood opportunities that cannot be met by the formal sector. Turok and McGranahan (2013) and Cohen (2006) argue that government reforms are the key to facilitating methods of urbanisation contributing to economic growth. Political pluralism in the developing world and tolerance of agglomeration economies and micro-enterprises are increasingly seen as solutions to the problems that accompany rapid urban growth (Cohen 2006).

Urbanisation has many causes, but a common result is that rapid urbanisation often leads to the increase of informal employment. In the case of sub-Saharan Africa, colonisation set development in motion, but left *ad hoc* and weak institutions that were unable to handle the accelerated urban growth that came with independence, resulting in the proliferation of the informal sector (Fox 2014). The development effects of urbanisation and the stimulation and sustaining of agglomeration economies are very variable as there is no linear relationship between urbanisation and economic growth or between the size of a city and its productivity (Turok and McGranahan 2013). Economic and social development appears to be based on the quality and level of urbanisation occurring (Turok and McGranahan 2013). However, in sub-Saharan Africa, urbanisation is discouraged and informal settlement responded to with indifference or hostility, which may negatively affect the

economic benefits and EAHs that result from urbanisation. This in turn may negatively affect the economic development and agglomeration economies within informal settlements, or EAHs, that act as entry points to urban labour markets. The research thus seeks to determine the importance of EAHs as a source of livelihoods for those who operate within the informal sector, in order to inform policy and potentially assist in making entry conditions to these economies easier and allow their growth and expansion in developing country cities such as Dar es Salaam.

2.3. Geographies of the Informal Economy

This section examines the geographies and spatial clustering of the IE and the factors that influence the formation of agglomeration economies in order to define the concept of EAHs. This includes an examination of locational drivers, spatial characteristics, and adaptive capacity based on existing debates surrounding street trade and what little existing literature on 'slum economies' there is. This section will also provide an examination of locational aspects of economic enterprises, particularly focusing on clustering and agglomeration economies as well as economic value chains and networks. The review will draw on wider literature to help define the gap regarding the agglomeration/cluster economies and economic networks and value chains with reference to the IE. An examination of the geography of the IE provides important contextual information for understanding EAHs, as the spatial phenomenon has not been previously examined.

2.3.1. Drivers of Locational Choices of the IE

There has been much research done on informal economic activities in both developed and developing countries, but there have been relatively few studies and even fewer conclusions drawn regarding the spatial patterning of these activities (Kesteloot and Meert 1999). There are commonalities in the literature as to the characteristics of economic clustering, notably centrality, accessibility, and the importance cost and demand. In order to fully understand the location and spatial patterning of the informal economy, more in-depth information is needed regarding

individual case studies, as cross-cultural studies are often too varied to provide reliable information. The following section will examine literature regarding the locational rationale of the informal economy (IE), providing context on the possible causes and characteristics of economic activity hubs (EAH), in order to develop a definition and critically analyse EAHs for the purposes of the research.

There are many types of informal trade, ranging from street vendors, to home based enterprises (HBE), and even local business clusters (Bromley and Mackie 2009; Grant 2010). According to Bromley (1978), street trading, or vending, is one of the most important occupations in most developing cities. Bromley (2000: 1) defines street vending as “the retail or wholesale trading of goods and services in streets and other related public axes.” Street vending is an important sub-sector among the larger aggregate economies, described in various literatures on the informal sector, commodity production, micro-enterprises, cluster economies, or the underground economy (Bromley 2000). As a result, the literature on street vending is relevant to the study as characteristics can be applied to micro-enterprises and EAHs. Street vending is a very adaptable occupation as it can be practiced part-time, full-time or seasonally; can be continuously active day and night; can be fixed or mobile; can range from one-person micro-enterprises to large economic networks; and can be a result of survival strategy or even a capitalist venture in order to promote demand and increase profits (Bromley 2000; Iyenda 2005).

Locational constraints such as cost of transport and space, as well as accessibility can create disadvantages for micro-entrepreneurs. Informal entrepreneurs invest a significant amount of their income in the pursuit of their livelihoods (Hays-Mitchell 1993). A large portion of this capital is often circulated through the informal sector through the necessity of financing related economic activities, such as: transportation of goods and services, construction of stands, guarding of inventory, food service, and child care (Hays-Mitchell 1993). A study of street enterprises in Kinshasa, Democratic Republic of the Congo, by Iyenda (2005), found that people were locating their enterprises based on access to resources and access to consumers (Iyenda 2005). The literature has found that centrally located, urban

public spaces provide informal entrepreneurs with locational advantages, reducing costs on transport and increasing income (Bromley 2000; Bromley and Mackie 2009; Brown et al 2010; Walsh and Maneepong 2012).

Several authors agree that the majority of informal activity takes place within centrally located urban public spaces because these provide easy access to supplies and customers (Bromley 2000; Bromley and Mackie 2009; Brown et al 2010; Walsh and Maneepong 2012). Market complexes and courtyards provide epicentres for economic activity and networking and provide access to consumers (Bromley 1978; Bromley and Mackie 2009). The higher rates of population density allow for more pedestrian traffic and increase the proximity to consumers. In addition, central urban locations typically correspond with high rates of tourism, as many culturally important sights are often located within these areas (Bromley and Mackie 2009).

Central urban locations also provide movement and accessibility as well as conveniences such as public transport and public amenities. Access to resources cuts down costs for micro-enterprises by reducing transportation costs. According to Hays-Mitchell (1993), micro-enterprises often sell merchandise produced by local small-scale manufacturers, as well as large national-level commercial products, both of which can be found within a reasonable spatial proximity in an area of high-intensity mixed land use. However, this view of street vending is out-dated, as authors such as Lyons et al (2013: 80) have found that micro-entrepreneurs have become increasingly integrated into value chains “as intermediaries or distributors.” In their study of value chains between China and sub-Saharan Africa, Lyons et al (2013) found that the traditional economic opportunities offered by imported goods have diminished, driving more African traders to bypass established importers and participate in the import trade on their own. These imported goods are then distributed within Africa through informal enterprises through street vending in public spaces (Lyons et al 2013: 94).

Agglomerations often occur as a result for three main reasons: 1) large concentrations of vendors become well-known, attracting other vendors and

customers, 2) an increase in street vending blocks entry to fixed off-street businesses, and 3) the increase in pedestrian and vehicular congestion slows everyone down, allowing people to spend more time looking at merchandise (Bromley 2000). For example, Bromley and Mackie (2009: 1497) found that street vendors in Cusco, Peru had begun to form clusters within courtyard markets. Many of these markets were centrally located near areas with a high-density tourist population in order to take advantage of the access to consumers. Other markets located in central Cusco were found to sell perishables and clothing to 'local clientele' (Bromley and Mackie 2009: 1497).

This section has provided insights into the possible causes and locational rationale behind economic activity hubs (EAHs). Various reasons related to supply and demand provide the rationale behind locational choice, resulting in similarities found throughout the literature such as centrality and accessibility. Central urban locations provide informal entrepreneurs with increased access to consumers and resources, while also reducing costs such as transportation. Similarly, centrality and accessibility have been seen in agglomerations of street vendors; however, the benefit of these locational aspects has not been examined in agglomeration economies within informal settlements. There is a clear need to examine the literature regarding location in relation to other enterprises, specifically agglomerations and network economies. The flexibility of the IE gives it an advantage over the formal sector and may provide insight into the development and operation of EAHs.

2.3.2. Adaptation vs. Design: Urban Planning and the IE

The flexibility of the informal economy is one of its greatest assets and provides an advantage over the formal sector. The informal economy is constantly changing and adapting as a result of political and social environments. As Bromley and Mackie (2009: 1486) stated, "Informal trade is heterogeneous, complex and dynamic, displaying a variety of locations, changing temporal patterns and fluid changes in workers." It is constantly affected by changing political policies, contiguous economic activities – both formal and informal, and demographic and social factors. Street trade is often seasonal, selling different goods in different seasons, e.g. catering to

special demands like umbrellas during a downpour or Independence Day flags (Bromley 2000). The literature examines the flexibility and ability of the informal economy to adapt through the study of street vendors. However, because the majority of the literature focuses on street vendors, it is unclear whether informal settlements and EAHs are also as flexible and adaptable and whether this affects their ability to compete economically. This section examines how and why the informal economy adapts to political and social factors by providing examples of adaptation and how the various schools of thought might provide insight into those adaptations.

For years it has been a common political practice to attempt removal or exclusion of the informal sector from city centres in an attempt to make the city more aesthetically pleasing (Bromley 1978; Bromley and Mackie 2009; Donovan 2008). Public spaces within city centres provide crucial locational advantages for networking as well as heavy pedestrian flows (Hays-Mitchell 1993); however, large agglomerations of street vendors result in congestion and unhygienic conditions (Bromley and Mackie 2009). According to Bromley (2000), many cities are removing street vendors from public spaces by privatising the public realm. Gated neighbourhoods and enclosed commercial areas attempt to exclude them from society (Bromley 2000). In Peru, street vendors are confined to certain areas of the city in order to exert some 'degree of control' over their economic activities (Hays-Mitchell 1993). According to Cross (1998), Mexico City attempted to remove informal traders from the city centre in the 1950s but failed as the traders eventually returned to their original locations. Historically, city planners in Latin America have committed to the removal of street traders from city centres in order to promote tourism (Middleton 2003: 119). For example, in Quito, Ecuador, street traders were relocated from the streets to commercial centres in order to develop an international tourist destination (Middleton 2003). However, Middleton (2003) argues that this removal of street traders actually has a negative effect, as street trade is an important part of Latin American culture and heritage as well as the tourism industry. Therefore, the relationship between planners and street traders needs to be redefined in order to successfully promote international tourism and increase economic opportunities (Middleton 2003: 120).

Displacement of street vendors from central locations to peripheral locations has also become common practice in many cities (Bromley and Mackie 2009; Donovan 2008; Mackie et al 2014). Typically, these street vendors are relocated to government-built markets on the outskirts of cities (Bromley 1998; Donovan 2008). Many cities in Latin America, such as Cusco, and Bogota, have attempted displacement from a central location to a peripheral location within the city (Bromley 1998; Bromley and Mackie 2009; Donovan 2008; Mackie et al 2014). After surveying vendors in Bogota that had been displaced to government-built markets, Donovan (2008: 41) found that most suffered from declining income following relocation due to “higher operating costs, lower sales, and fewer customers.” However, Donovan’s (2008: 41) study also found that vendors noted a substantial decrease of extortion and violence following their relocation due to lower levels of “theft, traffic accidents, and gangs,” indicating a potential reason many of these vendors choose to remain in the decentralised markets. The protection offered by the informal markets might also provide some insight into the development of cluster economies or EAHs. Informal entrepreneurs may be able to reduce external and internal threats to themselves and their businesses, such as forced removal and crime, by operating within close proximity and developing networks among themselves.

Many street vendors resist government displacement policies by simply reoccupying the streets, as in Mexico City (Cross 1998), or creating new ‘courtyard markets’ in off-street but accessible sites (Bromley and Mackie 2009; Mackie et al 2014). In the case of vendors returning to the streets, governments often increase efforts to reinforce displacement policies by confiscating goods or arresting vendors (Bromley 1978; Mackie et al 2014). In Cusco, courtyard markets developed as a way of resisting displacement to peripheral markets by taking over the courtyards of historic buildings where groups of vendors rent the space from the property owner (Mackie et al 2014). Interviews with vendors found that only 7 of the 33 courtyard markets operated prior to the relocation drive of 1999, and most of the courtyard traders were originally operating on streets (Bromley and Mackie 2009; Mackie et al 2014). While Mackie, Bromley and Brown’s (2014) study found some evidence of government closure of these markets between 1999 and 2005, they found that

nearly twice as many had been opened, confirming the markets' success in providing a safe environment from police and government intervention. Such policies of separating the formal and informal sectors through exclusion, removal, or displacement follow the more dualistic philosophy and do not take into account the frequent networks formed between the formal and informal actors or the importance of accessible, central public space as a locational for street vending.

As globalisation becomes more and more prevalent, tourism also continues to expand in the developing world. In response to an increase in tourism, research has found that informal vendors have capitalised on the economic opportunity it provides (Bromley 1998; Bromley and Mackie 2009; Cutsinger 2000; Lincoln 2008; Middleton 2003; Yotsumoto 2013). Heritage and large tourist attractions in developing countries provide the potential for economic activity because of the pedestrian traffic generated near tourist attractions and access to a new, relatively wealthy market, allowing informal traders to capitalise on a new market (Bromley and Mackie 2009). However, in many developing country cities, municipal governments see street vending and informal activities as an eyesore and obstacle in their effort to increase tourism by 'beautifying' and modernising their cities (Bromley 1998; Cutsinger 2000; Lincoln 2008; Middleton 2003). City governments and local businesses want to enhance profitability by reducing the congestion and waste generated by street vendors; therefore, displacement of informal vendors has become common practice for many cities, such as Mexico City and Cartagena (Bromley 1998). Alan Middleton's (2003) study of Quito found that street vendors were causing congestion in the historic city centre, creating conflict between the locals and city planners, and resulting in hostile policy responses such as forced removal.

In contrast to the beliefs of city officials and governments, many tourists appreciate street vending as a 'traditional' aspect of these cities as it provides an important opportunity to experience local culture (Lincoln 2008). In Hanoi, foreign visitors appreciate the 'nostalgic' visual appeal of the vendors as well as the delectable and exotic street food they provide (Lincoln 2008; Stutter 2017). In many countries,

governments have begun capitalising on this appreciation by promoting vendors as a way of increasing tourism (Cutsinger 2008; Yotsumoto 2013). In Barbados, local policy makers encourage street vendors to produce tourist items that represent the cultural heritage of the country, despite their strict regulation of street vendors and regular removal (Cutsinger 2000). In the Philippines, informal vendors are considered beneficial to tourism development (Yotsumoto 2013). In an effort to improve relations between street vendors and government officials, the Manila government formalised the businesses of vendors, also allowing the government to capitalise on the profits brought in by street vendors (Yotsumoto 2013). Even in the U.S., street vendors have been welcomed back or hired in historical centres such as the French Quarter of New Orleans or Colonial Williamsburg in an effort to increase tourism (Bromley 2000). This pluralist philosophy has proven beneficial not only to the informal sector but also to local governments, indicating that postmodernist ideal of coexistence between the formal and informal sectors in many contexts is not only possible but also advantageous to the overall economy.

This section has examined the adaptability of the informal sector and the social and political reasons behind the necessity for such flexibility in locale. As evidenced from the literature, much of the debate on the importance of flexibility centres on tourism and historical centres. This is to be expected as tourism is an unpredictable trade, and the related vending is very visible as a result; however, this indicates a case for considering flexibility in more hidden parts of the informal economy, such as within informal settlements or EAHs. This section has provided potential context for better understanding the characteristics of the IE and potentially EAHs as adaptive and flexible. In addition, the review has provided insight into the potential importance of centrality and accessibility on the locational rationale behind EAHs within developing country cities. The existing policies that promote displacement and removal do not take into account the effects such policies have on the complex economies that make up the IE and a more accepting attitude such as the pluralist perspective might provide a better solution to displacement as seen in the Philippines.

2.3.3. Location in Proximity to Other Enterprises

According to Grant (2010), little is understood about the spatial aspects of businesses within informal settlements. Although informal settlements accommodate many micro-enterprises in different informal economy sectors, existing literature does not examine the extent of participation of these micro-enterprises in the 'wider space economy'. Studies in South Africa found high levels of economic integration between the informal and formal sector (Du Toit and Neves 2007). Du Toit and Neves (2007) found that informal entrepreneurs use networks to connect to the economy, in both adjacent and distant spaces. Complex networks exist, creating a heterogeneous economy across a broad spatial spectrum (Du Toit and Neves 2007). The literature found that every space, whether it be an informal settlement, informal business cluster, or home based enterprise, has its own economy and even informal entrepreneurs are connected to wider space economies (Grant 2010). The following sections will provide an in-depth look at the literature regarding the spatial aspects of these relationships, and the networks and agglomerations created within informal settlements.

Agglomeration Economies

There has been a large amount of literature regarding agglomeration economies, but most focuses on agglomerations in developed countries. The question of agglomerations within the informal sector is a more recently studied phenomenon. The literature has identified successful cases of agglomeration economies generated by the IE. For example, Murphy (2006-07, as cited in Harris 2014: 103) found that Tanzanian furniture makers are "impacted by proximity to main markets where certain benefits of agglomeration are present." Flexibility provides an advantage in agglomeration economies as a way of decreasing transportation and production costs, particularly between small-scale firms. The IE provides this flexibility, making it an optimal source of agglomeration and cluster-based economies. Unfortunately the literature does not specifically examine the importance of flexibility or specialisation within agglomeration economies generated by the IE. The following section provides

context necessary to better understand agglomeration economies in order to apply this to the potential causes, characteristics, and function of EAHs.

Agglomeration economies occur when firms locate near each other due to a positive production and return output (Moreno-Monroy 2012; Rosenthal and Strange 2004). The concept can be traced back as far as Marshall's discussions of "external economies of scale" (1890, as cited in Johanssen and Quigley 2004: 1). According to Moreno-Monroy (2012), there are two types of agglomeration economies: 1) localisation economies, or clusters, based on enterprises that belong to the same industry and same geographical area; and 2) urbanisation economies are enterprises within the same geographical area but with different economic activities. The concept of urbanisation economies is related to the concentration of people and economic activity that occur in cities or central industrial regions (Malmberg and Maskell 2002).

Cluster economies play an important role both within the informal and formal economies; however there is a question of whether or not the factors driving these clusters, or agglomerations are the same for both the formal and informal economy. Porter (2000: 15) defines clusters as "geographic concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, and associated institutions in a particular field that compete but also cooperate." Clusters provide an advantage over the competition by providing locational links. Linkages between buyers and suppliers are important for efficiency as well as the rate of improvement and innovation (Porter 2000). Competition is what drives these links and location can provide an important competitive edge through its influence on productivity (Porter 2000). Firms with linkage transactions and transportation cost advantages are more incentivised to locate within close proximity and form an agglomeration (Johansson and Quigley 2004). Clusters might also form from different activities that support the same sector, for example: fabric suppliers, tailors, packaging services, and transportation might cluster together within the clothing sector in order to reduce costs.

Literature regarding agglomeration economies primarily focuses on developed countries or formal-sector enterprises in developing countries (Moreno-Monroy 2012). According to Moreno-Monroy (2012: 2021) and Rosenthal and Strange (2004), this literature associates the three 'supply-side' mechanisms, identified by Alfred Marshall, as the source for agglomeration economies: "greater access to specialised inputs; labour market pooling; and knowledge and technology spill overs". On the other hand, 'demand-driven' agglomerations are formed as a result of reducing search costs on the part of the consumer (Moreno-Monroy 2012). 'Demand-driven' agglomerations are associated with negative effects resulting from overcrowding and increasing input prices more quickly than 'supply-side' agglomerations and are more sensitive to the de-clustering effect as a result of stronger enterprises becoming independent (Moreno-Monroy 2012).

According to Moreno-Monroy (2012), there have been multiple successful cases of agglomeration economies generated by the informal economy. Some examples include the cotton knitting industry in southern India, or the shoe production industry in Brazil. Moreno-Monroy (2012) argues that informal enterprises can be expected to cluster due to their small size. Malmberg and Maskell (2002: 436) similarly argue that agglomeration economies are much more likely to manifest "when linkages between firms tend to be small-scale, varying, and unpredictable, and thus where the interaction costs rise rapidly with increasing distance." Therefore, localisation economies are more important the more flexible the product or production (Malmberg and Maskell 2002). Agglomeration economies can even result from the interaction between formal and informal enterprises through value chain links (Moreno-Monroy 2012).

Urban location and growth is often attributed to locational advantages, such as: relative location to other cities and national borders; accessibility to seas and major rivers; environmental features such as climate, topography, or elevation; and accessibility of major roadways or locational landmarks (Portnov and Schwartz 2009). It can be argued that agglomeration economies might also be affected by these locational advantages. A study by Felkner and Townsend (2011) found a positive correlation between high concentrations of enterprise and economic growth. They

found similar geographical characteristics associated with these clusters, such as: favourable physiographic conditions, main transportation arteries, and areas of high population activity. A similar study by Gallup et al (1999) determined that geographic variables such as proximity to waterways, availability of natural resources, and climate explained 73% of the observed variability of the population density. Gallup et al (1999: 184) argue that differentiation of physical geography has a large effect on economic development, but also that the new economic geography follows 'trade theory', in which highly differentiated spatial organisation of economic activity can be explained by "returns to scale, agglomeration economies, transport costs, and product differentiation."

Gallup et al (1999) contend that a city might emerge as a result of the cost advantages from differentiated geography and continue to thrive due to agglomeration economies. New economic geography models follow that "self-organising spatial patterns of production" are based on agglomeration effects rather than on differences in physical geography (Gallup et al 1999). Contrary to the findings of Gallup et al, Roos (2005) found that geography's influence on spatial distribution of economic activity, specifically agglomerations, is rather small with only 36% of the variation being explained by the direct and indirect effects of geography. Various geographical features were taken into account, including resource availability, location in relation to geographical features such as rivers or oceans, as well as political geography, and then compared with the spatial pattern of GDP in Germany to determine any correlation between agglomeration economies and geography. The findings of the study suggested that GDP played a much more important role in agglomeration than natural advantages (Roos 2005). As a result, it can be assumed that physical geographic attributes might affect agglomerations, but economic factors such as accessibility, land availability, and cost are more immediate causes.

The section has raised many questions that will need to be answered through research in the field. Much of the previous literature on agglomeration is based on work in the global North, rather than sub-Saharan Africa, making the contribution of this research valuable to understanding their role in the IE. It is unknown if the same processes that drive the formation and operation of agglomerations within the

formal sector would also be found within cluster economies in informal settlements. Where work on IE clusters has taken place, this is observational, rather than based on spatial analytics. This gap in existing literature creates a need for a review of the factors driving agglomeration economies within the IE other than supply/demand agglomerations or locational factors. For example, within EAHs, there may be more people who simply need work. There may also be the factor of a copycat mentality – if one person is successful, others will follow, which has been reported in the IE literature (Bromley 2000). Therefore, the factors driving market operation may be different within an informal settlement, making it necessary to study further.

Network Economies

The traditional concept of agglomerations and networks identified them as separate and unrelated, with agglomerations describing a particular point, while networks consist of nodes and the connecting links (Johansson and Quigley 2004). Complementarities between agglomerations and networks are proving more beneficial from an economic standpoint (Johansson and Quigley 2004). In a spatial context, networks facilitate exchange within and between regional agglomerations (Johansson and Quigley 2004). In the event that spatial proximity cannot be achieved due to economic, political, or technical reasons, networks provide a way of reducing the effective distance between enterprises or agglomerations and reduce transaction costs (Johansson and Quigley 2004).

The literature suggests that network economies and value chains are equally important as agglomeration economies for the IE, on both a social and economic level, and also provide opportunities for economic growth. In addition, Portes (1998) and others identify the importance of social capital to small-scale and micro-enterprises, particularly those operating informally. However, it is unclear from the literature as to the roles of small-scale or micro-enterprises within value chains. The majority of the literature regarding network economies and value chains focuses on developed countries with little to no focus on the IE. This section will explore the concepts of network economies and value chains in order to identify gaps in the literature that can be examined more closely in the analysis portion of the research

and help in understanding the operations of EAHs in order to better define the concept.

Recent changes in technology and competition have weakened the traditional importance of location (Porter 2000). Resources, capital, labour, and other inputs can be efficiently sourced in global markets via corporate networks (Porter 2000). Economic networks can be defined as an organisation of interlinked agents combining features of an enterprise and the economic market, formed from an incentive to reduce transaction costs (Johansson and Quigley 2004). Gereffi et al (2001) argues that policymakers and entrepreneurs have been convinced that global value chains and production networks are the key to economic growth due to technological advancement, international competition, continuing dispersion and linkages of production activity. It is no longer necessary for large firms to locate near markets to provide goods and services (Porter 2000).

Gereffi et al (2001) see the phenomenon of 'value chains' as an increasingly important part of global trade. There are a variety of terms used to describe the integrated economic relationship networks, with 'value chain' often used as a generic term and the most inclusive. A 'value chain' refers to the "whole range of activities involved in the design production and marketing of a product" (Gereffi 1999: 1). Thus value chains are considered to include the points of exchange along a global supply chain, together with the social relations that facilitate the exchange. Harris (2014) argues that value chains are crucial for networks of enterprises within the informal economy, but are not connected through what would usually be understood as economic transactions. For example, social relations that link business transactions play an important role, raising the question of how economic networks are created and operate within the informal economy, and particularly within EAHs.

Different types of chains are identified based on different spatial scales:

- Supply chains, often at a local or national scale – within one country – though it can refer to any spatial scale, are a basic 'input-output' structure of activities that transform raw materials into the final product;

- International production networks, operating at the international scale – within more than one country, are a network of multinational corporations that attract smaller firms and provide a way of connecting with other firms around the world;
- Global commodity chains, operating at the global scale – including two or more regional blocs, set up global production and sourcing networks for lead firms;
- French filiere approach studies primarily agricultural export commodities; and
- Global value chains, which is the overall network of activities bringing a product of service from just its conception, through the phases of production, to consumer delivery, and even the disposal after use (Gereffi et al 2001).

Value chains are usually considered to be made up of multinational enterprises and/or systems of governance that link firms together through a variety of arrangements, with the largest firms being located in developed countries while smaller firms, some of which are informal, are located in developing countries (Gereffi et al 2001). Sturgeon et al (2008) found that the automobile industry in the US, which was originally an agglomeration economy, began to rely on outsourcing and network economies during the 1990s in order to compete with Japanese industries. In this case, agglomerations and network economies worked together in order to provide a competitive edge to a failing industry (Sturgeon et al 2008).

Similar examples can be found around the world with agglomerations in developing countries, often in the form of micro-enterprises and informal settlements, forming and developing network relations with developed countries. In the case of Torreon, Mexico, local industrial clusters gained to access the global economy through value chains (Gereffi and Bair 2001). This is one of many industrial clusters located in Mexico, assisting in the overall development of the country through export-oriented manufacturing (Gereffi and Bair 2001). However, while being located next to the US may provide Mexico with a locational advantage, this argument could also be turned around as it probably allows US companies to outsource, resulting in bad business practices such as poor working conditions or insecure labour contracts.

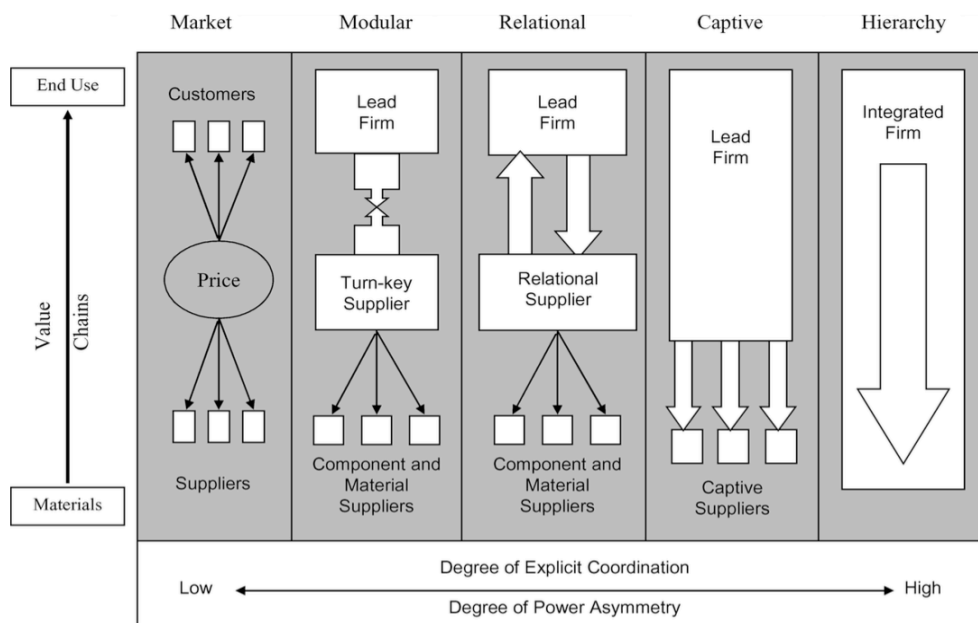
The literature identifies concerns of trade economists as to how global production is organised (Gereffi et al 2005; Gereffi and Lee 2012). Foreign direct investment has been a key driver of globally dispersed production and trade networks (Gereffi and Lee 2012). Since the 1960's, US companies have been outsourcing supply chains in order to cut production costs (Gereffi and Lee 2012). These supply chains quickly expanded from regional to global networks (Gereffi and Lee 2012). As a result, governments and international organisations began taking notice of these new spatial network patterns and analysis of the phenomenon and its governance became necessary (Gereffi and Lee 2012). Gereffi et al (2001: 4) define governance as the "non-market coordination of economic activity." According to Gereffi (1999), there are two types of international economic networks: producer-driven and consumer-driven. Producer-driven industries tend to be capital and technology intensive such as electronics and automobiles (Sturgeon 2008). These firms are transnational with investment-based network links and follow a predominantly vertical network structure (Gereffi 1999). Consumer-driven industries tend to be labour intensive such as apparel and consumer goods (Sturgeon 2008). These industries are often local firms located in developing countries with trade-based network links and a more horizontal network structure (Gereffi 1999). However, recent literature has critiqued Gereffi's arguments, suggesting a third way between demand-driven and supplier-driven networks. An article by Lyons et al (2013) examined the value chain for Chinese manufactured goods sold in sub-Saharan Africa, arguing for a 'third way', whereby value chains emerge from a myriad of individual decisions by small-scale operators or local collectives of micro-enterprises finding new and diverse ways to enter and retain a place in the market.

A typology of industry organisation by Gereffi et al (2005), divides economic networks into five main types of 'value chain governance', visually represented in Figure 2.1:

- *Market* governance involves simple transactions where suppliers make products with little input and coordination with buyers. Buyers respond to the prices set by sellers and the costs of switching to new partners are low for both parties.

- *Modular* governance is when suppliers make complex products based on specific customer requirements. Coordination costs are greatly reduced due to the form of information exchange and ease of arranging the product into systematic code.
- *Relational* governance occurs when product specifications cannot be easily arranged into systematic code, resulting in complex transactions. As a result, close linkages, such as social and spatial proximity, are critical in the coordination of these value chains
- *Captive* governance is when a group of small suppliers are dependent on a lead firm or few buyers for both their resources as well as market access. These lead firms set operating conditions and promote competitive production activity in order to reduce costs. As a result, is difficult for the ‘captive’ suppliers to exit the arrangement due to high switching costs.
- *Hierarchy* governance describes chains created by firms that develop and manufacture products in-house because product specifications cannot be codified or are complex and competent suppliers cannot be found.

Figure 2.1: Five Types of Global Value Chain Governance



Source: Gereffi et al 2005, p. 89

The visual model in Figure 2.1 helps better explain the various types of value chains. Modular and relational value chains are consumer-driven while captive and hierarchy value chains are producer-driven. Market value chains are not specifically consumer or producer-driven as they are more traditional transactions. These forms of governance are constantly changing as industries evolve and these governance patterns can vary for different stages of the chain within an industry (Gereffi and Lee 2012). The patterns and effects of these value chains often depend not only on the technological and business characteristics of specific industries, but also on the social and institutional characteristics of their place of operation. It is unclear from the literature how social and spatial proximity influence the governance of these value chains. The research will seek to examine this gap through the combination of spatial and qualitative methods.

There is a continuous debate as to the role of global value chains and how they are shaped. The traditional literature argues that global networks offer opportunities to micro-and informal enterprises through the expansion of formal enterprises within developing countries. However, then there is the question of micro-enterprises finding new opportunities in global value chains, as discussed by Lyons et al (2013), who see micro-entrepreneurs not as passive actors, but as agents shaping economies. For example, a more traditional view provided by Hays-Mitchell (1993) found that micro-entrepreneurs often sell large national-level merchandise that cannot reach remote areas that lack commercial centres. In addition, locally manufactured goods produced by skilled artisans, such as carvings or sweaters, are often purchased by micro-enterprises and exported and sold to formal enterprises (Hays-Mitchell 1993). However, the more recent literature has found that formal enterprises such as those in China, often copy local artisanship from other countries. For example, Chinese manufacturers have begun copying artisanal Mexican crafts and selling them in the US (Terra 2007). Links between the informal and formal sectors are prevalent everywhere with a multitude of networks connecting them.

The literature has identified many potential gaps in the research. While there is clear evidence regarding the importance of producer and consumer-driven value chains, the role of market-based value chains has been broadly overlooked, a traditional

form of value chain that may be important role in the functioning of EAHs. The role the IE plays within producer or consumer-driven value chains has also been overlooked, and could provide insight into the role of small-scale or micro-enterprises in global value chains. It is necessary to examine these gaps in order to provide a clear understanding of the causes, characteristics, and function of EAHs.

2.4. Informal Settlements: Filling in the Gaps

The previous sections have provided a context of the IE, as well as its spatial distribution and locational drivers for concentration of activities. This section will provide context for informal economic enterprises in relation to the surrounding informal settlement. Informal settlements are a growing concern to urban planners, as they continue to grow in size and number in many developing countries. This section will explore the characteristics of these settlements and commonalities they likely share with businesses they contain. The review will also examine the literature regarding the development and formation of informal settlements as well as their spatial dynamics in order to define and understand EAHs.

2.4.1. Defining Informal Settlements

The following section seeks to examine the characteristics of informal settlements through an examination of the literature in order to define EAHs for the research. There are multiple terms to describe informal settlements: e.g. slums, squatter settlements, shantytowns, spontaneous settlements, uncontrolled or unplanned settlements, etc. (Srinivas 1994). For the purposes of this research, the term 'informal settlement' will be used in order to establish the legal status of the areas being researched as well as avoid negative connotations assumed with many terms such as 'slum' or 'squatter settlement'.

Slums and informal settlements are often construed as the same phenomenon; however, according to Srinivas (1994) there is an important difference between the two terms. There are many definitions of slums but for the purposes of this research, the UN Habitat (2003: 10) definition of a 'slum' will be utilised as, "a contiguous

settlement where the inhabitants are characterised as having inadequate housing and basic services. A slum is often not recognised and addressed by the public authorities as an integral or equal part of the city.” A slum refers more to the condition of a settlement or area while an informal settlement refers to the legal status of the settlement or area (Srinivas 1994). According to Srinivas (1994: 1), an informal settlement can be defined as “a residential area that has developed without legal claims to the land and/or permission from the concerned authorities to build; as a result of their illegal or semi-legal status, infrastructure and services are usually inadequate.” While these terms technically examine different aspects, the areas defined by them share common characteristics.

Other descriptions of informal settlements are similar in describing low-income housing and poor living conditions but none provide any operational definition or typology. According to UN Habitat (2003), attempts to create a more quantifiable definition of informal settlements have been slowed due to their complexity, local variations, spatial nature, constant adaptation, and relative conception. Certain aspects such as poverty and insecurity of tenure are multidimensional and can be applied to informal settlements globally (Srinivas 1994; UN Habitat 2003). Characteristics such as accessibility or density vary based on the settlement but are easy to define, while social capital varies and is difficult to define and measure (UN Habitat 2003). As a result, the measurement and creation of a quantitative definition of informal settlements has been slow and difficult.

UN Habitat (2003) has combined a list of characteristics of informal settlements based on various definitions used by governments and institutions, which are listed below:

- i) Lack of basic services
- ii) Substandard housing or illegal and inadequate building structures
- iii) Overcrowding and high density
- iv) Unhealthy living conditions and hazardous locations
- v) Insecure tenure; irregular or informal settlements
- vi) Poverty and social exclusion; and
- vii) Minimum settlement size

Informality invades every part of life in Dar es Salaam and its complexity makes it difficult to identify. In many inner cities, as in much of Dar es Salaam, areas that were informally settled and built have now been regularised through the grant of land titles. These areas should perhaps more correctly be called 'informally-built settlements'. However, despite the land occupancy being regularised, many other aspects of informality remain, such as inadequate water supply, sanitation or road networks, and the stigma of living in low-income areas continues, so in this research the term 'informal settlement' is used to include informally-built areas, both those that are regularised and those that do not have land titles.

Throughout the literature, poverty and low income is a central characteristic of informal settlements (Roy et al 2014; Shatkin 2004; Srinivas 1994; UN Habitat 2003). Poverty is considered a cause or external attribute of slum environments and the development of informal settlements (Srinivas 1994; UN Habitat 2003). Lower levels of income associated with informal settlements are often a result of insecure tenure due to illegal or informal employment (Srinivas 1994; UN Habitat 2003). Therefore, legislative restrictions on the IE would only exacerbate the growth of informal settlements and decrease the occupants' livelihood opportunities or potential for upward mobility into a higher income class.

The lack of basic services and unhealthy living conditions are the most common characteristics of informal settlement definitions worldwide (Srinivas 1994; UN Habitat 2003; UN Habitat 2004; Wekesa et al 2011). Unhealthy living conditions are often a result of this lack of basic services as sewage and improper waste disposal are common characteristics of informal settlements (UN Habitat 2003). In addition polluted environments and hazardous building sites, such as floodplains or proximity to industrial or waste disposal sites are often locales for these settlements (UN-Habitat 2003). In a study of informal settlements in South Africa, Richards et al (2007: 376) found that the dwellings lack "water, sanitation, electricity, ventilation, food preparation and storage." Much of the literature focuses on living conditions, rather than the conditions of businesses operating within such environments. This research examines the lack of basic services and the conditions the businesses operate in to

provide context for the type of working conditions within the case studies, as the livelihoods of the entrepreneurs may be adversely affected.

Substandard housing or inadequate building structures are another common attribute of informal settlements, and as a result many cities have begun implementing building standards to set minimum requirements for residential buildings (UN Habitat 2003). For example, in Tanzania, the region commissioner of Katavi, Dr. Msengi, ordered that substandard development projects would not be tolerated following an inspection of recently constructed secondary schools that were found to have been built with substandard materials (Siyame 2015). Residences and buildings within informal settlements are often built with non-permanent and low-cost materials, such as “earthen floors, mud-and wattle walls, or straw roofs” (UN Habitat 2003: 11). As a result, hazards such as flooding or fires are not uncommon (Richards et al 2007). It is likely that businesses located within the settlements would also share these characteristics. Inadequate building materials and substandard development might affect the locale or spatial configuration of EAHs. The research thus examines the possibility whether or not structural and working conditions affect or are affected by these spatial characteristics or even the type of business operating within such structures.

The conditions associated with these environments create barriers that separate the residents of informal settlements from the rest of society and their own development (UN Habitat 2003). These areas are often avoided or suffer social dislocation as a result of the perception of being ‘dirty’ and having high levels of crime (Richards et al 2007; Roy et al 2014; UN Habitat 2003). Richards et al (2007) found that crime is a common social problem in many informal settlements of South Africa, which results in deterioration of the areas due to the inability or unwillingness of the government to alleviate the problem. As a result, the residents of these settlements are afraid to venture out at night for fear of their own safety. Roy et al (2014) found that violence in slum environments, particularly against women is commonplace, with rape and domestic violence being among the highest concerns. Like the study by Richards et al (2007), Roy et al (2014) found that residents were

afraid to venture out at night and those outside of the settlements were afraid to venture into the 'slums'. This leads to the question of how a lack of security affects businesses within the settlements.

Despite the difficulty in measuring the growth or population of informal settlements (UN Habitat 2003), the literature has found that the emergence and number of people living in informal settlements are expanding at a significant rate (Richards et al 2007; Roy et al 2014; Shatkin 2004; UN Habitat 2003). In India, it is estimated that 13.7 million households of 17.4% of urban Indian households, reside in 'slums' (Roy et al 2014). In South Africa, the national census of 2001 found that 16% of all households resided in informal dwellings and was continuing to expand (Statistics South Africa 2004). In Manila, informal settlements house an estimated 40% of the city's population and have only increased (Shatkin 2004). According to UN Habitat (2003), sub-Saharan Africa has the largest proportion of urban population residents in informal settlements at 71.9%, followed by South-central Asia at 58%. In terms of absolute numbers, Asia has the highest total number of 'slum dwellers' at 554 million (about 60% of the world total) followed by Africa at 187 million (about 20% of the world total). While these are estimates from 2001, the UN estimated that these numbers would simply increase rather than decrease due to urbanisation and population growth (UN Habitat 2003). As a result, overcrowding of informal settlements has become a common characteristic with many families often residing in one house or even one room (UN Habitat 2003). Such rapidly growing populations and overcrowding within the settlements probably also affect the businesses operating within them. It may be the case that enterprises within informal settlements attract migrants from rural areas seeking economic opportunities affecting their development and formation, as well as that of EAHs. Increases in population provide new sources of economic opportunity, as businesses are able to grow and expand within the community due to an increase in consumers. This may result in the creation of home-based enterprises or other unconventional locations due to a lack of space.

As the quantity and size of informal settlements continue to grow in developing countries, their conceptualisation and understanding is clearly important for urban planners. Much of the literature defining informal settlements focuses on housing, quality of life, social characteristics, or political policies. Very little focuses on the economic aspects or economic potential of these settlements or provide any operational characteristics that might be useful to policy-makers regarding their role in the economy. The characteristics of informal settlements can likely be applied to businesses and EAHs located within them, such as: lack of services, inadequate structures, unhealthy working environment, and a lack of security in the surrounding streets. This research seeks to examine these gaps further in order to provide a detailed examination of these businesses to be added to the literature. The existing literature regarding informal settlements is further examined in-depth in the following sections to provide context for the research.

2.4.2. Development & Spatial Processes: Creating Economic Advantages

The majority of the literature argues that urbanisation and rapid population growth combined with weakness in statutory planning and insufficient government resources has resulted in the development and growth of informal settlements within developing countries (Augustijn-Beckers 2011; Barros and Sobreira 2002; Roy et al 2014; UN Habitat 2003). As a result, urbanisation and population growth have become the dominant demographic issues of the 21st century, particularly within developing countries (Seto et al 2011; Todaro and Smith 2012; World Bank 2013). Due to recent population growth trends, there is more need for jobs, more competition and perhaps more pressure to innovate. The formation and operation of businesses within informal settlements is therefore likely to grow and expand. However, the literature does not examine their function within the wider urban economy or whether these settlements act as a potential pull factor for migrants. In addition these settlements are often excluded both spatially and socially, resulting in a segregated inequality. The spatial contexts of informal settlements have only been examined in research very recently and their resulting influence on businesses within the settlements has not been examined in existing debates. The following section

argues that both informal settlements and the enterprises they contain are impacted by developmental and spatial characteristics, affecting the scale and complexity of business operations.

While population growth as a result of advancements in medicine and technology play a huge role in urbanisation, migration patterns have also been found to explain the increases in informal settlements and 'slum' environments (Archambault 2012; Augustijn-Beckers 2011; Roy et al 2014; UN Habitat 2003). Such migration patterns might be expected to influence businesses within informal settlements, for example by rapid churn or links to rural areas of origin. There are two types of migration that result in urbanisation: rural-urban migration, and international migration (UN Habitat 2003). International migration involves migrating from one country to another, with the push factors often involving political instability or a lack of economic opportunities within the country of origin. In these cases, new immigrants are often displaced due to discrimination or social exclusion (UN Habitat 2003). In Nairobi, the Nubian people from the Kenyan/Sudanese border originally settled the largest slum, known as Kibera. They still occupy about 15% of the informal settlement (UN Habitat 2003). In Amman Jordan, Palestinian refugee camps created out of political instability have turned into an environment that share common characteristics with slums and informal settlements (UN Habitat 2003). In Dharavi, also known as 'the world's largest slum', the primary language is Tamil, and Algerian is commonly found in the Algerian 'banlieus' or settlements of Paris (UN Habitat 2003). This type of social exclusion may result in the demand for economic opportunities within informal settlements, as certain immigrant groups may also be excluded from the IE, and thus result in the development of EAHs. However, it is important to note that migration results in the spread of ideas, information, and money particularly with the aid of modern technology (*The Economist* 2011). Such migration may result in the creation of international economic networks with linkages to the EAHs operating within informal settlements.

Rural-urban migration involves moving from a rural area to an urban environment, either within one country or internationally. Rural-urban migration is one of the key

driving forces of growing informal settlements (Archambault 2012; Augustijn-Beckers 2011; Roy et al 2014; UN Habitat 2003). Rural-urban migration seems to be growing despite the poor conditions of informal settlements, particularly in Asia and Africa. In India, 22 million people have migrated from rural to urban areas since 2001 (Roy et al 2014) and a study of Nairobi by Bocquier et al (2009, as cited in Archambault 2012) found that only 10-15% of the population aged between 25 and 54 were actually born in the city. Due to their lack of income, these migrants are often forced to find housing and employment within informal settlements (Archambault 2012; Roy et al 2014). Rural-urban migrants to Nairobi typically settle within K'Akumu or Olima, two of the largest informal settlements that are estimated to hold 55% of the city's population (Archambault 2012). This continual migration of millions of people may indicate that the rural poor perceive informal settlements as an improvement (Roy et al 2014). Indian census data found that informal settlements provide more economic opportunities than rural areas, despite the poor living conditions (Roy et al 2014). However, the literature does not provide an in-depth examination of whether or not these informal settlements and their agglomeration economies might be a pull factor for rural-urban migrants, and whether there might also be links with village economies as a result of entrepreneur's origins, which may be revealed in the examination of potential value chain linkages of the EAHs.

Developing cities are known for "chaotic and discontinuous spatial patterns and rapid and unorganised development process" (Barros and Sobreira 2002: 1). This is a result of rapid urban growth, resource constraints and insufficient planning and coordination, resulting in fragmentation with different urban morphologies that are often disconnected (Archambault 2012; Augustijn-Beckers 2011; Barros and Sobreira 2002). Informal settlements are often difficult to understand within a spatial context as they seem erratic and unorganised with little being known about their development process (Barros and Sobreira 2002). According to the existing literature, their development is influenced by land availability, employment opportunity, and proximity of "high-intensity mixed land use" (Barros and Sobreira 2002: 2). Barros and Sobreira (2002) found that informal settlements tend to occupy the space between established developments, making them appear random and spontaneous.

This was the case in Nairobi following independence when the city infrastructure could not handle the flux of migrants (Archambault 2012). The city tolerated the establishment of informal settlements as a way to accommodate the growing population and settlements began to develop within any public or 'empty' lands, preferably within areas adjacent to potential employment opportunities (Archambault 2012). However, this leads to the question of how this affects businesses within these settlements.

According to Barros and Sobreira (2002), these settlements can be classified according to locational and morphological characteristics as inner city or peripheral settlements. As developing cities grow, these settlements evolve with the city, as once peripheral settlements become inner city settlements as a result of urban growth (Barros and Sobreira 2002). A self-organised process of locational economic advantages and constraints is constantly shaping these settlements. Micro-enterprises and small-scale businesses are then changed and shaped along with the settlement. Existing literature has not examined how the change from an inner city settlement to a peripheral settlement may affect the economic networks in which these businesses operate, or how their connection and dealings with formal enterprises might change. This research therefore seeks to examine the importance of location within the city and the effect on economic networks and formal-informal linkages.

Throughout the literature, centrality and accessibility have been key factors in the locational influence of the IE. These factors also influence the location of informal settlements, as settlements often expand along streets with economic activity or places of interest such as temples or popular public spaces (Roy et al 2014). This is likely the case with businesses within informal settlements as well. If possible, enterprises will locate centrally in order to provide access to more consumers, as well as access to resources. However, the exclusion of those working and living within informal settlements throughout the broader metropolitan area produces what Castells (1997) refers to as 'segregated inequality', often preventing access to land situated near economic centres within the city. According to Brown (2001), the

problem is not a lack of access to land, as there is often land available along the periphery of the city, but lack of access to the opportunities within the city. This raises concerns about the relevance of housing location to livelihood opportunities (Wigle 2008), as it is crucial to contributing to the quality of life (Brown 2001: 321). It is likely that it is this lack of access to opportunities that results in the need to create jobs within the settlement, resulting in new businesses and EAHs. The importance of centrality and accessibility for businesses is thus examined in the research.

According to Lall et al (2006), only one in five households living within an informal settlement are able to transition into the formal housing sector. Their study found that a major determinant is the ability to save on a regular basis. In order to reduce transportation and production costs, shelter is often used as a productive asset as “the site of home-based businesses or other kinds of income-generating activities” within informal settlements (Wiggle 2008: 200). The literature argues that the economic role of the dwelling provides income, enabling housing consolidation and improvement, and improves “opportunities for income generation, employment prospects and productivity” (Gough and Kellett 2001: 244). A study by Sinai (1998) in Kumasi found that out of 596 households in the survey, 144 (24.2%) used their home for income generation. A study by Gough and Kellett (2001) in Columbia found that within informal settlements, 20 to 30 percent of households operate home-based income generating activities. They also found a diverse range of strategies for income generation, many of which are a direct response to changing economic conditions, proving the flexibility of the IE is one of its most advantageous characteristics. It is unclear from the literature whether or not these home-based enterprises play a role within agglomeration economies or economic activity hubs (EAHs) within the settlements which is examined within the research.

Many studies have found that it is often the women within informal settlements who use their housing for income-generation (Mahmud 2003; Sinai 1998). Within low-income families of developing countries, it is common for all members of the household to participate in income generation, including women and children (Mahmud 2003). The literature has found that women within informal settlements

often use their domestic spaces for income generation and play a key role in providing income and home consolidation (Mahmud 2003; Sinai 1998). The types of home-based work often include activities such as: tailoring, food preparation, making household goods, small-scale workshops, and services such as hair-cutting, child minding, or restaurants (Mahmud 2003). By operating out of their homes, women are able to take care of their children and their home while also providing additional income (Mahmud 2003; Sinai 1998). The use of the home as a place of income generation saves time and money that are indispensable for survival of informal entrepreneurs (Mahmud 2003; Sinai 1998). These types of informal employment can often prove crucial during times of economic crisis or a shortage of formal employment opportunities (Mahmud 2003), as seen in the Arab Spring.

This review has provided insight into the developmental and spatial characteristics of informal settlements, as well as potential operation processes in order to help define EAHs. The literature suggests that globalisation and the resulting urbanisation are the primary causes of informal economic development and informal settlements within developing countries. Both informal settlements and the businesses they contain are affected by urbanisation and globalisation and, as the settlement grows, the scale and complexity of business operations will be affected. However, the literature does not examine how businesses are affected by characteristics associated with urbanisation and globalisation, such as population growth and migration patterns. The spatial drivers and characteristics that impact informal settlements also impact the businesses they contain; however, there are many gaps in the literature regarding the relation of businesses and the spatial characteristics of informal settlements. For example, how the locations of informal settlements and their common characteristics of being unfit for development and spatially excluded affect the development and operation of businesses, the role of social capital, or the importance of centrality and accessibility for these businesses. The research will seek to fill these gaps in the existing literature.

2.5. Underlying Social Capital

The previous sections have provided a conceptualisation of the IE as well as context for the research by examining informal settlements. The examination of existing debates has ascertained that social networks and identities often underlie informal processes. As a result of their exclusion from society, social networks often provide security, as well as access to economic opportunities for informal actors. These ties can be a result of ethnicity or kinship, or simply a result of locational proximity. By examining the importance of social capital in informal activities and livelihoods, the literature can provide some conception of its importance in EAHs.

As the informal economy moves closer to the model of a 'true market', it becomes more dependent on social ties for functioning effectively (Portes 1994, as cited in Berrou and Combarous 2012). Portes (1998: 6) defines social capital as "the ability of actors to secure benefits by virtue of membership in social networks or other social structures." Networks are not just a global phenomenon, but also play an important role within local economic activity hubs and agglomeration economies. According to Berrou and Combarous (2012), social capital plays a crucial role in the structuring of economic activities in developing countries, particularly for micro-enterprises within the informal economy. As a result, these social networks may act as a stronger factor in the formation and operation of EAHs than in formal sector agglomeration economies. Social networks are often promoted through marriage and subsequent relationships, expanding the networks and creating familial bonds that extend into the work environment, as was found in informal clusters in Nairobi (Harris 2014). These networks provide access to information and knowledge, as well as financial support and resources (Harris 2014; Hays-Mitchell 1993). They compensate for the weakness of the internal resources of micro-enterprises and provide support in times of crisis (Hays-Mitchell 1993). A study by Berrou and Combarous (2012) examined the importance of these social networks within market economies in Burkina Faso. They found a positive correlation between the strength of these networks and their economic performance (Berrou and Combarous 2012). Despite the fact that these networks are characterised by excessive competition and

instability that does not favour strong business ties, these connections are dynamic and flexible, giving them an advantage (Berrou and Combarrous 2012). Therefore, networks are not only important to micro-enterprises in the informal economy on a global scale, but also crucial on a local scale.

There is a recurring debate among literature as to whether social capital is deliberately created (Coleman 1988) or is a by-product of sociability (Putnam 1995). These debates regarding the 'deliberateness' of social capital inform ideas around socio-economic networks most associated with the IE and social capital needs to be examined in the context of EAHs as being 'created' or occurring as a 'by-product' of socio-economic activity. According to a study by Lyons and Snoxell (2005), there are arguments for both definitions, as traders in Nairobi consciously developed social capital within the marketplace in order to strategically create a sustainable economy; however, these networks were developed based on trust and feelings of friendship, which is a by-product of sociability. Despite the highly competitive environment associated with the IE and potential liability this poses to entrepreneurs, the assets social capital provides, such as flexible access to economic opportunities and financial support outweigh the costs (Barrios and Blocker 2015; Roberts in Portes et al 1989). For many informal traders, social ties, particularly among relatives, often help in the formation of a new trade, and sustained efforts are made by traders to maintain these ties (Lyons and Snoxell 2005). In many cases, social and family ties such as marriage help in sustaining social networks, as access to economic knowledge and opportunity are often shared more willingly (Harris 2014; Hays-Mitchell 1993). However, aspects of solidarity such as trust, reciprocity, and cooperation are also crucial in sustaining social capital within the IE (Lyons and Snoxell 2005), and are likely to play a key role in sustaining the social networks of EAHs. Because these social networks play such an important role in informal economic transactions, the research must examine how economic networks are created and sustained within the IE and EAHs.

Sassen (1991 cited in Lyons et al 2008: 196) argues that global cities play a crucial role in globalisation by acting as "nodes in international economic networks." The

resulting economic growth within these global cities also results in massive urbanisation. While attracting business and advanced economic enterprise, these nodes also attract rural-urban migrants looking for work, resulting in increasingly polarised socioeconomic groups (Mingione 1999). Such has been the case in many Latin American cities, where globalisation has indirectly isolated low-income populations and reduced their ability to perform economic activities by denying them access to public spaces in which they interact with higher economic classes (Roberts 2005). In addition to the 'elite' classes and poor migrants, globalisation has led to the migration of 'middle-ranking private actors' to global cities, affecting the ethnic diversity of the cities they choose to move to (Lyons et al 2008). Lyons et al (2008) found this to be the case in many Chinese cities and argue that globalisation and increased economic integration often exacerbate polarisation, not only between economic groups, but also among different ethnic groups. The authors found that trader social and economic networks are often based on ethnic or religious differences. For example amongst African traders in China, francophone trading groups are often defined by religion, while for Anglophone groups social and economic networks are based around ethnicity and "specific products and spaces" (Lyons et al 2008: 197).

There are discourses about international migration – some positive, some negative, and some focused on positive outcomes for social networks. An article in *The Economist* (2011) argues that governments should not fear international migration, as it is beneficial in providing international networks of kinship and language. Migration results in the spread of ideas, information, and money particularly with the aid of modern technology (Fox 2012; Gereffi et al 2001). The spreading of ideas and innovation through international migration could also affect businesses within informal settlements, as well as the importance of social networks based on ethnicity. Business operation and formation might be affected by ideas and customs from different ethnicities and connections may even form on an international scale. There may also be economic and social networks formed as a result of rural-urban migration with linkages to village economies as a result of entrepreneur's origins. These links based on ethnic or kinship ties may result in the formation or operations

of EAHs, as seen In Zimbabwe, where ethnic kinship ties play a crucial role for the exchange of skills and knowledge within informal clusters (Harris 2014).

In Section 2.4, the review examined the exclusionary practices associated with informal settlements. Those living and working within informal settlements are often excluded from society both spatially and socially, both of which may result in the formation of social networks. A common cause for social exclusion is the association of informal settlements with vulnerable groups such as immigrants, internally displaced persons, or ethnic minorities (UN Habitat 2003). These vulnerable groups may band together in an effort to create a sense of community, which might also affect the formation and operation of businesses within the settlement if they are associated with ethnic backgrounds or religious beliefs. Barros and Sobriera (2002) found that the settlements were excluded spatially as a result of fragmentation associated with poor planning and lack of infrastructure and resources within developing cities. These spatial gaps have resulted in a sort of 'segregated inequality' (Castells 1997), as discussed in Section 2.4.2. The unequal distribution of land results in the working poor often being denied access to economic centres, as informal occupants and vendors are often removed or relocated to the urban periphery (Bromley and Mackie; 2009; Brown 2001). This spatial inequality marginalizes the working poor and denies them access to livelihood opportunities (Brown 2001; Wigle 2008), as the importance of land accessibility has been intrinsically linked to tenure security (Holden and Otsuka 2014). In addition, because of their informally-built status, many settlement dwellers are excluded from the formal planning system and formal financial systems, making it impossible for them to improve their livelihood and move into a higher economic class (Roy et al 2014). For example, the requirements for obtaining a bank account or business license often require a postal address. The spatial gaps and social exclusion in which the settlements are formed may give them a separate identity and the development of a strong social network. These social networks contribute to the formation of agglomerations and local business development as a response to their exclusion from formal financial systems, and may explain the formation of EAHs within informal settlements.

Commonalities among the literature have identified the importance of centrality and public urban spaces as important locational drivers of informal economic activity, as they provide access to consumers and resources (Bromley 2000; Bromley and Mackie 2009; Brown et al 2010; Walsh and Maneepong 2012). Informal workers create dynamic relations based on their economic sector and livelihood strategy, creating broader socio-spatial relationships (Grant 2010). By operating within spatial proximity of consumers, social networks are developed as informal entrepreneurs can form a personal network of regular clients and form relationships that perform a wide range of functions (Hays-Mitchell 1993). The informal entrepreneurs may perform small tasks such as deliveries or domestic chores in exchange for advice or favours, often involving legal or health problems, reducing additional personal costs (Hays-Mitchell 1993). However, the existing literature has not considered how these agglomerations and social networks created by small-scale and micro-enterprises might allow for agglomeration or specialisation in order to gain an advantage within the local market, which will need to be examined in the research.

Existing debates regarding social capital have found that social identities and networks often underlie informal economic processes and must be taken into account when conceptualizing the IE and EAHs. Social networks are often a result of exclusionary practices and provide the working poor with access to economic opportunities and financial support that the formal sector does not. A large number of policy programs in developing cities, including Dar es Salaam, aim to limit informal activity, by providing resources for entrepreneurs to formalise; however they have been largely unsuccessful (Bromley 2004; Gilbert 2002). Barrios and Blocker (2015) argue that these programs are poorly designed because they do not account for the role of social capital, and often try to displace traditional support systems with increased reliance on external financial support. A greater understanding of social capital and its role in sustaining the IE may provide policy-makers with the knowledge to create more effective policies. Therefore, the research must examine the existing gaps in the literature by examining the role of social capital within EAHs, and whether underlying social networks have influenced their development and/or sustain the agglomeration economies.

2.6. Conceptualising Economic Activity Hubs (EAHs)

The focus of this research is to examine and provide a better understanding of EAHs. Following the review of the literature, the concluding section develops a definition of EAHs used in this research. Previous literature on the IE primarily researched street vendors and markets of city centres; however, much IE activity takes place in the informal settlements of the developing world. The contexts in these spaces is very different to city centres, with specialist clusters developing in particular localities, and there is a clear need to investigate the IE within informal settlements, and the extent to which clustering, or EAHs, add value to individual enterprise and the urban economy. The lack of literature regarding these phenomena makes it clear that their examination and understanding is crucial for future planning and policy-making. The term economic activity hub (EAH) is an original term that has not been previously adopted in research. The term was used in this research in order to avoid negative connotations often associated with the term 'slum' or 'slum economies' and focus on the economic aspect of informal settlements rather than housing or social aspects, which have been thoroughly studied in existing literature. This section seeks to define an EAH by examining the literature regarding the IE as well as the geographies and spatial clustering of the IE and the factors that influence the formation of agglomeration economies.

For the purposes of the research, an EAH has been chosen to delineate an agglomeration of small-scale or micro-enterprises within an informal settlement. The review does not assume all micro-enterprises within the agglomeration are informal, as the agglomeration could be made up of micro-enterprises that are legal, semi-legal, or informal. The general definition of the IE as discussed in the literature is any economic activity operating outside government or formal regulation. This definition provides a conceptual understanding of EAHs, particularly within the study area, as the majority of businesses within Tanzania are informal. The literature has found that the IE and formal sector are indeed linked and these linkages have increased (Chen 2012; ILO 1972) though there is a gap in the literature regarding the informal-formal

links between businesses within informal settlements and the wider urban economy. The research will need to examine how informal-formal linkages affect the operation of EAHs.

The literature regarding the explanatory theories of the IE – dualist, structuralist, voluntarist, legalist, and pluralist – provided insight regarding the formation and development of EAHs, as well as their potential relationship to the wider urban economy. The attraction to the ideal of self-employment could be considered as a potential driver to the formation and growth of EAHs. The flexibility of working outside of the formal sector as well as the minimisation of production costs are likely to be key features of EAHs. A lack of government regulation associated with informal economic activity potentially allows for greater earnings as a result of specialisation within small-scale agglomeration economies, though this is not discussed in the literature and will also need to be examined. However, there is also the argument that the formation of EAHs would be a response to the over-regulation and the failings of the formal sector. Enterprise-based employment through micro-enterprises provides workers with more control than would be allowed within the formal sector, but perhaps less security. There is a need to examine whether workers choose to operate within EAHs as a result of unemployment within the formal sector, as a result of economic opportunities arising from market demands within EAHs, or potentially as a way to retain control in a growing economic sector, or even a combination of these three factors. The research also needs to examine the role of EAHs within the wider urban economy in order to determine the accuracy of the pluralist assessment that the acceptance of the IE and the coexistence of the formal and informal sectors would benefit the wider urban economy.

An examination of the regional dynamics of the IE provides insight as to the political and wider urban processes that influence formation of the IE in order to examine potential processes of formation of EAHs. Globalisation has been identified by the literature as a key driver of urbanisation (Sassen 1991), and underlying impetus in the formation and development of the IE. Globalisation involves the IE as a way of

'absorbing' displaced workers or unskilled labour and provides cheap goods and services to help reduce high inflation caused by globalisation, potentially providing impetus for the development of EAHs as the resulting excess of unemployed labour or as an economic opportunity in meeting market demand. The research will seek to examine whether EAHs emerge as a response to polarisation among income groups and economic exclusion of sectors of the urban workforce, and what role ethnicity plays in their formation. Globalisation may cause an increase in the appearance of agglomeration economies in developing countries as specialisation by small-scale or micro-enterprises in local markets might provide international firms with an alternate source of cheap goods and labour. On the other hand, it might decrease the occurrence of agglomeration economies within the informal sector because micro-enterprises cannot compete with international firms. It is necessary to examine this further in order to provide a complete understanding into the potential causes and operations of EAHs.

Urbanisation has resulted in massive migration to urban environments within developing countries, resulting in the growth and development of informal settlements. The literature argues that informal settlements often fill in the spatial gaps that result from insufficient planning and coordination within developing cities (Augustijn-Beckers 2011; Barros and Sobreira 2002). It is believed their development is influenced by land availability, employment opportunity, and proximity of "high-intensity mixed land use" (Barros and Sobreira 2002). These factors may also affect the development of businesses and EAHs within the settlements. However, the literature does not examine the economic function of informal settlements or their enterprises within the wider urban economy or whether these settlements act as a potential pull factor for migrants. While there has not been much research done regarding the spatial patterns of economic activity within informal settlements, there are spatial characteristics of the IE agreed upon within the literature, e.g. centrality and accessibility (Bromley and Mackie 2009), that are likely to be shared with EAHs, though this is explored further through the research.

The most notable spatial characteristics of the IE are the aim for centrality, accessibility, and the importance of cost and demand (Bromley 2000; Bromley and Mackie 2009; Brown et al 2010; Iyenda 2005; Walsh and Maneepong 2012). According to these authors, much street trading occurs at localities that are centrally located, and market complexes and courtyards provide epicentres for economic activity and networking (Bromley 1978; Bromley and Mackie 2009). This is also likely to be the case for businesses within settlements and as these locations provide access to goods and services as well as market demand to small-scale and micro-enterprises (Bromley and Mackie 2009; Iyenda 2005). However, there is the question of the importance of centrality and accessibility compared with the importance of social networks. Agglomerations often develop as a result of social networks. It might be the case that social networks prove to be more important for the formation and operation of EAHs than central locations, as they have significantly different effects on location, as further examined in the fieldwork.

The flexibility and adaptability of the IE is one of its greatest assets and provides an advantage over the formal sector (Bromley and Mackie 2009). It is constantly changing and adapting as a result of political and social environments (Bromley and Mackie 2009). Because the majority of the literature focuses on street vendors, it is unclear whether informal settlements and EAHs are also as flexible and adaptable and whether this affects their ability to compete economically; however, it may be that such flexibility provides an advantage in agglomeration economies, or EAHs, as a way of decreasing transportation and production costs, particularly between small-scale firms. The literature has also not considered how the development of agglomerations and social networks created by small-scale and micro-enterprises might allow for specialisation in order to gain an advantage within the local market. The research will need to examine the importance of flexibility and specialisation within EAHs. For example, the research might find that social networks outweigh locational advantages in EAHs. Unfortunately, the majority of the literature regarding agglomeration economies focuses on developed countries, though it has identified successful cases of agglomeration economies generated by the IE (Malmberg and

Maskell 2002; Moreno-Monroy 2012). Moreno-Monroy (2012) and Malmberg and Maskell (2002) argue that micro-enterprises and informal enterprises can be expected to cluster due to their small size in order to reduce costs. Agglomeration economies provide a way for small-scale or micro-enterprises to compete with large transnational companies in a globalising economy (Carr et al 2000; Yuzon 2005).

The increase in globalisation processes has led to the creation of network economies and value chains all across the world, and has affected developing countries as much if not more than developed countries (Gereffi and Lee 2012). According to Moreno-Monroy (2012), agglomeration economies such as EAHs can emerge from the interactions and linkages created by network economies, either within the IE or between the informal and formal economies. Social networks are particularly important to small-scale and micro-enterprises operating with the IE (Portes 1998), though neither their role within value chains nor in spatial clustering has been previously examined by the literature and will need to be addressed in the research. Social capital is crucial to the structuring and success of the IE as it moves towards a 'true market' (Portes 1998) as it provides access to information and knowledge, as well as financial support and resources (Hays-Mitchell 1993). These social networks also compensate for any weakness of the internal resources of micro-enterprises and provide support during economic decline (Hays-Mitchell 1993). Despite the fact that these networks are characterised by excessive competition and instability that does not favour strong business ties, these connections are dynamic and flexible, giving them an advantage (Berrou and Combarous 2012).

This review has attempted to define EAHs based on existing literature; however, there are many gaps in the existing literature as EAHs are a phenomenon that has not been previously studied. Characteristics such as locational choice, and centrality and accessibility will need to be examined through fieldwork in order to provide an in-depth description of EAHs to contribute to existing literature. There is the question of potential drivers for the formation of EAHs as a result of spatial or social circumstances. The importance of social capital in comparison with locational

advantages and how social capital plays a role in EAHs, potentially providing information about the causes as well as the characteristics and functionality of EAHs. It is necessary to examine these gaps in order to provide a clear understanding of the causes, characteristics, and function of EAHs.

2.7. Conclusions of the Literature Review

This chapter has explored the literature on the IE in order to examine the processes that drive their creation and operation of EAHs. Very little of the literature touches on the concept of agglomeration economies or economic activity hubs within the IE, so the chapter has instead identified dimensions through which EAHs may be examined. This includes the economic (informal/formal) dynamic and political landscapes as well as wider literature on economic clustering and value chains in order to help define that gap in relation to the IE. The first section examined definitions of the IE and the potential causes and economic logic of the IE, followed by political dynamics influencing IE growth and the problems of urbanisation in sub-Saharan Africa. The second section examined potential spatial dimensions of the IE, examining literature on locational aspects of economic enterprises, particularly regarding clustering and agglomeration economies and economic networks and value chains within the IE. The third section provided an understanding of informal settlements that may provide insight into the formation and spatial drivers and characteristics of EAHs. The fourth section conceptualised the relationship between social capital and the IE to determine the importance of social networks and identities within EAHs. By drawing on the wider literature, it was possible to create a definition of EAHs and potential drivers and characteristics that will help in developing an understanding of them for the purposes of this research.

There are many definitions of the IE; however, it can be generally understood as any unregulated economic activity operating outside formal or government regulation. The various schools of thought regarding the IE provide reasons for its formation as well as its relationship with the formal economy, potentially providing insight as to the processes that drive the creation of EAHs and their link to the wider urban

economy. The flexible operations that characterise informal economic activity decrease costs associated with production while increasing income opportunities, possibly more so than would be within the formal sector. Linkages between the informal and formal sectors may prove to increase profitability of micro-enterprises. In addition, policy restrictions may act as a barrier to livelihood opportunities for many of the urban poor; however, the IE provides alternate sources of employment opportunity when the formal sector is unable to do so. These insights have provided importance conceptualisations for the research in understanding the potential drivers of EAHs.

The legalist approach of gradually moving the IE towards formalisation has been very influential on planning legislation but has not been effective, suggesting that the IE is an important dynamic in modern urban economies. Meagher (1995) argues that informalisation is not impossible for African countries, though “differences in the patterns of informalisation in Africa and Latin America indicate that caution is necessary in the application to African societies of a theoretical perspective based heavily on the Latin American experience.” Meagher (1995) goes on to say that informalisation is part of a ‘global restructuring strategy’ to alleviate economic deficits and upheaval within the formal economy and is an important player in the global economy. The formal market cannot copy the flexibility of the informal sector and could not operate and expand without the informal sector in some cases (Meagher 1995). In addition, in the case of African countries, informal activity has assisted in the development of the country by providing additional economic income (Meagher 1995). Therefore, acceptance of informalisation is a viable policy option for some low-income cities, but social, political, and economic characteristics must be taken into account. The research will seek to examine these characteristics in Dar es Salaam and the subsequent EAHs chosen for study as well as the potential of EAHs in providing livelihoods to determine the viability of such acceptance as a way of alleviating the decoupling of urbanisation and economic growth in many Sub-Saharan African cities.

As the purpose of the research is to examine economic activity within informal settlements, it was necessary to define and understand the characteristics of these settlements to provide context for EAHs. However, much literature defining informal settlements focuses on housing, quality of life, social characteristics, or political policies rather than the economic aspects or economic potential they may provide. The characteristics of informal settlements are defined by the literature as lack of services, inadequate structures, unhealthy environments, and lack of security. There is also a lack of literature regarding the spatial context or development process of informal settlements, as they are known for being erratic and unorganised, simply filling in the spatial gaps that result from insufficient planning and coordination within developing cities (Augustjin-Beckers 2011; Barros and Sobreira 2002). It may be the case that the spatial exclusion created as a result of 'filling in the gaps' has created a need for economic opportunity within the settlement, resulting in the creation of EAHs and agglomeration economies. It may also be the case that EAHs originated from the creation of home-based enterprises that have expanded as their success has generated more income. The spatial drivers and characteristics that impact informal settlements may also impact the businesses operating within them. The research seeks to fill the gaps in literature regarding locational attributes, spatial context, and common characteristics of being unfit for development affect business development and operation.

Kesteloot and Meert (1999) argue that there has been much research done on informal economic activities in both developed and developing countries, but there have been relatively few studies and even fewer conclusions drawn regarding the spatial patterning of these activities. Various reasons related to supply and demand provide rationale behind locational choice as centrality and accessibility are common characteristics throughout the literature. As displacement of informal economic actors from central locations to peripheral locations is common practice in many cities (Bromley 1998; Bromley and Mackie 2009; Donovan 2008; Mackie et al 2014), the IE is constantly changing and adapting. Flexibility and adaptability are assets of the IE that may provide insight into the development and operation of EAHs, as the literature has not considered how these agglomerations and social capital created by

micro-enterprises might allow for specialisation in order to gain an advantage within the local market. The literature has provided successful cases of agglomeration economies generated by the IE, such as the cotton-knitting industry in southern India or the shoe production industry in Brazil (Moreno-Monroy 2012); however it has also identified many gaps in the research. These agglomeration economies may provide advantages to micro-enterprises, such as decreasing transportation and production costs. However, little is understood about the factors that drive agglomeration economies within the IE other than supply/demand agglomerations or locational factors, the spatial aspects of businesses within informal settlements, or the extent of the role these businesses play in the wider urban economy. In the case of EAHs, it may be the case that there are simply more people who need work, or the success of existing businesses draw others. The research will need to examine the advantages that location and clustering afford these EAHs, as the majority of literature has focused on street vendors.

The role of market value chains has been broadly overlooked, and this traditional form of value chain might play an important role in the function of EAHs. The factors driving market operation may be different within informal settlements, making it necessary to study further. The role the IE plays within producer or consumer-driven value chains has also been overlooked, and could provide insight into the role of small-scale or micro-enterprises in global value chains. Traditional literature argues that global networks offer opportunities to micro and informal enterprise through the expansion of global enterprises in developing countries, but there is evidence in the literature that micro and informal entrepreneurs are not only passive actors, finding new opportunities within global value chains, but also agents shaping economies (Lyons et al 2013). Informal entrepreneurs create a heterogeneous economy made up of complex networks, where the entrepreneurs use these networks to connect to the economy in both adjacent and distant spaces. Social capital is crucial in these networks as it often underlies transaction processes in informal and micro-enterprises, as a true market economy is more dependent on social ties for functioning effectively. These social networks provide access to information and financial support and resources while compensating for the

weakness of the internal resources and lack of political support (Hays-Mitchell 1993). Social capital was found to be particularly important in African market economies, as there is a positive correlation between the strength of social networks and their economic performance (Berrou and Combarous 2012). However, it is unclear from the literature how social capital may play a role in EAHs, potentially providing information about the causes as well as the characteristics and functionality of EAHs.

For the purposes of this research, EAHs can be defined as the agglomerations of micro-enterprises, formal or informal, within an informal settlement. There is a significant gap in the literature regarding economic activity within informal settlements and this research will seek to provide an understanding of the importance of these agglomerations to the wider urban economy. This review provided insight into the definition, potential drivers, geography and spatial clustering of the IE, as well as potential operation processes in order to help develop the concept of EAHs. However, potential drivers; characteristics such as locational choice; the importance of social capital; and economic networks and value chains associated with EAHs are all aspects that must be examined through the research, as gaps in the literature do not provide a clear understanding of EAHs.

Chapter 3: Research Design and Methodology

3.1. Introduction

This chapter seeks to explain the methods that were employed during the research process and to highlight the methodological approach in terms of the role of theory in the research. The methodology used in this research is original in the combination of qualitative methods with spatial analysis to fully understand the phenomenon of EAHs. The first chapter introduced the research aim – being to *provide a better understanding of the IE within informal settlements, particularly the importance of agglomeration economies (EAHs) and their role within the wider urban economy* – together with the research objectives. These objectives seek to provide a better understanding of the IE within informal settlements, particularly the importance of EAHs within informal settlements and their role within the wider urban economy. This chapter presents the research methods employed to investigate these issues.

The first section provides a brief theory behind the methodology chosen to complete the research. The next section examines the research design that was employed to complete the research objectives. The research design consists of mixed methods, combining both qualitative and quantitative approaches. This will be followed by the justification for using case studies of informal settlements, and the selection criteria for the cases chosen for the study. A detailed examination of the spatial data analysis techniques used and the use of Geographic Information Systems (GIS) is then presented before the qualitative approach, which examines the observation and interview techniques employed. The chapter concludes with a discussion of ethical considerations and limitations to the research.

3.2. Theory and Research

This section establishes the theoretical background for the methodologies chosen to meet the research objectives. This research aims to provide a theory within which the phenomena of economic activity hubs (EAH) can be understood and the research findings can be deduced. Because little is known about these agglomeration

economies, the research will employ an interpretivist approach, as it seeks to understand how and why EAHs occur and will utilise an inductive approach, in which the theory and understanding will be drawn from the outcome of the research.

There are three commonly discussed approaches in qualitative inquiry: grounded theory, ethnography, and phenomenology (Creswell 1998). Grounded theory attempts to create a theory by examining a phenomenon to determine how it came about and whom it affects (Creswell 1998). Ethnography is a description and interpretation of a culture or social group (Creswell 1998). A phenomenological study examines a phenomenon and how and why this occurrence has changed the way society functions (Creswell 1998). These social theories help explain phenomena about how culture and society evolve over time (Creswell 1998); however, it is necessary to select one theory over another as a conceptual scheme when “reality itself is relative to a scheme: what counts as real in one system may not in another” (Donald Davidson 1984: 183, as cited in Avis 2003). Philosophical positions allow for the defence of qualitative research as a credible form of inquiry without relying solely on one conceptual scheme (Avis 2003).

The positivist form of scientific method, or the traditional scientific approach, is unsuitable for understanding the constructionist facets of human behaviour (Avis 2003). Critical realism will be adopted as the philosophical position, as realism and social constructionism are mutually supportive (Elder-Vass 2015). Bryman (2008: 29) defines critical realism as a method of “recognising the reality of the natural order and the events and discourses of the social world.” Like the positivist view, critical realism implies that observation and conceptualisation are a way of knowing that reality, but recognises that the methods employed to understand that reality might be provisional (Bryman 2008). Therefore, theories that account for regularities in the natural or social order based on observation are acceptable for realists, unlike positivists. This implies a more retroductive reasoning, rather than inductive, as it entails making an inference about the causes of observed regularities in the social

world (Blaikie 2004). Therefore, the research is based on empirical evidence, but will also draw rational conceptions and understandings from this evidence.

One of the main concerns in research is how culture and society affect the way scientists and researchers observe and understand different realities. Hermeneutics is a term drawn from theology that is concerned with the theory and method of interpretation and emphasises the need to understand from the perspective of those realities (Hennink et al 2011). Through the interpretivist approach, the study seeks to understand and identify the phenomenon of EAHs from the perspective of entrepreneurs that form part of the EAHs in order to understand the meanings and interpretations they apply to certain behaviours or activity and to provide a theory behind the formation and functionality of the phenomenon of EAHs. However, some authors, such as Schutz and Weber (as cited in Bryman 2008), argue that it is impossible to completely discount personal social realities as they provide the basis of how individuals make sense of the world around them and have created preconceptions of how individuals behave and experience various environments and social phenomena.

Thus, through the examination of various theories regarding methodological choices, an interpretivist approach has been applied throughout the research as a way of understanding EAHs. The study will seek to provide an accurate assessment combining scientific approaches and subjective analysis to infer theory based on the findings.

3.3. Research Design and the Mixed Methods Approach

This section will provide the general research strategy and its relation to theory that will be applied in the study. In order to meet the research objectives, a mixed methods approach was used, a procedure for collecting and analysing both quantitative and qualitative data and methods, better to understand a research problem (Creswell 2014). The combination of qualitative research with spatial

analysis is original in this context and, as part of the piloting of this type of mixed methodology, the research will also be testing the methodology and determining how it can be improved. The rationale for using a mixed methods approach is that neither the quantitative nor qualitative methods alone are sufficient to fully understand EAHs, but the combination of the two methods provides a more comprehensive account of the phenomenon. The research objectives are complex with multiple parts; therefore, certain methods are more appropriate to answer certain questions. The methodological approaches are complementary in that the results from one method clarify the results from another, as well as expansive in that they extend the range of inquiry by using different methods for different inquiry components (Creswell 2014). In the past, it was uncommon to combine quantitative and qualitative methodologies, however, the combination of the two methods allows for more dynamic analysis and new ideological positions (Holland and Campbell 2005).

Qualitative research is difficult to define as it covers a wide range of techniques and philosophies (Hennink et al 2011). Creswell (1998: 15) defines qualitative research as “an inquiry process of understanding based on distinct methodological traditions of inquiry that explore a social or human problem.” This can be achieved using research methods such as interviews, focus group discussions, content analysis, and observation. The most distinctive feature of qualitative research is its use of the interpretive approach, examined in the previous section (Hennink et al 2011). Therefore, qualitative research seeks to understand the social world through an examination of the interpretation of that world by its participants (Bryman 2008). Qualitative analysis will provide a better understanding of the drivers of EAH formation and how they function. This will be accomplished through interviews and observational methods, discussed later within the chapter.

Unlike qualitative research, quantitative research can be defined as a research strategy that stresses quantification in the collection and analysis of data (Black 1999). The quantitative method typically follows a deductive approach, whereby the

theory is proven by research and observation, rather than being formed based on the data collected (Black 1999). Quantitative analysis, or spatial analysis in the case of this thesis, is important for the completion of the research, as it will allow for the examination of spatial patterns of EAHs and provide a visual representation of their role within the wider urban economy. Through the application of GIS technology, the research was able to examine the spatial distribution of EAHs for visual analysis and identify potential patterns as deepen the understanding of economic networks. This research will therefore help in determining the feasibility of the application of GIS technologies in future urban spatial planning research.

The mixed methods approach offers a way of thinking that actively encourages participation of various way of seeing the world, making sense of the social world, and provides a better understanding of the complex character of social phenomena through the use of multiple approaches (Greene 2008). Greene (2012:770) argues, "Contemporary social inquiry is challenged by such issues as complexity, contextuality, values, and societal role." The mixed methods approach offers multiple stances on how to provide a better understanding of these complex social inquiries (Greene 2012). According to Holland and Campbell (2005: 5), "while quantitative methods produce data that can be aggregated and analysed to describe and predict relationships, qualitative research can help to prove and explain those relationships and to explain contextual differences in their quality." Holland and Campbell (2005) argue that the combination of these two methods is particularly important in development research as it provides more flexibility in understanding social phenomenon, such as EAHs. Both quantitative and qualitative methods complement each other in the understanding of EAHs. The research is novel in its approach of applying GIS methodologies to the study of the IE within informal settlements, and in its combined spatial and qualitative methods. The spatial analysis provides visual representations that allow for better understanding of cluster patterns and potential locational drivers, while the qualitative analysis provides the explanation behind socio-cultural, business, and locational choices.

According to Creswell (2014), three issues need consideration when designing a mixed methods study: priority, implementation, and integration. **Priority** refers to the method, either quantitative or qualitative, given more weight in the research (Creswell 2014). For this study, priority was given equally to both methodologies. Spatial analysis was necessary in understanding EAHs, as it provided a visual representation of the spatial patterns of IE activity and economic networks of EAHs to determine potential drivers and operations of these economies. Through interviews and observations with the social actors of EAHs, the research was able to deepen the understanding of EAH agglomerations, and socio-cultural, economic and policy drivers behind their formation.

Implementation refers to whether the quantitative and qualitative data collection and analysis occur at different stages or concurrently (Creswell 2014). For the study, it was necessary to first observe the phenomenon to determine the best plan of action for obtaining all data necessary for the study. The first stage was the selection of case studies, discussed further below. The qualitative and spatial analysis portions of the research took place concurrently, as GPS (Global Positioning System) readings were used to map the location of businesses in the settlement and to mark the location of those businesses interviewed. The interviewees were both selectively and opportunistically sampled based on different types of enterprise.

Following completion of the interview portion, the remaining businesses within the chosen case studies were collected using GPS, and external economic networks were also tracked using a GPS device. Thus the data collection was broadly concurrent. By collecting spatial data at the same time as the interviews, the research provided a better understanding of the economic activity within the chosen case studies.

Finally, **integration** refers to the stage in the research where the mixing of both quantitative and qualitative data occurs (Creswell 2014), in order to draw in-depth conclusions about the findings from the two main strands of fieldwork, qualitative and spatial analysis. This was done through the combining of the data collected

within an ArcGIS environment to visually analyse the spatial attributes of the EAHs. Information gathered through interviews and observations was input into an excel file and combined with the collected GPS coordinates to be georeferenced. In this way, qualitative data can be mapped to explain the spatial characteristics of the EAHs and the social and economic networks that are part of the functionality of these EAHs. Integration of the data occurred at the data analysis stage and continued through the data interpretation stages. The combination of the various data types provides descriptive, visual analyses, as well as identifying themes and looking for connections among the various themes. Data interpretation will attempt to contextualise the analysis in order to make sense of the phenomenon and construct generalisations as well as interpretations based on the analysis.

This section has examined the research design that was used for completion of the research. The mixed methods approach was applied as the combination of multiple methods provides more flexibility in understanding EAHs and both quantitative and qualitative methods are necessary to complement each other. By combining qualitative methods such as interviews and observations with spatial analysis, it is possible to address the three broad research objectives.

3.4. Case Study Approach

The next sections examine the methodological strategies employed in the research and how those methods will assist in completing the research objectives. As little is known about EAHs, their formation or operations, case studies are necessary to provide an in-depth investigation into the phenomenon. The study investigates the drivers of EAH formation and functionality in the informal settlements of Dar es Salaam. Case studies typically combine different data collection methods, and the evidence may be qualitative, quantitative, or mixed (Eisenhardt 1989). This allows the researcher to obtain more detailed information and evidence for a specific area, providing a fuller assessment of the phenomenon and enabling the formation of inferences and theories based on the evidence. For this research, a case study

approach using interview and observation methods as well as spatial analysis methods was adopted. Undertaking a case study of EAHs in Dar es Salaam has allowed for exploration of the characteristics of these EAHs and how they function. This section provides information regarding the case study approach, as well as how it was applied within the research.

According to Yin (1984), a case study is best defined as an empirical inquiry that investigates a contemporary phenomenon within a real-life context, particularly when the boundaries between the phenomenon and context are not clearly evident. There are many types of case studies, defined by Yin (1993) as exploratory, explanatory, and descriptive. For this research, explanatory case studies were best suited for understanding EAHs, as they use both qualitative and quantitative research methods in order to explore and describe a phenomena and can also be used to explain causal relationships and to develop theory (Yin 1993). The case selection method for this research would be defined as 'most similar'; in which the cases are chosen based on specified variables for exploring said specific variables (Seawright and Gerring 2008).

There are arguments against the use of case studies, primarily over the methods used and data collected during case studies (Gerring 2004). Another common concern is generalisations based on case studies that might not apply in other contexts (Gerring 2004). As a result it is important to ensure that the data collection and methods are thorough, and that generalisations are not made during analysis that might imply that the results can be applied within all other contexts. Another possible concern is how the case itself is chosen and what implications this may have for the generalisation of results to other cases. For example, informal settlements in Dar es Salaam may prove to be very specific cases compared to those in other cities, which may have unforeseen implications for the development of theory around EAHs. However, the advantages of the case study approach outweigh the concerns regarding the methodology, as it was necessary to examine the phenomenon of EAHs within the context of their circumstances and conditions.

3.4.1. Choosing the Case Studies

For this research, Dar es Salaam, Tanzania has been chosen as the area of study for the research, as it provides an excellent locale for the study of EAHs for a number of reasons. According to Lyons and Msoka (2010), informality in Tanzania is comparable with many other sub-Saharan African economies. It is estimated that 70% of the population of Dar es Salaam lives within informal settlements (World Bank 2012), identified in Section 2.5 as the setting for EAHs. In addition, 98% of all businesses within the city are believed to be informal based on studies by the ILD (Institute for Liberty and Democracy, 2005) and it is estimated that the informal sector as a whole contributes 35% of the GDP (Lyons and Msoka 2010). As discussed in the literature review, the IE is likely to play an important role in the formation and operation of EAHs. With a current population of about five million and a rapid growth rate (World Bank 2012), Dar es Salaam's urbanisation rate is seen as one reason for the growth of the IE and informal settlements (UN Habitat 2003; World Bank 2012).

Following the fieldwork and observations of several informal settlements throughout the city, two informal settlements within Dar es Salaam were chosen based on certain criteria. It was necessary to locate areas of significant economic activity that specialise in a particular industry, resulting in the agglomeration of micro and small-scale enterprises and, potentially, formal enterprises as well. Other criteria were formed following observation, such as the level of income, mixed land use and density, as informal settlements vary greatly and it was necessary to choose cases that shared the basic characteristics outlined below for the comparative analysis of the case studies. In addition, these criteria meet the definition of an informal settlement as examined within the literature review. Cases for the research were chosen based on the following criteria:

- A predominantly low-income population (judged from housing condition);
- Relatively high density for Dar es Salaam (which is quite a low-density city);
- Mixed land use;
- Existence of an agglomeration economy with an industrial specialism;
- Significant economic activity; and
- Location within the city

The objective was thus to find two or more informal settlements for comparison, which exhibited significant agglomeration economies where businesses appeared to be predominantly informal, and which were politically accessible for the research.

A multiple case study approach at a local scale was utilised to compare EAHs within different contexts, and a comparative approach was used in the analysis phase to determine the applicability of the findings to other cities. According to Seawright and Gerring (2008), there may be the problem of case independence in multiple case study research, in which certain cases are not applicable to any others, as discussed previously.

The objectives of case selection were to find 1) cases that could be representative of wider EAH formation processes; and 2) a useful variation on the dimensions of theoretical interest (Seawright and Gerring 2008). In order to choose the case studies, the first step was to interview academic and urban professionals, who provided a basic understanding of the history, location and characteristics of informal settlements and which ones within the city would be appropriate for the research. Various settlements within the city, listed in Table 3.1, were suggested as possible sites for researching EAHs during these interviews. In a scoping study, various settlements were visited for observation and the options narrowed down based on the criteria above, chosen following observation. The settlements visited and criteria met are listed in Table 3.1.

An important limitation in the selection of case studies was the time available in the field and the resources available in terms of the number of case studies chosen and their location within the city, as acute traffic congestion makes travel round Dar es Salaam time-consuming and inefficient. The informal settlements chosen needed to be easily accessible, making it necessary to choose those located within a certain distance of the city centre, though this may result in specifications that will affect the theory regarding EAHs. The research would benefit from more case studies in a wider area to provide a more accurate assessment of EAHs; however, time limitations and resources prevented this.

Table 3.1: Scoping study: settlements visited and criteria met

Settlement	Criteria					
	Low Income	High Density	Mixed Land Use	EAHs	High Economic Activity	Close proximity to CBD
Msasani	✓	✓	✓		✓	✓
Manzese	✓	✓	✓	✓	✓	✓
Kimara	✓		✓		✓	
Keko	✓	✓	✓	✓	✓	✓
Sandali	✓		✓			✓
Kinondoni Shamba	✓	✓	✓		✓	✓
Mwananyamala	✓	✓	✓		✓	✓
Kawe	✓	✓	✓			
Mabibo	✓	✓	✓		✓	✓

Another limitation was the limited number of informal settlements with an obvious specialisation in a particular industry/sector. To provide comparison across the city of Dar es Salaam, an important factor was also the selection of inner-city settlements from more than one of the three central metropolitan districts, Temeke (south), Ilala (central), and Kinondoni (north west). This is because different districts – despite supporting a variety of economic backgrounds – tend to be more populated by either higher or lower income groups, with Kinondoni considered the wealthier area and Temeke considered the least wealthy, according to local sources (AUP6 2015). The newer, outlying districts of Ubungo and Kigamboni were discounted because of distance from the city centre. By examining low-income settlements from different areas, rather than just one, a more accurate assessment of the informal economic activity for the entire city is provided. However, during the selection, it was discovered that EAHs are not particularly common among the inner-city settlements, with small-scale local shops and services making up the majority of micro-enterprises in the other areas. Therefore, it was difficult to select cases within the different areas as there were fewer choices than originally expected.

Despite limitations, case studies were selected that met all of the criteria. Two informal settlements were chosen: **Keko** and **Manzese**. The characteristics of each settlement for the various selection criteria are shown in Table 3.2. Their location is shown in Figure 3.1.

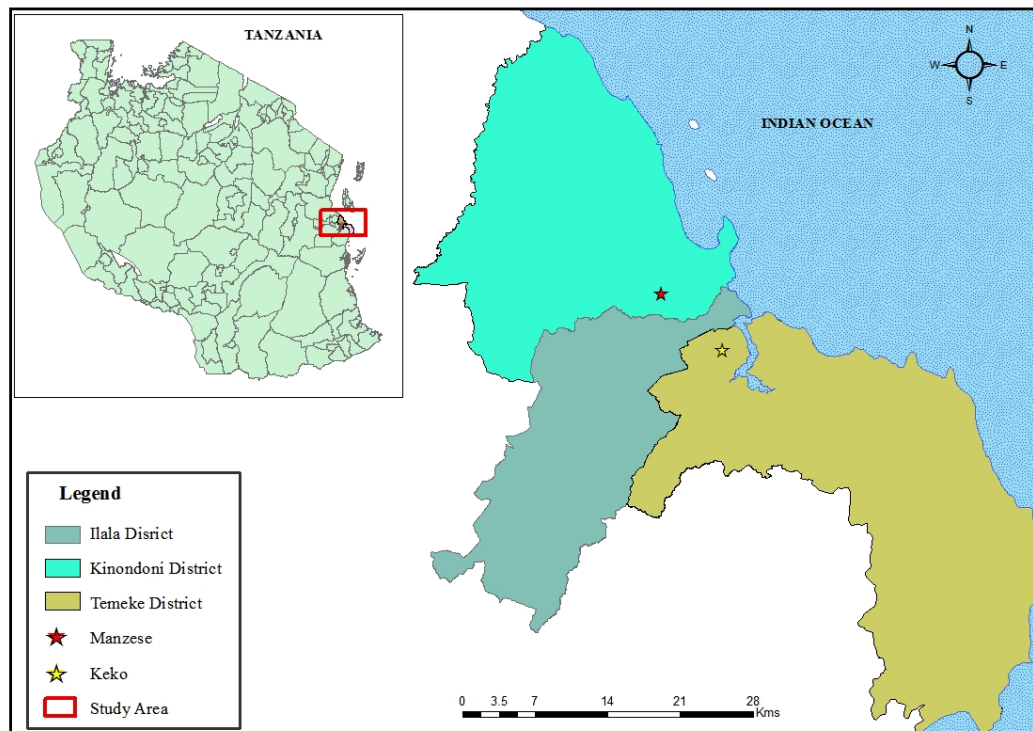
Table 3.2: Comparison of case study settlements per selection criteria

Criteria	Keko	Manzese
Age	1960s	1960s
Development history	One of the oldest informal settlements –development linked to port activities during colonial period.	One of the oldest and largest informal settlements – development linked to growth of industrial activities in 1960s & 70s.
Density	Very High	Very High
Location – Km to CBD	3 km	6 km
Socio-economic profile	Predominantly low income	Predominantly low income
Mixed land use	Yes	Yes
High economic activity	Yes	Yes
Existence of EAHs	Yes	Yes

The two informal settlements chosen as case studies fit all of the selection criteria – both are high-density settlements with mixed land use and significant economic activity. Both are within a reasonable distance of the central business district (CBD) and their socio-economic characteristics of their populations are predominantly low-income. Keko is located within Temeke District while Manzese is located in Kinondoni District. Most importantly, both settlements provide ideal locations to study industrial specialisation, as EAHs can be found within both settlements.

In Keko, the specialisation is furniture – e.g. making furniture, selling hardware or textile supplies, furniture showrooms – and is considered the ‘Furniture Capital’ for Tanzania according both to local respondents, and in existing research such as a study of cluster-based growth in Africa by Zeng (2008), in which Keko was used as a case study. According to some respondents, customers even come from Kenya and Uganda to buy furniture at a reasonable price. In Manzese, the specialisation is in textiles, e.g. tailoring; cobbling; selling imported, used clothes (*mitumba*), new mostly imported clothing, and shoes. In addition, both settlements have experienced varying degrees of upgrading through the CIUP (Community Infrastructure Upgrading Project). Therefore, they both provide information on how upgrading may or may not have affected micro-enterprises within EAHs and what upgrading local entrepreneurs believe would be most helpful in improving their business.

Figure 3.1: Location of the 2 case settlements



Source: University of Dar es Salaam; the University of Twente, Faculty of Geo-Information Science and Earth Observation; and the University of Dortmund

Keko is one of the oldest informal settlements of Dar es Salaam, dating back to the colonial period, and was predominantly inhabited by port-workers (Lupala 2002). According to Lupala (2002: 52), much of the city was planned out during the colonial period and high density informal settlements were demolished. Keko “was spared from demolition...because it was earmarked for Africans working at the port” (Lupala 2002: 52). As a result of inner city planning and demolishing of African residential areas, the settlement became even more crowded. According to the Ward Executive Officer (2015) for the settlement, the population is estimated at 36,000.

Manzese is the largest informal settlement in Dar es Salam, located within the Kinondoni District (Lupala 2002). Like Keko, Manzese originally developed as an agricultural area during the German colonial rule outside the city limits, but as the city expanded the settlement continued to grow (Tripp 1997). Manzese’s growth was manifest by the establishment of industries in the Ubungu area during the 1960s and 70s (Tripp 1997). According to Tripp (1997: 37), the population of Manzese was only 4,630 in 1967. By 1978 it grew to 28,522 and nearly doubled by 1988 (Tripp 1997).

Manzese flourished because it developed outside of the jurisdiction of city licensing regulations (Tripp 1997), indicating the importance of the informal economy in the development of these EAHs; however, it continued to grow due to the employment of workers by nearby industries. The Urafiki Textile Factory, established in 1968 with the assistance of the Chinese Government, employs a large number of these workers.

As EAHs are a relatively unstudied phenomenon, these case studies are crucial for meeting the research objectives. Because Keko and Manzese both meet the criteria, they will provide an accurate assessment of EAHs within Dar es Salaam.

3.5. Spatial Analysis

This section presents the quantitative, or spatial, data that was collected in the fieldwork and how it was applied within the research. Spatial analysis gives an added depth to the research design, and is important for meeting the first part of the second research objective. In addition, its use in informal economic analysis is rare, so the research can provide a better understanding of the spatial patterns of IE activity and examine the potential of GIS and spatial analysis as a tool in urban development research. Spatial analysis will determine the spatial factors that influence the emergence of EAHs, and the reasons behind locational choices of business – whether to meet needs of clients, have better access to resources, or draw on existing social or economic connections – and the patterns formed as a result. Spatial analysis gives a clear picture of the extent of mixed use in the settlement in order to understand the functions of EAHs by providing visual representations of the spatial patterns of enterprise within the settlements.

The application of GIS in this research is cutting edge, as the application of GIS and spatial analysis is relatively new in development research and particularly in the examination of EAHs. While observation assists in examining spatial patterns and the role of EAHs within the wider urban economy, GIS provides a more thorough understanding through objective spatial analysis and its visual representation. By later combining qualitative data with the information obtained from the GIS analysis,

the research can determine any patterning or spatial rationale behind these locations and business choices. The results of the research will determine the feasibility of the application of GIS technologies in future research.

GIS is a growing social research application that provides new technological ways of exploring social phenomena (Anselin 1999). Spatial models are increasingly employed as decision support tools in urban planning. For example, in 2004, Richard Sliuzas published his thesis on the role of GIS in improving the effectiveness of urban planning and management of 'informal settlements' in Dar es Salaam. The study found that spatial information was useful at both a city and local level; however, application at the community level in planning and administration was found to be particularly useful and with considerable potential for future research in city planning as well as development studies (Sliuzas 2004).

Another example of the use of GIS use in social research is Hill and Lindner's 2010 study of land use modelling to support strategic urban planning in Dar es Salaam. With the use of GIS, Hill and Lindner were able to model the existing expansion of informal residential areas from 1982 to 2002, and use these results to estimate how much the informal residential areas would expand by 2022. This research allowed for more strategic spatial planning interventions and provided explanations for observed development patterns using spatial analysis. GIS plays an important part in this research as it provides a way to examine visually the spatial patterns of EAHs and their role within the wider urban economy. GIS is a tool designed to "translate spatially referenced empirical information into a spatial language to enable cartographic representation of patterns and relationships, and analyse the nature of these relationships" (Sheppard 1995: 6). There are those who argue that GIS should have no part in qualitative research, and should be used in spatial research rather than social research (Sheppard 1995). However, GIS applications are proving their importance in social research, particularly in city planning and development.

The spatial analysis phase of this research combines micro-scale land use with data collected through interviews and observations to determine any spatial patterns and

form theories regarding the spatial characteristics of EAHs and how these spatial characteristics affect their formation and operation. The research applies cluster and network analysis in order to examine the spatial distribution of EAHs for visual analysis and identification of potential patterns based on the case studies.

- **Cluster analysis** groups a set of objects, which share similarities or characteristics (Everitt 1993). In this research, cluster analysis consisted of first plotting the location of businesses within EAHs and then identifying them based on characteristics added within the attribute table.
- **Network analysis** is the study of graphs as a representation of either symmetric or asymmetric relations between nodes, or objects (Okabe and Sugihara 2012). In this research, network analysis consists of analysing the flow of goods on both a local scale (within the informal settlement) and a global scale within an ArcGIS environment.

The maps throughout this research were created using ArcGIS and ArcMap software, which are the intellectual property of Esri and are used herein under license. Prior to beginning the fieldwork, secondary GIS data was collected in order to better understand the study area. Such data included:

- **Base maps:** These maps include the Esri Light Gray Canvas Base and the Esri World Street Map, which were obtained from the Esri ArcGIS Online Basemap database. The base map data is high quality with varying levels of detail and is complete for the area studied.
- **Physiographic data:** Physiographic data was provided by the University of Dar es Salaam, and consisted of land features, e.g. waterways, various terrain typologies, and flood zones determined through previous university research. The data was of high quality and required no correction.
- **Boundary data:** Boundary data was provided by the University of Dar es Salaam; the University of Twente, Faculty of Geo-Information Science and Earth Observation; and the University of Dortmund. The datasets included regional and international boundaries, as well as municipalities, districts, and neighbourhoods. The data was of high quality and required no correction.
- **Road networks:** The road network data was provided by the University of Dar es Salaam; the University of Twente, Faculty of Geo-Information Science and

Earth Observation; and the University of Dortmund. The quality of the road network data varied, as the information provided about the road network for primary roads and highways, such as typology and quality, was complete; however, the data was not up to date and many roads were missing from the road network on a city-wide and local scale. In addition, often roads within settlements are not paved, and are therefore, not included within road networks, which severely limits the data analysis. On the local scale, roads had to be added within Esri ArcMap and new typologies and qualities assigned to each road segment for accurate analysis.

- Land use data: Land use data was provided by the University of Dar es Salaam, and consisted of building outlines, which included information regarding the official land use of the building assigned by the city planning department, and includes such categories as residential, commercial, religious, institutional, industrial, public, and government uses. However, a large number of these assigned land uses were not accurate as the two areas chosen for case studies are zoned as residential, making the businesses operating within them illegal, and therefore assigned by the city as residential rather than commercial. As a result, land use data had to be re-assigned manually following the fieldwork.

The primary concern is that there is often little available data regarding developing countries, and particularly for informal settlements. As a result, it is often necessary to collect all or most data as primary data, rather than secondary. While the data provided by the University of Twente, Faculty of Geo-Information Science and Earth Observation, the Technical University of Dortmund, and Dar es Salaam University was very useful as a starting point, particularly the building outlines used in the cluster analysis, much of the data was out-dated or missing and had to be manually added to the existing data files based on observations and fieldwork. This limited the spatial analysis not only because of time restraints, but also because certain analyses, such as road network analysis, cannot be performed without proper and complete data as the results would not be accurate.

The first part of the spatial analysis examines the case studies in a citywide context in order to examine any locational attributes that may be important for the formation

and operation of EAHs. Two points were created within ArcMap to represent Keko and Manzese. Other points such as the CBD and Kariakoo, the primary wholesale market in Dar es Salaam, were also created. These points were created based on satellite imagery and pre-existing base maps within ArcGIS.

The mapping process of the research involved visiting the settlements each day to conduct a settlement-level assessment and determine the boundaries of the case study area. It was necessary to meet with *mtaa* leaders and business owners to create a profile of the settlements and gather qualitative information to be combined with spatial analysis during the analysis phase of the research. In order to complete the analysis, longitudinal and latitudinal coordinates of businesses and enterprises within the EAHs, as well as formal enterprises these businesses might be linked to in the wider urban economy, were collected using GPS readings. This data was collected within an ArcGIS environment and spatially analysed, along with the data collected through interviews and observations, such as any cultural or ethnic characteristics and socio-economic data.

Longitude and latitude points, also known as waypoints, were collected using a hand-held GPS to be entered into a table within ArcGIS. Public transportation nodes, such as *dala dala* stops, were also collected and buffered at 400m to determine the potential importance of commuter activity in the settlements. In addition, roads within the settlement were assigned higher classifications and added to the available road shapefiles based on observations and satellite imagery to determine if this might affect the location of businesses and any spatial patterns. These classifications include: primary, secondary, local, residential, and footways, illustrated in Table 3.3 below. These classifications were created based on a combination of UK and Tanzanian road classifications, but some new classifications were created for the purposes of this research as Western standards would not apply to roads found within informal settlements and could not describe the level of upgrading. For example, local roads have been assigned to roads that have been asphalted and can carry cars but act as access roads to the settlements and residential areas. Residential roads have the potential to bear motor vehicles in terms of width, though

it would not be optimal for a small-low riding car as they are still dirt roads. Footways on the other hand, are completely inaccessible for motor vehicles, as they are far too narrow and substandard in terms of quality, and therefore can only be used by pedestrians.

Table 3.3: Road hierarchy

ROAD HIERARCHY	EXPLANATION
Primary	<ul style="list-style-type: none"> • Roads providing for major traffic movement between centres on a national and regional level • Two lane road or wider • Chosen for new DART system and used by <i>dala dalas</i> • Asphalted • Drainage ditches upgraded to highest standard – either underground or covered
Secondary	<ul style="list-style-type: none"> • Roads intended to connect different areas and feed traffic between primary roads and smaller roads • Used by <i>dala dalas</i> • Two lane roads but often taken over by <i>wachinga</i> making it difficult for two cars to pass side by side • Asphalted • Drainage ditches typically on both sides – typically with bridges for crossing
Local	<ul style="list-style-type: none"> • Provide access to residential areas • One lane road • Wide enough to bear cars • Asphalted • Drainage ditches typically on one side
Residential	<ul style="list-style-type: none"> • Wide enough to bear cars • Made of dirt • Drainage ditches typically on one side or not at all
Footway	<ul style="list-style-type: none"> • Inaccessible for motor vehicles • Made of dirt and substandard, e.g. potholes, worn away by flooding, etc. • Lack drainage ditches

The waypoints of the EAH enterprises were then collected and assigned a business class and sub-class, which are illustrated in Appendix 1. A dataset had to be created for these waypoints with the business type and sub-class entered individually for each point, of which there were over five hundred for each settlement. These waypoints were then overlaid onto a map of building data polygons, which was provided by Dar es Salaam University. Because the buildings are often divided up into multiple businesses, there was no way to automatically link each waypoint to a building and business type, and a sub-class then had to be individually assigned to

each building. This also involved editing the buildings by splitting them into multiple buildings within ArcGIS to increase accuracy. Land use maps were then created based on business type and then sub-class in order to determine any spatial patterns the enterprises may form.

A clustering analysis of both the business class and sub-classes was performed using the Getis-Ord General G statistic tool to provide statistical evidence. The Getis-Ord General G tool measures the concentrations of clustering within an area to determine the density and dispersion of clustering within the area. In this way, the analysis can determine if there is significance to the patterns that cannot be a result of random chance. Information about these businesses was collected through interview and observation to be analysed with the coordinates in ArcMap for the qualitative analysis. The rationale for this approach is that the spatial analysis provide a visual representation of the role of EAHs within the wider urban economy while the qualitative data and its results provide a more in-depth understanding of EAHs. The combination of data collected from the interviews and observations along with a spatial analysis will deepen the understanding of EAHs for future research applications.

In addition to the coordinates of micro-enterprises within EAHs, the research collected information regarding economic networks or value chains within the settlement and the wider urban and global economy. By analysing information from interviews, linkages and networks between global connections were plotted within ArcGIS to create a representational model of economic networks and provide an understanding of the extent and importance of these EAHs. A flow map was created to provide a representational model of these global connections by entering all of the cities determined by interviews to have economic connections with the businesses within the EAHs into a database. By using the 'XY to Line' tool, it is possible to create a map illustrating the flow of goods from one point on the globe to another. It is possible to create a distribution map indicating the amount of goods flowing from one location to another but lack of data prevented this. It would be interesting to determine quantity of goods for these value chains in future research.

The application of GIS technology in this research helped determine the feasibility of GIS technology in future research regarding informal settlements. Section 7.2 provides a critique of the application of GIS technology for the research. However, initial concerns have found that accessibility of data prevents a more thorough spatial analysis. Developing cities, and particularly informal settlements simply do not have consistent data, particularly regarding transport networks, and business data. This lack of information is caused not only by the level of informality within the settlements, as the businesses and even residential information has not been properly recorded, but also the lack of resources for the city to perform a proper site analysis for each settlement. This research provides potential future applications of GIS technology to planning and development research, as well as useful information for policy makers. The spatial models created from this research could contribute to resolving planning difficulties and assist in creating a more co-ordinated urban environment, as cross-sectoral and co-ordinating planning is largely missing in Dar es Salaam (Hill and Lindner 2010). Furthermore, they contribute two detailed examples of the complex networked aspects of EAHs in informal settlements.

3.6. Qualitative Design

This section will examine the qualitative methods that were applied to the research. As discussed earlier in Section 3.3 above, this research employed a mixed methods design. Qualitative and quantitative data were collected during the case studies concurrently and independently to be mixed during analysis for overall interpretation. The qualitative data collection methods consisted of observations and interviews.

The qualitative methodologies help deepen the understanding of EAHs by examining EAH processes, their socio-cultural dimensions, the wider economic linkages and value chains of the EAHs, and policy drivers influencing their formation. A review of literature has provided the background information on the IE as well as agglomeration economies and economic networks necessary for understanding EAHs. This section will examine the qualitative methods employed in detail, and how they were employed to accomplish the research objectives.

3.6.1. Observation

Observational research is the study of events, situations, settings, practices, and other social phenomena as they occur (Vogt et al 2012). It is a key tool for collecting data in qualitative research (Creswell 2013, Vogt et al 2012). Observation was both to identifying the EAHs, and to help understanding their characteristics and operation.

The observational method chosen for this research was nonparticipant/observer as participant, where the researcher is an outsider of the group being studied, watching and recording from a distance without direct involvement (Creswell 2013). This method was chosen due to time limitations, as there was not enough time to become involved in the phenomenon of EAHs though forming relationships with those operating within EAHs was attempted in order to gain a more accurate understanding of the phenomenon.

Observation was particularly important for understanding the data gathered from the spatial analysis of EAHs and the agglomeration processes. EAHs are a relatively unstudied phenomenon and therefore difficult to identify without first observing the informal settlements and determining how local businesses work together to create an agglomeration. Many of these businesses are located within homes or on side streets and are not immediately obvious. Observation determined which informal settlements were chosen as case studies based on the occurrence of these EAHs, as well as meeting the other criteria for case studies.

For the first part of the observational research, various informal settlements were examined to determine the case studies that would be selected for the research. This involved walking through the settlements, speaking to local residents and business owners, photographing the areas, and tracking the areas examined using GPS equipment to determine their location within the city. A translator, a student from the University of Dar es Salaam, was present during fieldwork.

After the case studies were selected, observational methods resumed as the interview and spatial analysis phase proceeded and were implemented throughout

the remainder of the fieldwork. The detailed data collection included the recording all interviews, and photographing the settlements chosen, and the businesses interviewed for those who agreed. In addition, two entrepreneurs from Keko and one from Manzese agreed to being followed for about a day, to observe and track their movements and activities. This allowed for a better understanding of how EAHs function, as well as the economic networks both within and outside the settlements.

The observation of these EAHs on a regular basis resulted in a better understanding of how agglomerations function and any characteristics that can be determined through observations, such as business type or specialisation. Observations were also important while examining the spatial patterns and distribution of EAHs during the spatial analysis and in determining any economic networks to which the EAHs are linked. Without first observing the case studies to gain an understanding of their spatial context, it would have been difficult to understand some of the responses from interviewees such as the connections between businesses and the importance of location for a business. The research area was photographed and recorded thoroughly to map the area and apply the data collected through other methods.

3.6.2. Interviews

The second qualitative method adopted was interviews. Interviews were crucial to deepening the understanding of EAHs and providing explanations for the data and results that the initial spatial analysis provided. Interviews provided key insight into the agglomeration processes of EAHs as well as the importance of socio-cultural dimensions in the sustaining of these processes and networks. Interviews were also important in understanding the wider economic linkages and contribution of these EAHs by determining the relationship of specific activity clusters to the broader economic networks, such as formal-informal links and value chains they may be part of. In addition, interviews are necessary to examine the policy and regulatory environment in which these EAHs operate through interviews with city planners and government officials, as well as how these policies and regulations are implemented and affect the entrepreneurs. The interviews undertaken are listed in Table 3.4.

Table 3.4: Interview schedule

Interviewees	Number of Interviews	Purpose of Interviews
Academic and Urban Professionals	6	<ul style="list-style-type: none"> • General understanding of policies/reactions regarding informal sector, e.g. upgrading, formalisation, relocation, etc. • Reasons behind formation of informal sector, e.g. constraint or choice • Personal views regarding informal sector • Characteristics and spatial patterns of informal settlements • Role of informal sector in wider economy • Potential settlements to examine for the research
	6 Total	
Keko LGA Manzese LGA	<ul style="list-style-type: none"> • 2 <i>mtaa</i> chairmen • 1 <i>mtaa</i> executive officer • 1 ward executive officer 	<ul style="list-style-type: none"> • Role within the community and government • Basic information about settlement, e.g. history, population, characteristics, etc. • Businesses within settlement, e.g. number, type, spatial patterns, economic networks • Role of municipal government and policies regarding settlements and informal businesses • Upgrading within settlement • Monitoring and regulation of settlement, e.g. housing regulations, business regulations, tools and techniques used, etc.
	<ul style="list-style-type: none"> • 1 <i>mtaa</i> chairman • 2 <i>mtaa</i> executive officers • 1 ward executive officer 	
	8 Total	
Municipal/City Government Officials	<ul style="list-style-type: none"> • City Council/CIUP • MKURABITA • Ministry for Land, Housing, and Human Settlements Development 	<ul style="list-style-type: none"> • Role of government office/organisation • Any work done in chosen settlements • Questions regarding specific policies raised by groundwork, e.g. difficulty of formalising, lack of upgrading or access to basic services, relocation and forced removal policies, lack of financial support, corruption of government officials and employees, etc. • Views on informal sector and future of informality • Usefulness of research and areas that need to be examined
	3 Total	
Keko Entrepreneurs Manzese Entrepreneurs	33	<ul style="list-style-type: none"> • Demographic characteristics, e.g. age, gender, tribe, religion, etc. • Business type, income, age, licensed or not, etc. • Reasons for business • Reasons for location • Supply chain of goods/services • Economic networks within and outside settlement • Problems faced, e.g. flooding, waste disposal, electricity, crime, competition, financial support, etc. • Policies or regulations that affect business • Effects of upgrading or upgrading needed
	44	
	77 Total	

Interviews are one of the oldest and most important forms of research (Creswell 2013; Vogt et al 2012). A 'research interview' can be defined as an organised conversation in which questions are asked in order to provide a better understanding of a phenomenon or social situation (Vogt et al 2012). It is important to note that interviews are different from surveys in that interviews aim to provide a more in-depth understanding, while surveys aim to provide a more generalised understanding (Vogt et al 2012), which is why interviews have been chosen over surveys as the methodology for this research.

For this research, face-to-face semi-structured interviews were employed. It was necessary to perform interviews with multiple parties. Semi-structured interviews with Key informants were performed, including: academic and urban professionals who have studied the informal sector and the relating policies to provide a preliminary understanding of these settlements and relating regulations; government offices, such as MKURABITA and the Ministry of Lands, Housing, and Human Settlements Development to understand the procedures involved in regularisation, formalisation, and upgrading and provide a comparison of their views on these policies with those operating informal businesses; non-profit organisations and NGOs such as the Community Infrastructure Upgrading Project (CIUP), who support 'slum' development by working with local residents in order to examine the community involvement in upgrading and formalisation policies; and the local government authority (LGA), such as *mtaa* leaders, ward counsellors, and the government hired executive officers for the wards and sub-wards (to be explained in detail in the Section 4.5) to find out about the specific settlements chosen for the study and the rules and regulations within the settlements. As illustrated in the table above, the largest number of interviews was with local entrepreneurs within the EAHs to understand the drivers of EAH formation and how they function. The interview protocols for each group can be found in Appendices 3-6.

Academics and urban professionals: Interviews with academic and urban professionals were the first step to gain a better understanding of the settlements and obtain advice for settlements to observe in order to choose the case studies more quickly and efficiently. As seen in the table, these interviews asked questions regarding the policies and responses to the informal sector and settlements. In addition, they sought to determine their opinions about: the effectiveness of those policies; the LGA and whether they are best placed to monitor and regulate the settlements; community involvement in upgrading; any information regarding informal businesses – e.g. policies, difficulty of formalisation, if they believe informal business owners would want to formalise, relocation of businesses, connections with the formal sector, etc. – and any information regarding the settlements themselves – e.g. characteristics affecting spatial distribution and patterning, push and pull factors drawing people to these places, the most common businesses within low-income settlements, etc. A basic understanding of the informal settlements and the policies regarding these areas assisted in selecting the case studies, and determining which questions should be asked of the LGA, entrepreneurs, and government officials.

LGA interviews: Interviews were then held with the local government authority (LGA) – e.g. *mtaa* chairmen, *mtaa* executive officers and ward executive officers (explained in Section 4.5) – not only to gain information on various aspects of the settlements, but also to establish trust and a relationship with the people living in the informal settlement. The interviews tried to ascertain: basic information about the settlement; e.g. history, population, characteristics, incomes, etc.; information about the community; any government upgrading or formalisation; the rules and regulations within the community regarding development and business; how they monitor and regulate the settlements; and, most of all, learn about the businesses within the settlement – e.g. the number, types, most common businesses, spatial patterning, connections both internal and external, etc. However, during the interview process, it was discovered that many of the *mtaa* executive officers and ward officers are simply assigned to these areas but actually come from other places,

and so, knew little about the history or characteristics of the area. In addition, as government officials, they might have felt obliged to follow government policy, which their answers to questions seemed to suggest, as they were very opposed to informality. Equally, this may have just been their personal opinion. The information gained from the *mtaa* chairmen – locals elected to communicate with higher government offices – was very helpful in understanding the settlements. They were able to provide answers regarding the background of the settlement, e.g. history, population, businesses, upgrading, etc., as well as the policies relating to informal settlements and informal economic activity without a negative perspective. This process enabled the researcher to establish a sense of trust and familiarity amongst local people about the research.

Government interviews: Three interviews were also undertaken with government officials and NGOs in order to provide a better comparison of the policies from the government's point of view to those living and working within the low-income settlements. As illustrated Table 3.3, interviews were held with a member of the City Council, who also served on the board for the CIUP; a representative of MKURABITA, the Presidential program for Property and Business Formalisation; and a member of the Ministry for Land, Housing, and Human Settlements Development, the government ministry which administers land and human settlement throughout the country. These interviews ascertained the general urban management and upgrading policies (e.g. for formalisation, and regularisation) for the settlements, and their views of how these approaches affected the residents and entrepreneurs – either positively or negatively. Questions were formed based on issues determined through observation and interviews. It was also important to determine their views on the usefulness of this research, and any areas they think need to be examined for the conclusions and recommendations portion of the research.

Keko/Manzese business interviews: Interviews were undertaken with 77 small-scale and micro-enterprises within the two case study sites. The research intended to only

interview established business owners, omitting itinerant traders (*wachinga*), but due to the number of the *wachinga* in Manzese, eleven interviews were conducted to get a sense of their role within the EAH. These interviews were held within the informal settlements of Keko and Manzese, mostly at the place of work of the enterprise, in order to provide a safe and familiar setting for the interviewees. As mentioned in Section 3.3, the samples were selectively and opportunistically chosen based on business type in order to provide an accurate understanding of the enterprises and their operation. Demographic characteristics such as gender, age, employment, ethnicity, and any other potentially relevant cultural aspects were necessary to determine whether these characteristics might drive the formation or operation of these EAHs. They might also explain spatial patterns in the spatial analysis portion of the research, for example, if religious beliefs or ethnicity affect the locale of a business within one area over another. The interviews ascertained basic information about the individual businesses such as: what they do, how they got started, who they work for or who works for them, why these businesses and locations, where they obtain their goods and supplies and who they sell the final products to, connections between businesses, anything that might have a negative impact on their business – e.g. natural hazards, unsafe working environment, competition, etc. –, and government policies or regulations that might have affected their businesses. These questions sought to uncover underlying and deeper information such as: why they operate formally or informally, why they chose those locations, the impact of clustering on their enterprise, whether specialisation is advantageous to individual business, the importance of socio or economic networks and connections, if there are any ties to formal enterprises, and if any policies or regulations impact their enterprise. The interview portion of the methodology deepened the understanding of EAHs that the spatial analysis provided.

Analysis of the 77 interviews determined various common themes, as there were commonalities among the responses of entrepreneurs relating to drivers of informality, enterprise and location. The responses were grouped based on these

themes and analysed not only qualitatively, but also coded to enrich the analysis and help identify the emerging patterns within responses. The coded results were analysed using SPSS and quantified in order to better identify agglomeration processes, socio-cultural dimensions, economic links and value chains, and policy context that would help deepen the understanding of EAHs.

In addition to the 77 interviews, seven return interviews were performed with interviewees in the first sample who had particularly relevant stories to tell. These follow-up interviews provide a representation of the characteristics of entrepreneurs within EAHs. The in-depth interviewees allowed for a more detailed examination of broader themes identified within the literature review and help understand how EAHs emerge and operate. The seven follow-up interviews provide important information regarding the importance of social capital in EAHs, along with other themes such as: the business operators and their economic and locational choices; the complexity of informality in cities like Dar es Salaam; locational advantages; the implication of sector specialism; and the significance in terms of livelihoods.

In the interviews with local entrepreneurs, many concerns were raised about the operation of urban management and upgrading in the area. These included issues such as: corruption within municipal and local government, access to basic services, forced relocation or removal, etc. Therefore, it was important in this research to compare the points of view on the ease of formalisation of businesses between the government offices and micro-entrepreneurs, as well as determining types of corruption that may emerge within groups of traders and/or government officials, and/or their dealings with each other.

Confidentiality: To protect the identities of those interviewed, the interviewees have been assigned names based on their position. Table 3.5 below provides the details of those interviewed while keeping their anonymity. This table can also be found in Appendix 2.

Table 3.5: List of Interviewees and assigned names

INTERVIEWEE	POSITION
ACADEMIC/URBAN PROFESSIONALS	
AUP1	Architect/Designer and Senior Lecturer at ARDHI University
AUP2	Senior member of staff at the Institute of Human Settlements Studies, and in the School of Urban and Regional Planning at ARDHI University
AUP3	Associate Professor at ARDHI University
AUP4	Professor at ARDHI University and Director of Housing at MLHSSD
AUP5	Professor at ARDHI University and Director of the Institute for Human Settlement Studies (IHSS)
AUP6	Professor at the University of Dar es Salaam (UDSM) and expert in development studies
LGA	
KMC1	Keko <i>Mtaa</i> Chairman
KMC2	Keko <i>Mtaa</i> Chairman
KMEO	Keko <i>Mtaa</i> Executive Officer
KWEO	Keko Ward Executive Officer
MMC	Manzese <i>Mtaa</i> Chairman
MMEO1	Manzese <i>Mtaa</i> Executive Officer
MMEO2	Manzese <i>Mtaa</i> Executive Officer (Interviewed with another <i>Mtaa</i> Chairman)
MWEO	Manzese Ward Executive Officer
MUNICIPAL GOVERNMENT	
MG1	MLHSD
MG2	MKURABITA
MG3	City Council/CIUP
SEVEN FOLLOW-UP INTERVIEWS WITH ENTREPRENEURS	
INTERVIEWEE A	Wood supplier in Keko
INTERVIEWEE B	Machinga in Manzese
INTERVIEWEE C	Carpenter in Keko
INTERVIEWEE D & E	Cobblers in Manzese
INTERVIEWEE F	Owner of furniture store in Keko
INTERVIEWEE G	Kanga shop assistant in Manzese

The information gathered through these interviews was analysed and combined with the data collected from the spatial analysis to provide a deeper understanding of EAHs. By interviewing various parties, different information was gathered to provide a comprehensive picture of EAHs and to help meet the research objectives. The combination of this data with observations and spatial analysis will provide a better understanding of the phenomenon.

3.7. Ethics of Fieldwork in a Developing Country

When undertaking field research, positionality affects all aspects of research which involve interaction with other people, particularly when researching the lives of people who are different from the researcher (Robson and Willis 1997). The personal characteristics of the researcher can put them in a position of power, particularly in the case of a person from a developed country conducting research in a developing country (Robson and Willis 1997). Therefore, it was necessary to follow ethical guidelines.

Drawing on precedents set within medical research, the Nuremburg Code – established following World War 2 and the Nuremburg trials – ethical protocols used in medical research can also be applied in social research (Vogt et al 2012). The code contains 10 regulations, the most important of which for this research include (Vogt et al 2012):

- Human subjects should give informed consent
- The research should have potential benefit
- The research should avoid all unnecessary physical and mental suffering and injury
- The risks should not be greater than the potential benefits
- The subjects should be free to end the experiment at any stage

These ethical guidelines were considered throughout the research process in order to prevent any harm to the groups being studied and the ethics review procedure for Cardiff University was completed prior to undertaking any fieldwork.

There are many particular ethical concerns associated with research in developing countries. Information that is sensitive for personal, cultural or legal reasons poses problems for field research (Christensen in Devereux and Hoddinott 1993). The research for this thesis required observations of and interviews with those involved in illegal activities as part of the informal economy. Informants tend to be more wary when the study involves association with illegal activities (Christensen 1993). According to Christensen (1993), it is important for the researcher to establish

independence from the authorities that control these activities and guarantee confidentiality of the data collected. However, this cannot guarantee the cooperation of informants, as it is their livelihood that will be subject to forfeiture if there are any follow-up problems from the interviews. In order to complete the research despite the informal nature of the phenomenon being studied, a translator speaking fluent Kiswahili and English was used, and interviews were conducted at the place of business to make the interviewees feel more at ease. It was important that the translator make clear that these questions were purely for research and that both the researcher and translator were students. A research permit and student ID were carried at all times in case interviewees needed more assurance. However, in some cases, particularly in Manzese, this was not enough and some potential respondents refused interviews.

Information regarding cultural, or ethnic characteristics can also be guarded, as practices such as religious ceremonies are guarded to protect their integrity and sanctity (Christensen 1993). This might apply to the secrets of a particular skill or specialisation within the EAH, which would make it difficult to interview entrepreneurs, as small groups often band together, and those who provide this information could be punished (Christensen 1993). Other personal characteristics, such as age, sex, or ethnicity are important to the research, but may be considered inappropriate or disrespectful, making the acknowledgement of anonymity a necessary part of the interview process. As a result, in the field it was necessary to assure the interviewees that the results of the interview were anonymous and they were not required to give any data they did not feel comfortable disclosing. Again, the use of a translator was very helpful here, as they made the interviewees feel more comfortable, being Tanzanian, and were able to explain the importance of the research questions and why they were being asked. Another concern is the gender of the researcher. In traditional societies with importance placed on gender roles, the gender of the researcher can also severely restrict access to certain informants or occurrences (Robson and Willis 1997). As Tanzania has a very large Muslim population, a couple of the interviewees did not seem amenable to answering questions or would not make eye contact with the researcher as a woman. We were

also told not to enter some stores or religious areas to conduct interviews or make observations, as women were not permitted. The use of a male translator assisted a great deal in these situations.

Another factor that had to be taken into account was the political atmosphere in the area. The fieldwork was undertaken during the Tanzanian presidential elections, with the political atmosphere intensely divided between the ruling political party, Chama Cha Mapinduzi (CCM), and their leading rival, the Chadema party. As a result, interview respondents commonly brought up political affiliation. The political affiliation or perceived affiliation of the researcher has an important influence on the outcome of the research (Robson and Willis 1997). Therefore, it was important to explain to respondents that there was no political affiliation involved with the research and to redirect their attention to the interview questions in order to avoid any potential sidetracking during the interview.

Measures of income and expenditure were important for the completion of this research. It is important to establish a measure of income for enterprises within EAHs in order to determine the importance of these EAHs for the wider urban economy and as a source of income in developing countries; however, this can be considered as sensitive information. For example, subjecting only the poorest households to a detailed interview might expose the extent of their poverty, causing humiliation to the interviewees (Christensen 1993). In addition, discussing income might be considered intrusive or uncivil in many cultures, making it a difficult subject to broach. In many sub-Saharan African countries, unemployment rates are quite high and poverty is widespread (Pearson and Paige 2012), which often significantly contrasts with the income level of the researcher. In the case studies selected, the majority of the entrepreneurs had a very low level of income. Again, it was important in the field to assure interviewees they need not disclose any information unwillingly, though most had no concerns disclosing their income levels. Many seemed eager to do so, as it may potentially lead them to aid from international organisations, though it was made clear this was only for research purposes.

Based on these ethical concerns, it was crucial that anonymity as well as the provision of a safe setting be carefully scrutinised throughout the research process. The local residents and entrepreneurs must feel they can trust in the anonymity of the research. Respect was shown at all times in order to avoid any misunderstandings or insult. The use of a translator from Tanzania was important to ensure that all interview questions are appropriate as well as to translate from Swahili to English, as those living and working within the settlements generally do not speak English. However, despite all of the care taken to ensure the following of ethical guidelines, some of the local residents and entrepreneurs still did not feel comfortable being interviewed. Therefore, it was important to be accepting of their answer in order to show others within the community that it was optional and build a sense of trust. As mentioned in Robson and Willis (1997), flexibility is key when conducting research in developing countries.

3.8. A Critical Review: Limitations in the Methods

Following the completion of the fieldwork, the methodological approach was critiqued as a way to inform future research and examine the limitations of the research. For this research, the approach chosen was sound, but some problems arose during the interview portion of the methodology, as well as the detail attained during the mapping portion, given the limited amount of time and resources available for the project.

The concerns regarding the interviews related primarily to the need for a translator, cultural differences, and apprehension from the local entrepreneurs. Regarding translations, problems included misunderstandings and possible misrepresentation in translating from Swahili to English. In addition, to save time, the translator would summarise what the business owners were saying. As a result, some of the detail might have been lost. There is little that can be done regarding information lost through translation, though this was gradually improved by doing more interviews. Eventually, the translator came to understand the research better and knew the questions as well as what information was important and what was not. Occasionally,

local entrepreneurs would ask for compensation to perform an interview, so in order to avoid any disputes, it was made clear to the translator beforehand that compensation would not be given for interviews and it was their responsibility to make it clear that this was student research. The author sought to reduce misunderstanding about cultural differences by taking Kiswahili lessons and classes about Swahili culture at the beginning of the field research at the University of Dar es Salaam. By having a better understanding of greetings and polite interactions in Kiswahili, it was easier to make the locals feel more at ease by greeting them in their native language. However, some still felt uneasy and refused to participate.

The concerns of entrepreneurs was a slight issue in the completion of the interviews, but was not really significant in Keko, where many of the local businessmen and residents were very curious about the research and volunteered to be interviewed. However, entrepreneurs in Manzese were much more cautious about the research, often because they had been interviewed for research purposes before and nothing changed within the community. Manzese is relatively close to the University of Dar es Salaam, so research there is not uncommon. Those who did participate in the interviews would sometimes not let their shops or goods be photographed for fear of being reported to the government, and possibly for cultural reasons. In addition, the possibility that some of those interviewed were not honest or open in their answers must be taken into account. Several *wachinga* (street hawkers) from Manzese claimed they were in the process of getting a license, but when asked if they could get a license when operating on the street, changed their answer. This is probably due to the frequency of forced removal in Manzese, compared with Keko, which has not been as affected by the municipal government evictions. In addition, some entrepreneurs would not admit to having any difficulties regarding infrastructure or upgrading requirements, and many would not say if they had any problems with local government authority or government regulations. This was likely out of fear of being shut down by the municipal government.

Limits of time and resources were also an issue. Due to a limited amount of funding, the research had to be completed within a little over two months. There were also

delays in obtaining the necessary research permits because of the slow pace of the municipal government offices in Temeke, Ilala, and Kinondoni. In addition, it was necessary to interview academics at the beginning the research in order to determine possible sites for case studies, rather than trying to examine every low-income settlement in Dar es Salaam. Therefore, the field research was delayed. While the fieldwork was completed within the given amount of time, the research could have been more comprehensive with more time allowed.

Due to the time restraints, the mapping could not be as detailed as previously hoped, particularly in Manzese, where there are so many businesses of varying types and levels of formality. Therefore, a general mapping method was applied for the majority of the ward, with detailed mapping on a few of the busiest streets. In addition, the sheer number of businesses in Manzese made it difficult to accurately assess the area given the time limits, and not all of the business types could be interviewed or examined, providing limitations in the analysis of the area. In order to provide a more detailed analysis of Manzese, the research focussed on the clothing and textiles specialisation, despite the presence of businesses in furniture, electronics, etc. in Manzese.

Given the knowledge of the research areas following the completion of the research, it is clear that the primary limitations regarding the methodology chosen lies in the interview portion, data availability, and limits to time and resources. Given the nature of the areas being examined, concerns regarding interviews are inevitable due to language and cultural barriers as some detail may have been lost through working through a translator. The spatial data was also found to be out-dated or inaccurate and much of the data had to be added manually, taking a great deal of time and limiting the analysis. Limited time and resources also made it difficult to perform a detailed analysis of two areas, although the comparative value of studying two areas was very useful.

Chapter 4: Background and Context of Dar es Salaam, Tanzania

4.1. Introduction

The purpose of this chapter is to provide context for the research area – Dar es Salaam, Tanzania. Dar es Salaam was chosen for the research area due to its large informal economy and because a large portion of the population resides within informally built settlements. Although many inner city areas have now been granted intermediate tenure, access to basic services remains patchy, and their built form is largely informal. In this research all are referred to as ‘informal settlements’.

Estimates suggest that 70% of the population of Dar es Salaam lives in informal settlements (World Bank 2012) and 98% of businesses are informal (ILD 2005). Poverty is widespread in Tanzania and the World Bank (2017) estimated the GNI for 2016 at 900 USD, with 28.2% of the population living below the poverty line. This poverty level is affected by historical and political aspects, which need to be examined further. Furthermore, relative political stability, compared with other East African nations, has given the informal economy time to consolidate, making the assessment of the informal economy more applicable to other country contexts. The main sectors of the IE consist of urban agriculture, processing, construction, transport, trade, and a local specialism of furniture making, but many sub-sectors exist (Nnkya 2003). The informal sector dominates the city’s economy, despite it being the commercial and administrative centre of Tanzania (Nnkya 2003).

It was determined from the literature that while some research has been undertaken on street trade, spatial clustering within informal settlements in sub-Saharan Africa has not yet been examined. According to various news articles and census data (Boyle 2012; World Bank 2012), Dar es Salaam is now the third fastest growing city in Africa – foremost in the list of Africa’s fast urbanisation rates – and ninth fastest growing city in the world. As a result, Dar es Salaam is a good location to examine the wider role of economic specialism within the IE. In addition, the size and prominence of the city’s informal sector and informal settlements make it appropriate for investigating the IE within informal settlements. To do so, it is necessary to understand the history of the city and its development, particularly the reasons

behind its rapidly growing informal sector and any policies regarding the development of the informal settlements and economy, to determine the impact on the informal economy and the development of informal settlements.

Section 4.2 provides a brief background on Dar es Salaam, including background data of the city and a brief history of colonialism and politics and the growth of the informal sector. Section 4.3 examines the spatial arrangement of the city, looking at questions such as: the spatial formation of the city, what caused the development of informal settlements, etc. Section 4.4 looks at the historical and current political responses to informal settlements, and examines the specific policies relevant to this research. Section 4.5 provides an overview of the local government, its creation, organisation, and functions in order to examine how the local government interacts with the informal sector. By providing background context for the research area, it can be applied to the data collected during field research and help in understanding and analysing that data. It can then be determined whether the findings are applicable to other parts of the world. Section 4.6 summarises the findings.

4.2. A Brief Background and History of Dar es Salaam

This section provides a brief history for the city of Dar es Salaam to explore how history might have impacted current informal activities. This section seeks to examine the factors that caused the development of informal settlements within the city and the growth of the informal economy.

Dar es Salaam was originally founded by the Omani ruler Sultan Majid bin Said as a fishing and trading port in the mid-1860s (Brennan et al 2007). In Arabic, the name means 'haven/house of peace'. The city came under the control of the German East Africa Company in 1887, and grew rapidly as it became the administrative and commercial centre of German East Africa (Brennan et al 2007). German East Africa came under British control during World War I, and became Tanganyika, with Dar es Salaam being the administrative and commercial centre once again (Brennan et al

2007). The area experienced a separation of European settler areas, e.g. Oyster Bay, and African, e.g. Kariakoo and Ilala, under British indirect rule from the African settlements (Brennan et al 2007), which is also a likely cause of some current infrastructural problems.

In 1961, Tanganyika gained independence from colonial rule and became Tanzania following the merging of Tanganyika and Zanzibar in 1964 (Brennan et al 2007). Dar es Salaam continued to serve as the capital until 1973 when the capital was relocated to Dodoma, a more centrally located city (Brennan et al 2007). The relocation process is still on-going and Dar es Salaam still remains Tanzania's economic and administrative centre.

In 1967, the Tanzanian government declared the *Ujamaa policy*, developed by President Julius Nyerere, which followed the socialist path (Pratt 1999). The *Ujamaa* concept created a one-party system under the leadership of the Tanganyika African National Union (TANU) and nationalised the economy's key sectors (Pratt 1999). The *Ujamaa* policy saw the institutionalisation of social, economic and political equality as well as the abolition of discrimination and pushed Tanzanians to free themselves from dependence on European powers (Pratt 1999). Education became compulsory and the policy encouraged the creation of a Tanzanian identity over that of tribal identities, e.g. through the adoption of Kiswahili as the national language (Pratt 1999). While the *Ujamaa* policies provided many valuable programmes and policies, the socialist ideology also enforced programmes that led to the economy's gradual decline, including nationalisation of key industries and closure of agricultural marketing cooperatives.

A villagisation programme was established in 1967 to collectivise the rural population in "accessible, nucleated settlements" in order to increase agricultural production and provide them with government services (Maro 1990). Originally, the movement was voluntary with incentives provided by the government; however, by 1973, villagisation was compulsory for all rural areas (Maro 1990). Unfortunately, the

majority of these villages were unable to meet the projected agricultural output and the country was unable to meet its' goal in self-reliance (Maro 1990). As a result, many people who had moved to the villages returned to cities like Dar es Salaam and sought residence and economic opportunity within informal settlements.

The *Ujamaa* policies eventually failed due to the practice of villagisation (Pratt 1999), and the inability of the country to meet production quotas in order to become self-reliant. This resulted in decreased production and economic decline, and by the 1980s it became clear that the *Ujamaa* policy could not combat increasing poverty and hunger, and many other development indicators in Tanzania showed lack of progress. Deteriorating economic conditions led to an increase in informal economic activity and the creation of informal settlements (Brennan et al 2007; Nnkya 2003). By 1979, the majority of the urban population in Dar es Salaam was housed in unplanned settlements – almost 500,000 out of 769,445 – and by the early 1980s it was estimated that over 60% of the country's population was involved in some form of informal economic activity (Brennan et al 2007; Nnkya 2003). Eventually, with the retirement of President Nyerere, the *Ujamaa* development model came to an end in 1985 (Pratt 1999).

Under President Ali Hassan Mwinyi, who acceded to power in 1985, Tanzania adopted the conventional liberalisation reforms required by the International Monetary Fund's Structural Adjustment Programme, or *mageuzi*, the capitalist policy (Brennan et al 2007). However, the transformation of the country's education and healthcare subsidies to privatised and cost-sharing programmes meant that education and healthcare would only be available to those who could afford it (Brennan et al 2007). As a result, the state began to rely heavily on World Bank aid and Foreign Direct investment (Brennan et al 2007). Migrants began flooding in from rural areas seeking economic opportunities and began settling within informal settlements. During the 1990s, Dar es Salaam experienced a massive influx of refugees from fighting between Rwanda and Burundi, adding to the population living in informal settlements (Brennan et al 2007).

In 1992, the constitution of Tanzania was amended to allow multi-party elections and continues to follow a more democratic and capitalist political ideology (Brennan et al 2007). Today, Dar es Salaam is the largest and most densely populated city in Tanzania with a population of over five million in the metropolitan area and an annual growth rate between 6 and 7% (Nnkya 2003; World Bank 2012).

Despite differences in the socio-economic histories of various African cities, many have developed large informal economies and informal settlements. Dar es Salaam was chosen as a case study due to its' large informal economy, which was in part influenced by the city's history. The next sections will examine the spatial attributes of the city, to determine the reasons behind the spatial patterns and forms of the informal sector, current growth and expansion, and how the development might be affected by any characteristics, e.g. ethnicity, religion, etc.

4.3. Spatial Informality

This section will examine the spatial patterns of the city of Dar es Salaam, looking at the formation of the city developed, its current spatial form and its informal sector. Historical and natural factors affected the development of the city as well as its informal settlements. This section will examine the spatial aspects of the informal sector and how that spatial pattern might play a role in the characteristics of informal settlements, such as religious ties, the effects of re-ruralisation, etc. to provide a better understanding of the informal economy within Dar es Salaam specifically that can add to the context of the research analysis.

Natural and socio-economic differences in spatial patterns are a product of specific ecological and historical factors (Maro 1990). According to Maro (1990), productive areas are few and randomly scattered in the country. The coastal strip where Dar es Salaam is located is one of the more productive areas in the country (Maro 1990). The port plays a crucial role in the city's economy – which is based on trade, commerce, and industrial manufacturing – and makes Dar es Salaam the financial

and transport hub of Tanzania (Nnkya 2006). In addition to ecological factors, historical factors of colonialism and capitalism have had a dominant influence on the spatial differentiation in Dar es Salaam (Maro 1990).

The German colonial administration implemented the first general plan for Dar es Salaam between 1891 and 1916, followed by the British colonial administration in 1949 (Halla 2007). Both focused on the central business district (CBD) around the harbour and created spatial separation between the European and African settlements (Halla 2007). For this reason, certain areas of the city allocated to Europeans, such as Oyster Bay, have developed into middle to high class residential areas, while other areas allocated to Africans, such as Kariakoo and Maandazi Road (part of Hanna Nassif), have developed into informally developed areas (Abebe 2011). Interestingly, both Kariakoo and Maandazi Road were designated as residential and became highly mixed use, with large amounts of commercial activity, comprising of both formal and informal micro-enterprises (Swai 2013). Kariakoo market now acts as a wholesale distribution and trading centre for the whole of Dar es Salaam.

The post-colonial period was characterised by rapid urbanisation and resulted in uncoordinated decentralised planning as individuals and socioeconomic groups occupied land for settlement (Halla 2007). The socialist *Ujamaa* policies sought to assist in economic and political changes following independence, but the traditional small-scale trading, or IE activity, continued to grow as the city expanded (Nnkya 2006). Following independence, many communities began developing small industries in food processing and clothing or furniture manufacturing (Nnkya 2006). Throughout the 1960s and 70s, the informal sector continued to provide self-employment opportunities and the rates of formal sector employment were able to keep pace with the growth of the urban population (Nnkya 2006).

Various internal and external factors resulted in the failure of the *Ujamaa* policies. The country's socialist government increased socio-economic differences in spatial

patterns through programmes such as villagisation, which forced many residents into rural villages. In addition, the nationalisation of private industries, financial institutions and agricultural industries and the discouragement of private entrepreneurship associated with the socialist policies led to the discouragement of individual initiative and a lack of growth and progress (Brown 2006). Focus was placed on state-led industrialisation at the expense of agriculture and nationalised enterprises were mismanaged (Brown 2006). External factors such as the oil crisis of the early 1970's, the collapse of coffee prices – one of Tanzania's key exports – and the 1978 war with Uganda eventually led the socialist policy to fail and resulted in an economic crisis in the 1970s and 1980s (Brown 2006).

From 1986 -91 the IMF (International Monetary Fund) and the World Bank pressured the government to adopt an Economic Recovery programme to introduce a market-led economy, leading to changes in the employment structure (Brown 2006; Nnkya 2006). The socio-economic gap increased following the end of the *Ujamaa* policies as privatisation of government para-statal institutions cost many formal workers their jobs, and formal sector wages and employment began to diminish (Nnkya 2003). According to Tripp (1997 in Brown 2006), the proportion of formal employment fell from 84% to 36% between 1978 and 1991. Formal sector wages also began to diminish and had fallen 83% by 1988 (Nnkya 2006). As a result, many formal employees began operating a *mradi* (side business) or left formal employment entirely (Nnkya 2006). By 1989, it was estimated that 70% of public employees operated another informal business on the side, which paid as much as ten times that of formal salaries (Nnkya 2003).

As the *Ujamaa* policies faded, the country's economic decline resulted in rural-urban migration and the growth of informal settlements, the ties between settlement residents and rural areas may have resulted in spatial patterning of informal settlements based on ethnic or even religious ties, though it is not discussed in the literature. While the coastal areas of Tanzania had a relatively high proportion of Muslim population, due to the former Arab colonisation, Dar es Salaam is now quite

mixed. As a result of the growing population and the inability of the city's infrastructure to meet demands for planned housing land, informal settlements began developing on available land, often on the extensive marshlands and agricultural areas around the CBD, and continued expanding outward, as illustrated in Figure 4.1.

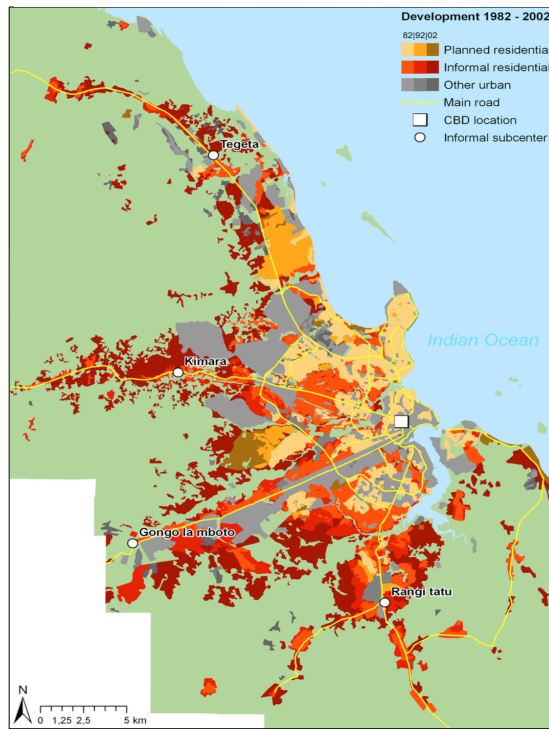
Figure 4.1: Informal Settlements in Dar es Salaam, 2002



Today, Dar es Salaam is one of the fastest growing cities of the developing world, and like most other cities, urban informality has been recognised as a predominant method

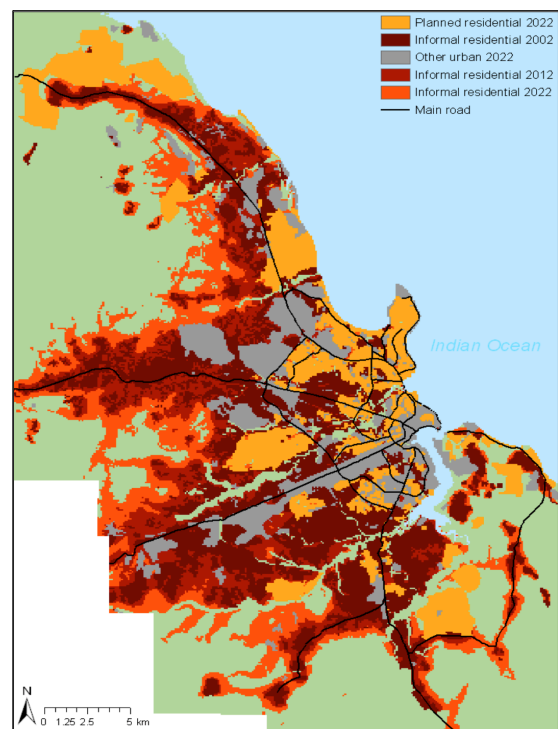
of urbanisation, and informal residential growth constitutes a major component of urban change (Hill and Lindner 2010). According to the Ministry of Lands, Housing, and Human Settlements Development masterplan (2013), the majority of the city's growth occurs along the main arterial roads, creating a radial growth pattern. As a result, the informal settlements occur outside the original regular and grid plans of the settler city, sprawling outward in an unplanned manner (Hill and Lindner 2010; Ministry 2013). Hill and Lindner (2010: 2) describe the informal settlements as "a diffusion process progressing in wave-like concentric rings from the city centre towards the periphery of the city in combination with broadening ribbons following the arterial roads" (See Figure 4.2).

Figure 4.2: Land Use Development in Dar es Salaam in 1982, 1992, and 2002



Source: Hill and Lindner 2010

Figure 4.3: Estimated Land Use Development in Dar es Salaam in 2022



The majority of urban growth is accommodated on formerly vacant or agricultural land as informal settlements are driven by plot availability and affordability (Hill and Lindner 2010). Based on UN population projections, Hill and Lindner (2010) were able to demonstrate the likely expansion of informal settlements to the year 2022 using spatial modelling within a GIS environment (see Figure 4.3). They assume informal settlement growth will continue expanding along the main arterial roads and encroach into the less developed areas between the arterial roads (Hill and Lindner 2010). The modelling of the expansion of informal settlements suggests that research into the economic activity within informal settlements will become increasingly pertinent to planning in the future.

This section has examined the spatial aspects of informality within the city of Dar es Salaam and provided some background information on the history and size of the informal sector. Despite attempts by the government to control the expansion of the informal sector, it constitutes a major component of both urban housing and the urban economy. The next section will examine the policy responses and regulations

to the informal sector – the first section looking at the changes of policy responses over time, and the second section giving a brief summary of the policies and legislations.

4.4. Political Responses to the Informal Sector

The traditional view of informal activities has been historically negative with urban planners and government officials preferring public spaces to be ‘clean’. Street vendors and informal workers are seen as a blemish that ruins the “aesthetics of the city” (Walsh and Maneepong 2012: 255), although it is sometimes political policies and regulations that make it too difficult for informal enterprises to join the formal economy. Relocation and eviction of informal activities are not uncommon within Tanzania as well as other developing urban environments (Bromley 2000; Bromley and Mackie 2009; Walsh and Maneepong 2012). This section will examine the regulatory framework of the city of Dar es Salaam and examine the political responses of the city towards the informal sector, to examine whether inappropriate regulations or lack of operating space has contributed to the formation of EAHs.

4.4.1. The Rights of Street Traders

Since the late 1960’s the Tanzanian government has enacted multiple policies and regulations in an effort to control the expansion of the IE and informal settlements, with little success. The government was hostile towards the IE until the mid-1980s as they were considered subversive and the practices challenged socialist ideals by operating outside the legal system and not paying taxes (Nnkya 2006), and generally promoted the individual over the collective good. In 1963, street trade was made illegal in 1963, however, street traders were not deterred so by 1973, the government stopped issuing trade licenses and authorities began forcibly removing street traders to villages (Nnkya 2003; 2006). However, these actions were unsuccessful as traders were unable to find economic opportunities in the villages and often returned the cities (Nnkya 2003; 2006).

In 1982, the government once again tried to remove traders by forcing them into designated markets but the lack of passing trade and customers led them back to the streets within a few months (Nnkya 2006). In 1983 the government required all urban workers to register and carry labour identification cards, known as *nguvu kazi* licenses, as part of the Human Resources Deployment Act, and labelled the self-employed as 'idle and unproductive' and banned them from cities (Nnkya 2006: 82). However, the government did not have the resources to keep track of all the illegally self-employed, and the purchase of illegal documentation made this almost impossible, and so the strict policies forced many into non-compliance (Nnkya 2006). Gradually, the Human Resources Deployment Act was subtly 'reinterpreted' and sought to control and regulate street trade rather than eliminate it (Nnkya 2006: 83), and the *nguvu kazi* began to be seen as a hawker's license.

The failure of policy efforts to remove street traders and informal entrepreneurs eventually led the government to seek alternatives in the early 1990s (Nnkya 2006). The Sustainable Dar es Salaam Project (SDP) of 1992 brought huge benefits for traders in the CBD as UN-Habitat collaborated with the City Council as part of the Sustainable Cities Program (SCP) and identified street trade as a key issue (Nnkya 2006). UN-Habitat persuaded the City Council to take a more collaborative approach and focus on the problems between street trade and the environment rather than simply trying to eliminate it (Nnkya 2006). The SCP's focus on management of the informal sectors resulted in: strengthening petty trader organisations; shared management of city centre streets under a trader association, and use of specifically designed metal stands to reduce congestion; as well as the provision of new markets, (e.e. Temeke) (Nnkya 2006).

In 1998, the Dar es Salaam City Government published the National Poverty Eradication Strategy (NPES) to measure poverty and its manifestation within the city using indicators such as, illiteracy, sanitation and health services, unemployment and low income, and inadequate housing and infrastructure (DSMCC 1998: 10). The NPES sought to eradicate poverty and "bring coherence, consistency and eliminate

contradictions in policies in addressing issues of poverty eradication” (NPES 1998: 14). The goal was to reduce poverty in Tanzania by 50% by 2010 and eradicate poverty completely by 2025. This goal was to be achieved by: coordinating and clearly defining the responsibilities for the implementation of poverty eradication efforts; creating an enabling environment for effective poverty eradication efforts; and empowering the poor – both men and women – to participate effectively in poverty eradication programmes (NPES 1998). In 1999, the government invited the International Labour Organisation to study the potential of the IE for employment and the study found that the IE contributed 30-35% of the GDP and employed about 20-30% of the labour force (Brown 2006: 73; Nnkya 2006).

As a result of sub-Saharan Africa’s failure to integrate into global production chains and formalise their growing informal sectors, the World Bank and other international agencies employed the ‘Doing Business’ report in 2003. The Doing Business reforms, which are inspired by de Soto’s theories of the IE and seek to increase business by reducing cost and providing access to financial services, simplifying procedures and regulations, ensuring property rights, lowering taxes, etc. in an effort to help informal businesses to formalise (Lyons and Msoka 2010). However, in order to access these benefits and reforms, businesses must register with national tax authorities and provide a fixed address (Lyons and Msoka 2010). As part of the formalisation effort, two programmes were created under the Business Environment Strengthening programme for Tanzania (BEST) (Lyons and Msoka 2010). The first programme, MKURABITA, deals with the legalisation of street traders and the recognition of their assets, while the other programme, the Land Act and Urban Planning Act, try to make residential land formalisation accessible (Lyons and Msoka 2010).

MKURABITA, or the Property and Business Reform Programme was initiated with the goal to economically empower the poor by increasing their access to property and business opportunities in an effort to develop the overall market economy of the country (MKURABITA 2008). The programme focuses on the formalisation of business by attempting to increase accessibility to business licenses as well as helping

micro-enterprises establish and expand (MKURABITA 2008). However, in order to receive a loan, the micro-enterprises must form a collective, and in order to receive a business license, micro-enterprises must meet certain criteria, such as: holding a land title, having had a fixed address for six months or longer, and registering with the Tanzanian Revenue Authority (TRA) (MKURABITA 2008).

In 2005 Hernando de Soto was invited by the government to visit Tanzania and his findings strongly emphasised the formalisation of informal property and businesses (Brown et al 2010). In 2006, in a letter from the Prime Minister's office, seven local government authorities were ordered to remove street trade in areas "designated for other activities, particularly city centres" (Lyons and Msoka 2010: 1088). Responses included the demolition of trade structures, confiscation of goods and the prosecution of traders with evictions affecting perhaps 1 million people (Brown et al 2010; Lyons and Msoka 2010; Lyons et al. 2012). A small number of traders were offered designated trading spaces, although in Dar es Salaam there was only space for 25,000 out of the estimated 700,000 traders evicted (Lyons and Msoka 2010). These designated spaces were also problematic as they were located in non-central location and received fewer customers (Lyons and Msoka 2010). The previous licenses were recalled, effectively making street traders even more vulnerable as a result of the reforms (Lyons and Msoka 2010). Since 2006, pro-formalisation policies and increased regulations have been the primary focus rather than empowering the poor (Brown 2017). The eviction of street traders is permissible as a result of several different laws, including: The Land Use Planning Act 2007; The Urban Planning Act 2007; The Highways Act; and The Local Government Act 1982, which empowers the municipal councils within Dar es Salaam to pass by-laws either facilitating or inhibiting street vending (Msoka and Ackson 2017). These various laws impinge the rights of the vendors and as a result, street traders and informal actors have been penalised, and the right to property and tenure security has become increasingly difficult (Brown 2017; Brown et al 2010; Lyons and Msoka 2010; Msoka and Ackson 2017).

Research has found that the results of these reforms have been overwhelmingly negative for street traders, as they are continually excluded from the policy reforms (Brown et al 2010; Lyons and Msoka 2010). Even those who are able to achieve formality are then excluded from society as they are often unable to access credit or other benefits (Brown et al 2010; Lyons and Msoka 2010). Bromley and Mackie (2009: 1503) found began to “colonise” centrally located private courtyards in order to continue their informal activities in locations they were accustomed to (Bromley and Mackie 2009). This may also prove to be the case in Dar es Salaam, though this will need to be examined in the research.

Views regarding informal activities vary dramatically, though the typical response of relocation and eviction has not been very successful. An interesting aspect taken from the literature is the adaptability of informal workers. In sub-Saharan Africa, street traders often implement a form of social collectivism, a social network to “reinforce their strength” and survive in a highly competitive environment with institutions that want their removal (Brown et al 2010). Trader associations – both formal and informal – have formed in order to create a voice for the informal sector to be heard by the government (Brown et al 2010). These groups have had mixed results but the overall goal is to provide effective citizenship in urban planning and governance for a group that makes up the largest percentage of revenue (Brown et al 2010). In an effort to strengthen the dialogue between street traders and authorities, the SDP supported strengthening formal trader associations, and by 1997, 240 groups represented 16,000 traders in Tanzania (Brown et al 2010). Two main groups were established – VIBINDO, the association of small businesses, and KIWAKU, the association of clothes sellers (Brown et al 2010). Unfortunately these groups were unable to prevent the massive eviction of street traders, and the itinerant trader’s licence (*nguvu kazi*) was abolished in 2003 (Brown et al 2010). As a result, it now represents an illegal workforce and has lost its political support (Brown et al 2010).

4.4.2. Settlements and Squatter Policies

As with street trade and informal economic activity, the Tanzanian government took a similarly hostile attitude towards the informal settlements. The government initially adopting a squatter clearance and resettlement programme as part of the 1968 masterplan (Nnkya 2003; Sliuzas 2004). The government demolished informally built housing areas that were considered unsafe for habitation and replaced them with government-funded housing (Kyessi and Kyessi 2007). This plan was criticised for its hostile attitude towards squatters and inability to provide adequate housing for low-income groups as they were unable to afford the new government housing and was abandoned in 1969 (Kyessi and Kyessi 2007; Sliuzas 2004).

During the 1970's, the slum clearance policy was replaced by the National Sites and Services and Squatter Upgrading Programmes (Sliuzas 2004). As part of the Squatter Upgrading Programme, Dar es Salaam began what Kironde (1991) calls the 'creation' phenomenon. According to Kironde (1991), these 'creations' are plots that were originally planned for other uses in the town-planning scheme such as public open space or other public land uses. The city set aside these plots as unplanned areas where self-built housing was accepted and encouraged in order to provide housing to those who could not afford it (Kironde 1991). Sites such as Kijitonyama, Sinza and Mikocheni were chosen as the first 'creations' in 1972 and other 'creations' were largely promoted as part of the sites and services scheme in Dar es Salaam during the 1980s (Kironde 1991). Manzese, the case study chosen for the research, was one of the sites included in the programme (Lupala 2002). Even though they are legally granted, it was determined in 1990 that these creations use scarce city resources inefficiently, and that the identification of suitable land and its approval and allocation has been largely corrupted (Kironde 1991). In 2002 the Ministry of Lands began a major project in Dar es Salaam to plan and survey the plots to be sold; however, many of the poor still could not afford these plots, resulting in random planned areas scattered throughout the city (Kironde 2006).

In 1992, Dar es Salaam City Council initiated a Strategic Urban Development Planning (SUDP) Framework, and it was determined that “inadequate servicing of land has led to deterioration of the city’s environment,” primarily as a result of ineffective collecting of the city’s resource base, chaotic and uncoordinated investment in infrastructure, and the slow and ineffective response of the local government to plan, coordinate, and manage city functions (Halla 2007). In response to these findings, the Sustainable Dar es Salaam Project (SDP) was launched in 1992 with funding from UNDP and technical support from UN-Habitat with the aim providing city administrations and its partners with an improved method of planning, coordination, and managing of development and environmental concerns (Halla 2007, Nnkya 2006). One of the initiatives under the SDP was the Sustainable Cities Programme (SCP), which began in Dar es Salaam (Nnkya 2004). The SCP focused on environmental planning and management, and “inclusion, transparency, decentralisation, efficient service delivery and responsiveness to civil society and sustainability” (Nnkya 2003). Under the SCP and SDP, urban planning and management of the city was reformed in order to increase coordination and consultation among the departments of the city government (Nnkya 2004).

The Sustainable Dar es Salaam Project (SDP) was an unusual programme in that it was based almost entirely on community consultation. The city-side consultation in 1992 identified nine issues, for each of which a working group was formed 1) servicing city expansion; 2) upgrading unserviced settlements; 3) solid waste management; 4) managing surface water run-off and liquid waste; traffic congestion and lack of parking opportunities; 6) managing open spaces, hazardous land and urban agriculture; 7) managing informal micro-trade; 8) managing urban renewal; 9) managing building minerals and other coastal resources. Recommendations from the working groups were then implemented (Nnkya 2006: 84; SDUP 1999; Sliuzas 2004: 92). In 1999, a new Strategic Urban Development Planning Framework for Dar es Salaam was finally developed as part of the SDP, from a synthesis of the working group recommendations (Sliuzas 2004), and thus the strategic planning and coordination came after the micro-level actions proposed by the working groups. This plan was thus very different from the previous frameworks, as it focused on the

improvement of infrastructure and utilised GIS technology to improve the city (Sliuzas 2004). Working group 7) on micro-trade encouraged the formation of trader associations, collective management of congested city centre streets and the construction of new markets. However, some of the literature argues that the regulatory framework provisions are inappropriate to meet the needs of planning in Dar es Salaam today, and has created areas that are irregularly developed and lack infrastructure and public services as a result (Kironde 2006; Kombe 2000). The regulatory framework often affects the poor the most as they are left out of planned land, and end up in unplanned slums and they are often displaced for other uses (Kironde 2006). Being allocated a planned plot in Dar es Salaam is a major problem, as it must first be surveyed and corruption is a common issue among those who allocate the land, as they often promote favouritism or bribes (Kironde 2006; Kombe 2000).

A community-based upgrading process was also begun as part of the Sustainable Cities Programme. The Hanna Nassif community was one of the first communities to be upgraded through these initiatives. The project was formulated in 1992 and commenced in 1994 (World Bank 2002). The project was implemented through two phases and completed in 2000 (World Bank 2002). The aim of the Hanna Nassif project was to “empower the community to develop infrastructure through its own resources with some assistance from donors” (World Bank 2002: 14). The immediate objective was to upgrade storm water drainage, in turn creating improved capability of the City Council to manage and respond to similar initiatives in other parts of the city (World Bank 2002). The development initiatives were to improve the living conditions and expand employment opportunities within Hanna Nassif, and demonstrate the applicability of the community-based upgrading (World Bank 2002). Using the experience from Hanna Nassif, the Community Infrastructure Upgrading Programme (CIUP) was started as part of the wider Local Government Support Programme (LGSP) – a programme intended to ‘enhance the delivery and management capabilities, and financial sustainability of the local government’ – funded by the World Bank (UCLAS 2004: 1). The objectives of CIUP were to: improve productivity and the well-being of low-income urban residents in Dar es Salaam by:

upgrading infrastructure and services in unplanned and under-serviced settlements; strengthen municipal systems for the upgrading of infrastructure and services; and build community capacity to participate in planning and maintaining infrastructure in cooperation with municipalities (UCLAS 2003). CIUP was implemented in two phases: Phase 1 was to be completed from 2005-2008, though it was not completed until 2010, and involved 16 communities. Phase 2 involves 15 communities and was to be completed in 2015, though it is still on-going. The literature agrees that, in areas where the CIUP was implemented, it has been successful in ameliorating the living conditions by improving access to infrastructure and services (UN-Habitat 2010). The total project is expected to provide 20% of currently unserved areas in Dar es Salaam with basic services infrastructure (UN-Habitat 2010).

Various policies related to housing and land rights have been enacted since the 1990s in an effort to regularise unplanned settlements and provide adequate housing to the poor. The National Land Policy (NLP) was approved in 1995 as a result of the demands of the growing population on urban infrastructure and services, and addresses issues of: land tenure and administration, land surveying and mapping, urban and rural land use planning, land use management, and the institutional set up (MLHSD 1997). The NLP aimed to stop the growth of informal settlements by designating areas for low-income housing with simplified building regulations and affordable services, and preserving the existing housing stock within unplanned settlements as they provide a large portion of shelter for the urban population (MLHSD 1997). The NLP also specifies that the government ensures the provision of basic services essential to human health to all urban residents through participatory community upgrading (MLHSD 1997).

The Land Act 1999 established legislation regarding land rights and regularisation of unplanned areas (*Land Act 1999*: 17). The Land Act 1999 is the first act to address the issue of informality in relation to the right of occupancy and the distribution of residential licenses as a derivative right (*Land Act 1999*: Section 23). According to the act, any person who has occupied land within an urban or peri-urban area as their home for no less than three years, without any official title, is deemed to occupy that

land as a residential licensee under a license that is granted on a year-to-year basis by the local authority of that area. The license provides protection and compensation under the Land Acquisition Act 1967, should the government appropriate their land, and acts as an intermediate tenure status that can be allocated to land in unplanned areas; however, according to the University College of Lands and Architectural Studies (UCLAS – now known as Ardhi University in Tanzania) report (2003), no authority has yet issued any of these residential licenses.

In 2000, the Tanzanian government approved the National Human Settlements Development Policy (NHSDP), the overall goals of which are: to promote development of human settlements that are sustainable, and to facilitate the provisions of adequate and affordable shelter to all income groups in Tanzania (MLHSD 2000: 2). This policy gave responsibility of unplanned areas to the Local Government Authority, which were to be upgraded by the community with the help of NGOs and the municipal and local government (MLHSD 2000).

Policies and legislation regarding the working poor and unplanned settlements have changed drastically since Tanzanian independence; however, this section has illustrated that these policies are not cohesive. Legislation such as the National Poverty Eradication Strategy were established to enable the working poor and eliminate contradictions in related policy, but pro-formalisation policies established after the 'Doing Business' reforms have since created even more contradictions and incoherence. Interestingly, acts regarding housing and unplanned areas such as the Land Act and NLP should provide protection to low-income residents through the provision of residential licenses, but as previously stated, none have been issued. In addition, the legislation does not take into account that many of these residents may earn an income through street trade or other forms of informal activity, which is permissible to evict through legislation such as the Land Use and Urban Planning Acts. Therefore, the research must examine the effect of these policies on enterprises within the EAHs chosen as well as the view the government takes towards this economic activity.

4.5. Institutional and Management Arrangements

4.5.1. Creation of the Local Government Authority (LGA)

In 1972, the Local Government was abolished and replaced with direct central government rule (Othman and Liviga 2002); however, the central government rule was criticised for being ineffective in the amount of time taken in decision making, coordination at the local level, and lack of finance and resources at the local level to initiate and implement development programmes (Maro 1990). The reintroduction of the Local Government occurred in the early 1980s with the creation of the Local Government Act 1982 (Othman and Liviga 2002). The Local Government (Urban Authorities) Act 1982 was created “to make better provision for the establishment of urban authorities for the purposes of local government, and to provide for the functions of those authorities and for other matters connected with or incidental to those authorities” (LGA Act 1982: 5). Elections for local government positions took place in 1983, and functioning councils were established in 1984 (Othman and Liviga 2002).

According to Maro (1990), decentralisation allows for an increased flow of information to local communities, and enables communication between community and government regarding planning policy. It is a tool for facilitating planning of socioeconomic development with three objectives: 1) to facilitate participation in local development planning by the community, making the planning process more relevant to local conditions and needs while mobilising local resources; 2) to increase efficiency by providing flexibility in plan implementation and coordination among various level of government involved, which results in prompt decisions, better coordination, and more efficient use of resources; and 3) to strengthen national unity and the sense of community (Maro 1990). The National Environmental Policy (1997: 102), suggests that the role of local governments in Tanzania includes “overseeing planning processes, and establishing local environmental policies and regulations.” However, shifting power from a centralised mode of government to local governments was not entirely straightforward.

In 1996, Dar es Salaam City Council was suspended by central government as a result of inefficiency and near bankruptcy, (Nnkya 2003, 2006: 85). The city council was replaced by City Commission of 12 members appointed for six years, and responsible for upgrading the municipal administration. Following effective tax collection and administrative reforms, in 2000 the City Council was reorganised into the Dar es Salaam City Council, which administered the entire area, and the three municipalities: Kinondoni in the North, Ilala in the centre, and Temeke in the South, as illustrated in Figure 4.4 (Nnkya 2003) (this has now been extended to five municipalities to include the outlying areas of Ubungo and Kigamboni). The three municipal councils were the first phase of local government institutions with elected councillors. These administrative

Figure 4.4: Three Municipalities in Dar es Salaam, 2002



Source: <http://coastalforests.tfcg.org/tz-dar-es-salaam.html#Ilala%20Kinondoni>

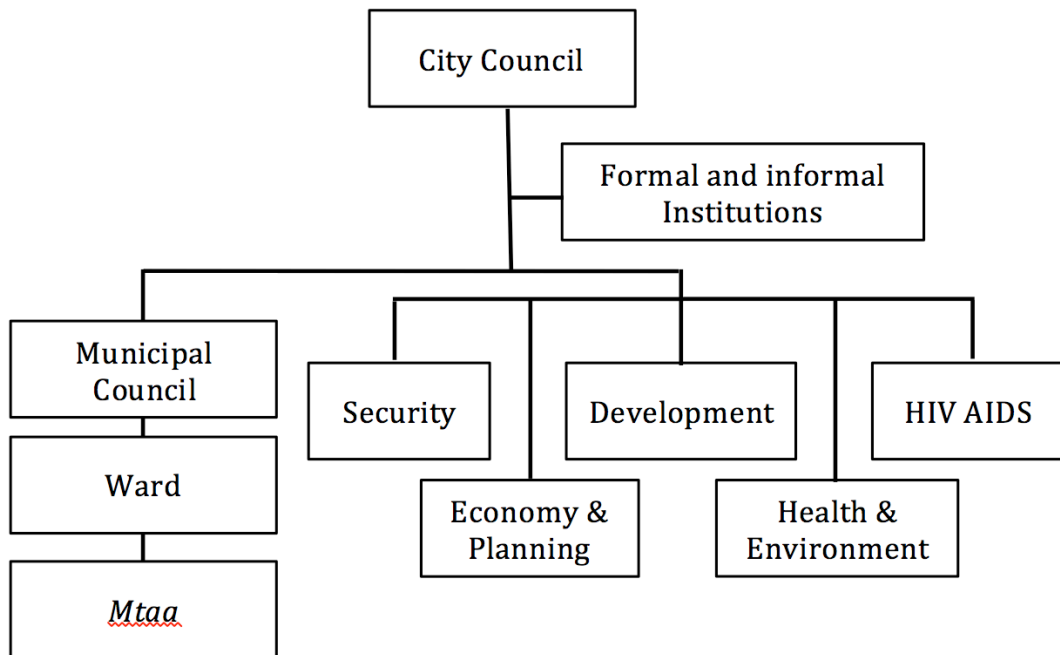
districts are then divided further into wards, and each ward is then divided into *mtaa*, or sub-wards or neighbourhoods, which are the lowest administrative unit in the local government organisation structure (Nnkya 2003). The *mtaa* chairman and executive officers act in a day-to-day administrative capacity by implementing government directives and discouraging the “harassment of informal operators” (Nnkya 2003: 86) by attempting to prevent exploitation by government employees such as tax collectors or police and providing a safe environment for both residences and commercial activities. They also provide oversight of local populations. The structure of the LGA and its’ institutional capacity will be further examined in the following sections. The devolution reforms reflected a considerable diminution of powers for the City Council. In particular the management of micro-trade largely passed to the new district councils, and the enabling approach of the SCP was lost.

4.5.2. Organisation of the LGA

The government of the United Republic of Tanzania is a unitary republic, divided into 26 regions – 21 of which are on the mainland and 5 in Zanzibar (NBS 2012). These regions are then further divided into districts, which are then further sub-divided into divisions (NBS 2012). The local government is divided into urban and rural authorities (NBS 2012).

The general structure of the local government authority (LGA) for the City of Dar es Salaam is as shown in Figure 4.5.

Figure 4.5: The general structure of the local government authorities of Dar es Salaam



Own source

The city council is the highest tier of the LGA, followed by the municipal council. Below each municipal council are wards. Below that are the sub-wards, known as the *mtaa*, based on the socialist philosophy of ten-cell units, to ensure accountability to people and a local government presence on the ground. For the purposes of this research, the wards and *mtaa* are the most important level of government, as they deal directly with informal activities and will have a better knowledge of the settlements chosen as case studies. Therefore, the key informant interviews in each

of the two case-study localities were undertaken with them, and it is important to note the functions and roles of those who have been interviewed.

Each ward consists of a Ward Development Committee, which consists of:

- A Chairman who is a member representing the ward in the municipal authority (i.e. the elected councillor of the Ward).
- Chairmen of the *mtaa* within the ward
- Councillors of the Municipal authorities residing in the ward. These include those who are nominated
- Chairmen of village councils within the ward
- Women members of the municipal authority appointed as provided for, for municipal councils.
- Other invited persons from interested groups (such as CBOs), as may be determined by the committee. However, these have no right to vote (UCLAS 2003).

The government also assigns a Ward Executive Officer, an employee of the municipal government, to each ward committee who acts as the secretary to the committee (UCLAS 2003).

The *mtaa* committees have a fully elected membership, the elections of which are held on the basis of various political parties (UCLAS 2003). Each *mtaa* comprises of a chairperson as well as an *mtaa* committee, which is made up of six members including the chairperson (UCLAS 2003). The *mtaa* committee members are elected from the community and at least two members of the committee must be women (UCLAS 2003). In addition to the chairperson and committee, the government assigns an *mtaa* executive officer to oversee the execution of municipal regulations. The *mtaa* committees are designed to mobilise citizen participation in local development (NBS 2012). As a result, various formal and informal institutions have been organised among the people as a way to create discussions between the *mtaa* and the residents of the settlements.

According to the National Bureau of Statistics (NBS) 2014 Socio-Economic Profile for the region of Dar es Salaam, the number of administrative units is as follows:

Table 4.1: Land Area and Administrative Units (numbers) in Dar es Salaam, 2013

District	Area (sq.km)	Constituencies	Divisions	Wards	Streets (Mtaa)
Kinondoni	501	3	4	34	180
Ilala	208	3	3	26	101
Temeke	684	2	3	30	171
Total	1,393	8	10	90	452

Source: National Bureau of Statistics (NBS) and Regional Commissioner's Office 2014. Dar es Salaam Region Socio-Economic Profile.

4.5.3. Functions of the LGA

It is important to note the functions of each level of the LGA, as interviews with government officials will be necessary to gain a better understanding of the area and determine general views of the informal sector from the local government, as well as how they respond to informality. These interviews are necessary to determine what improvements to basic services or related policies are needed for the recommendations section of the study based on the findings of the field research. Preliminary studies of the areas have found that roads and waste collection are a serious problem, which would indicate the need for new management or reorganization at the city council level. Concerns relating to the environment or the social welfare and economic wellbeing of the people within the settlements would indicate possible recommendations for improvement at the municipal level. Lack of knowledge regarding economic regulations, infrastructural regulations, or how to get assistance from government or financial groups would indicate a lack of communication between the ward level and the community. Finally, possible issues with tax collection, such as bribery or other forms of corruption by government employees, as well as upgrading needs of the people that have not been met would indicate a lack of communication between the community and the *mtaa* level, which will be particularly important to examine in the research. The overall functions of the various levels of the LGA have been combined into a table below for clarity:

Table 4.2: LGA Functions

LGA Level	Summary	Key Functions
City Council	The city council was created in 2000 and is the highest tier of local government authority. The decentralisation of government as part of the SCP resulted in a significant loss of power for the city council.	<ul style="list-style-type: none"> • To coordinate the functions of the municipal councils and address cross-cutting issues in relation to roads, transportation, waste management (dumping sites), fire brigade, bus terminals and markets, etc. • To strengthen the relationships between the municipal councils. • To give technical backstopping to the municipal councils. • To initiate revenue sources and investment avenues for the municipal authorities. • To ensure law and order within the City. • To deal with matters of national and international protocol. • To prepare the City's Sustainable Urban Development Plan.
Municipal Council	The municipal council is responsible for duties to ensure the orderly development of their area of jurisdiction (UCLAS 2003). The Local Government Act empowers the municipal councils to make by-laws in order to fulfil their duties and functions (Msoka and Ackson 2017). Each municipal council has enacted by-laws dealing with various matters such as hygiene and market regulation and these by-laws have provisions that impact street vendors (Msoka and Ackson 2017).	<ul style="list-style-type: none"> • To maintain and facilitate the maintenance of peace, order and good government within its area of jurisdiction. • To promote the social welfare and economic wellbeing of all persons within its area of jurisdiction. • Subject to the national policy and plans for rural and urban development, to further the social and economic development of its area of jurisdiction. • To take necessary measures to protect and enhance the environment in order to promote sustainable development. • To give effect to the meaningful decentralisation in political, financial and administrative matters relating to the functions, powers, responsibilities and services of all levels of local government authorities. • To promote and ensure democratic participation in and control of decision making by people concerned; and, • To establish and maintain reliable sources of revenue and other resources enabling local government authorities to perform other functions effectively and to enhance financial accountability of LGA
Ward and Ward Development Committee	The primary aim of the Ward is to enhance efficiency and coordination between the municipal level and street level. The Ward level is responsible for proposing any development plans of the area to the Municipal council and	<ul style="list-style-type: none"> • Implementing decisions and policies of the municipal authority • Promoting economic and social development of the ward • Promoting co-operative activities in the ward • Initiating or undertaking any task, venture, or enterprise designed to ensure the welfare and well being of the residents of the ward. • Planning and co-ordinating activities of, and rendering assistance and advice to the residents of the ward engaged in any activity or industry.

	to receive and implement municipal regulations, orders, and directives (UCLAS 2003).	<ul style="list-style-type: none"> • Formulating and submitting to the municipal authority, proposals for the making of bylaws in relation to the affairs of the ward. • Monitoring and co-ordinating the activities of the <i>mtaa</i>, within the ward.
<i>Mtaa</i>	The <i>Mtaa</i> is the lowest level of local government, responsible for the implementation of all council plans and all development activities within the area (UCLAS 2003).	<ul style="list-style-type: none"> • To implement the policies of the Council • To advise the council on matters relating to development plans and activities of the <i>mtaa</i>. • To advise the Ward Development Committee on matters relating to peace and security in the <i>mtaa</i>. • To keep a proper record of the residents of the <i>mtaa</i>. • To carry out duties conferred upon it by the WDC. • Coordinating the activities of the various standing committees in the <i>mtaa</i>. • Ensuring the collection of revenue and the spending of the same in accordance with local government regulations. • Making by-laws. • Acting as an agent of the central government and the council

4.6. Conclusion

This chapter has examined the background context necessary to understand the growth and success of the IE in Dar es Salaam. The city's history led to the development and rapid growth of informal settlements, which was then exacerbated by legislation and various city and government programmes, as well as economic crises resulting from internal as well as external factors. Following the failure of the *Ujamaa* policies, the government took a more negative approach towards the IE, as is common in many other developing urban environments (Bromley 2000; Bromley and Mackie 2009; Walsh and Maneepong 2012). The principal objective of current planning policies is the relocation street traders from 'unacceptable sites' such as Manzese, to markets and trade centres. The policies and framework do not take into consideration the potential importance of existing networks that make up micro and informal trade, which may be an important characteristic of EAHs and economic agglomerations within informal settlements.

The context in which EAHs operate in Dar es Salaam is important in understanding the potential drivers and operations of agglomeration economies within informal settlements, as they may have been developed as an alternative source of employment when the formal economic sector could not meet the demands of a rapidly growing population. Various legislation and planning policies, as well as historical factors may affect the informal economy in Dar es Salaam, and is relevant to the informal settlements that will be chosen as case studies.

Because the literature focuses on street vendors, it is unclear whether these regulatory political restraints such as displacement affect informal settlements and EAHs. However, the literature does provide context necessary for better understanding EAHs by examining government policies as well as the responses of the informal sector to those policies. This analysis of the legislative and administrative policies has provided context to the environment EAHs operate within, as well as the government sectors that may affect the operations of EAHs and their businesses. The functions of each level of the city government are important in determining which areas need improvement in order to make recommendations based on the research findings.

Chapter 5: Mapping out an EAH – Spatial Analysis

5.1. Introduction

The analysis has been divided into two chapters in order to fully explore the objectives – chapter 5 analyses the EAH’s locational attributes and the GIS survey data to develop a spatial analysis of the functioning of the selected EAHs while chapter 6 examines the drivers of EAH formation and operation through the analysis of qualitative data obtained through interviews. Both compliment each other to provide a more comprehensive understanding of EAHs in Dar es Salaam. This chapter analyses the findings of the research attained in response to the primary research aim – to provide a better understanding of the IE within informal settlements, and the importance of EAHs. It investigates the research objectives through a case study of EAHs in two informal settlements in Dar es Salaam, Manzese and Keko, through a spatial analysis to provide a visual representation of the spatial and economic networks of EAHs, both to determine potential drivers and operations of these economies, and to examine the potential of GIS and spatial analysis as a tool in development research.

To meet Research Objective 2a, to provide a visual representation of the economic networks of EAHs, to help determine the drivers and operations of these economies, and the potential of GIS in IE research, a spatial analysis was performed using the GIS software package ArcGIS and QGIS as described in Section 3.5. Using GIS, the two detailed case study locations of Keko and Manzese have been mapped on both a citywide scale to provide insight on the networked aspects and potential drivers of their locations, and a local scale to examine how they function and potential spatial characteristics associated with EAHs that may result in significant economic advantages or disadvantages for micro-entrepreneurs operating within them. An in-depth spatial analysis of features such as land use and transportation networks was necessary for this stage in the analysis as outlined in Section 3.5.

Statistical analyses available in ArcGIS software were also used to provide insight into spatial patterning and evidence of clustered activities. The use of both mapping and

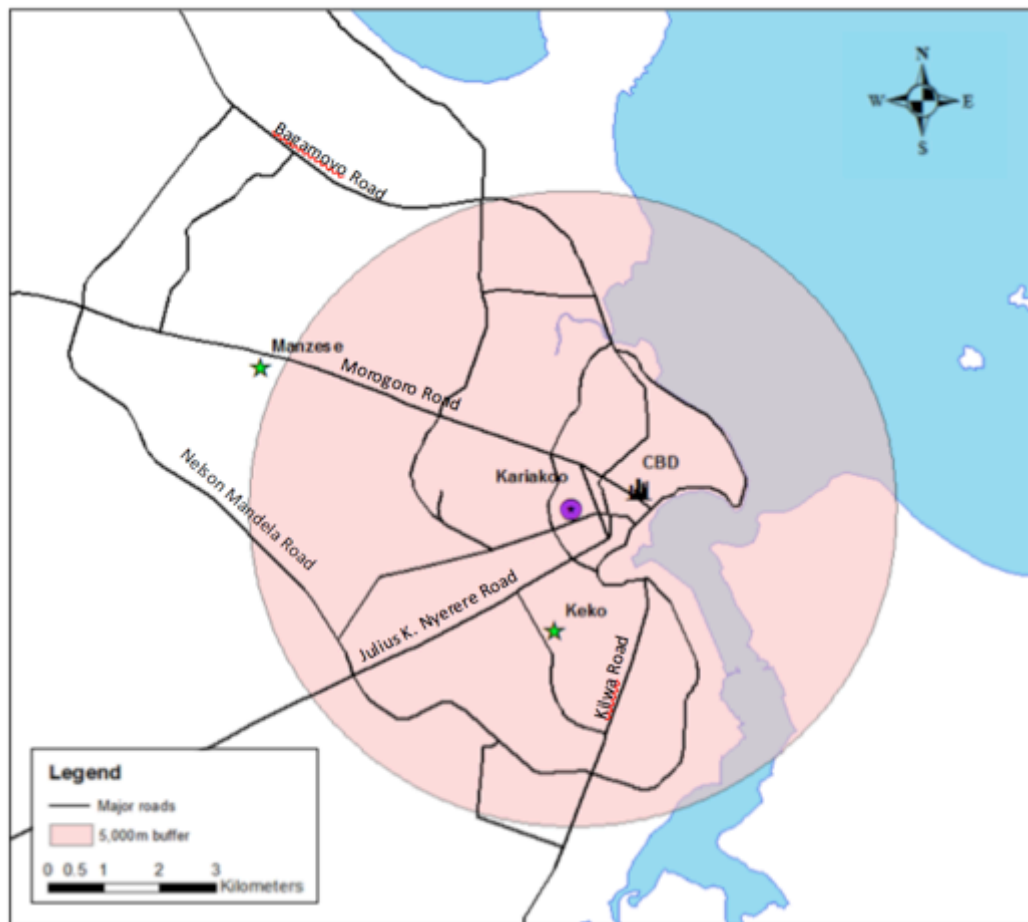
statistical analysis has provided a clear picture of the spatial characteristics, and the importance of proximity and spatial clustering within the operation of EAHs. The spatial analysis of the case studies provides a visual representation of the spatial patterns and clusters to better understand the qualitative analysis. The spatial analysis will be compared to information from interviews in the qualitative analysis in Chapter 6 to provide a visual representation of the spatial and economic networks of EAHs, to examine their wider economic linkages and contributions – examining the relationship of specific activity clusters to the broader economic networks, including formal-informal linkages and value chains – and to explore the social relations underpinning the observed spatial distributions examined in Chapter 5.

5.2. Locational Drivers – Wider urban context

In order to determine any potential locational drivers of EAH formation or attributes that contribute to their operations, the research first examined why businesses would choose these locations – what spatial and locational attributes found in Keko and Manzese might have led to the creation of the EAHs in these areas. This section examines the settlements on a city-wide scale, looking at the location of both settlements in comparison with the CBD and primary distribution and trade centre of Dar es Salaam.

Figure 5.1 shows the location of Keko and Manzese within the city, as well as the city centre and Dar es Salaam's largest and busiest market, Kariakoo. A 5,000 meter buffer has been placed around Kariakoo to provide a visual representation of the distance from the settlements to the marketplace. The city's major roadways have also been included in order to assess the location of settlements within the context of the transportation network.

Figure 5.1: Keko and Manzese in wider urban context



Source: University of Dar es Salaam; University of Twente, Faculty of Geo-Information Science and Earth Observation; and University of Dortmund

It is clear from the map of the city that both Keko and Manzese are located alongside a major link or arterial roads that provide the areas with access to the city centre and Kariakoo. Keko is located along Julius K. Nyerere Road and Manzese is located along Morogoro Road, both of which are primary transport routes in and out of Dar es Salaam. Dar es Salaam, like many rapidly developing cities has a relatively limited paved road network, and the location of the CBD on a promontory surrounded by sea limits the directions in which the city can expand. Areas with good linkage to the city centre and Kariakoo are thus important as second tier markets and distribution centres in their own right.

The map illustrates the importance of place in the context of city development. In Dar es Salaam, growth pressure and poor city planning has resulted in massive urban

sprawl and the city continues to expand. The outward development of the city has resulted in the creation of alternative economic centres like Keko and Manzese. One of the problems of developing country cities is that, because they have grown rapidly, they tend to be mono-centric with a dominant CBD. What the analysis here shows is that polycentricity is occurring, but in a way that is unlikely to be recognised in formal planning processes. Polycentric regional development has been proposed as a planning solution for suburban sprawl by achieving efficiency and sustainability (Knapp et al 2016). Polycentric development prescribes multiple economic centres, or areas of employment within a city, promoting shorter commutes to reduce traffic congestion, and expands choice in terms of employment opportunity (Knapp et al 2016). However, because many of these economic clusters are cases of unplanned development within areas designated as residential, they are not recognised by formal planning processes.

As a result of this polycentrism, it is important to consider locational advantages of place, e.g. access to consumers and resources, to understand the creational drivers and operations of these EAHs. Factors like transportation within the city context must be understood to determine why it would be necessary to create economic centres beyond Kariakoo. Due to ineffective city planning and limited road networks, traffic within Dar es Salaam – like many developing cities – is often gridlocked and public transportation provides a necessary service for those commuting to and from the city centre.

The locations of both Keko and Manzese fall along network links that are likely to have high relative flow rates for vehicular access. Observations found large amount of vehicular traffic comes through these areas, reinforcing the initial findings that the transport network was likely to be a major driving factor in the creation of these EAHs. High traffic flows would result in a larger customer base, and are likely to offer greater access to public transport and services. According to Bromley (2000), agglomerations of street vendors occur as a result of high concentrations of vendors becoming well-known, which then attracts other vendors and results in the blocking

of fixed off-street businesses and the increased pedestrian and vehicular congestion leads to increased purchasing and clustering. The qualitative analysis further examines the validity of the rest of Bromley's (2000) hypothesis, regarding areas becoming well-known as a driver of economic activity.

Keko is located in close proximity to Kariakoo and the docks, indicating that this EAH may have developed as a result of this proximity. Both Kariakoo and the docks were identified during the interviews as key locations where the entrepreneurs purchase their goods. Manzese is located just outside of the 5,000 meters buffer from the city centre, but is situated at the entrance of a significant group of informal settlements, large enough to support their own centre of economic activity with an estimated population of over 74,000 according to the ward executive officer (MWEO 2015), indicating that this EAH may have been developed as an alternative economic centre as part of polycentric growth within the city. The theories behind the development of both settlements are different, indicating the importance of geographical context when conceptualising and understanding the IE, supporting the use of GIS technology in development research. However, the analysis also found similarities, such as the importance of access to central areas, where goods and services can be acquired, as well as the public transportation network, which not only provides easy transport to and from the city centre, but also provides accessibility for customers. This corresponds with hypotheses put forth by the literature that informal activity, such as that found within EAHs, takes place within highly populated and accessible urban spaces because these locations provide easy access to resources and consumers (Bromley and Mackie 2009; Iyenda 2005). In addition, these areas provide ease of movement of goods as well as the convenience of public transport, reducing overall transportation costs for micro-entrepreneurs (Iyenda 2005), and perhaps further increasing access to consumers.

Based on the locational analysis within the wider city context, the results appear to confirm that highly populated urban areas and accessible urban spaces are important locational aspects of informal economic activities. Accessibility is likely to be of crucial

importance for both operators and customers of informal micro-enterprises, who may not have access to personalised transport and therefore depend on hired transport, for example *bajaji* (three-wheeler taxis) or small trucks when they need to transport goods. As in many other aspects of urban development, low-income micro-entrepreneurs lack capital so have to buy urban services in small amounts, but often at expensive rates. Based on the historical backgrounds of Keko and Manzese (See Section 3.4.1), there are numerous factors that have resulted in the creation of economic centres, e.g. Manzese is located at the entrance to a large informal settlement and Keko is linked back to port activities during colonial times; however, it is evident that the geographical context and drivers such as access and population clusters play a key role in the sustaining and operation of these EAHs.

Keko and Manzese act as hubs outside the city centre that are surrounded by residential areas – many of which are unplanned. For these residents, these hubs offer important areas of economic opportunity. In addition, they occur along major roads and public transport routes, e.g. *dala dala* (mini-bus), hubs. Therefore, these economic centres likely act as commuter hubs, but this will be analysed on a local scale later in the chapter as well as in the qualitative analysis. It may be the case that commuter hubs, identified in the research as bus interchanges where passengers travel to and from work, offer an ideal locale for EAHs, acting as a driver of their creation and sustaining the EAHs.

5.3. The Case Studies – Local context

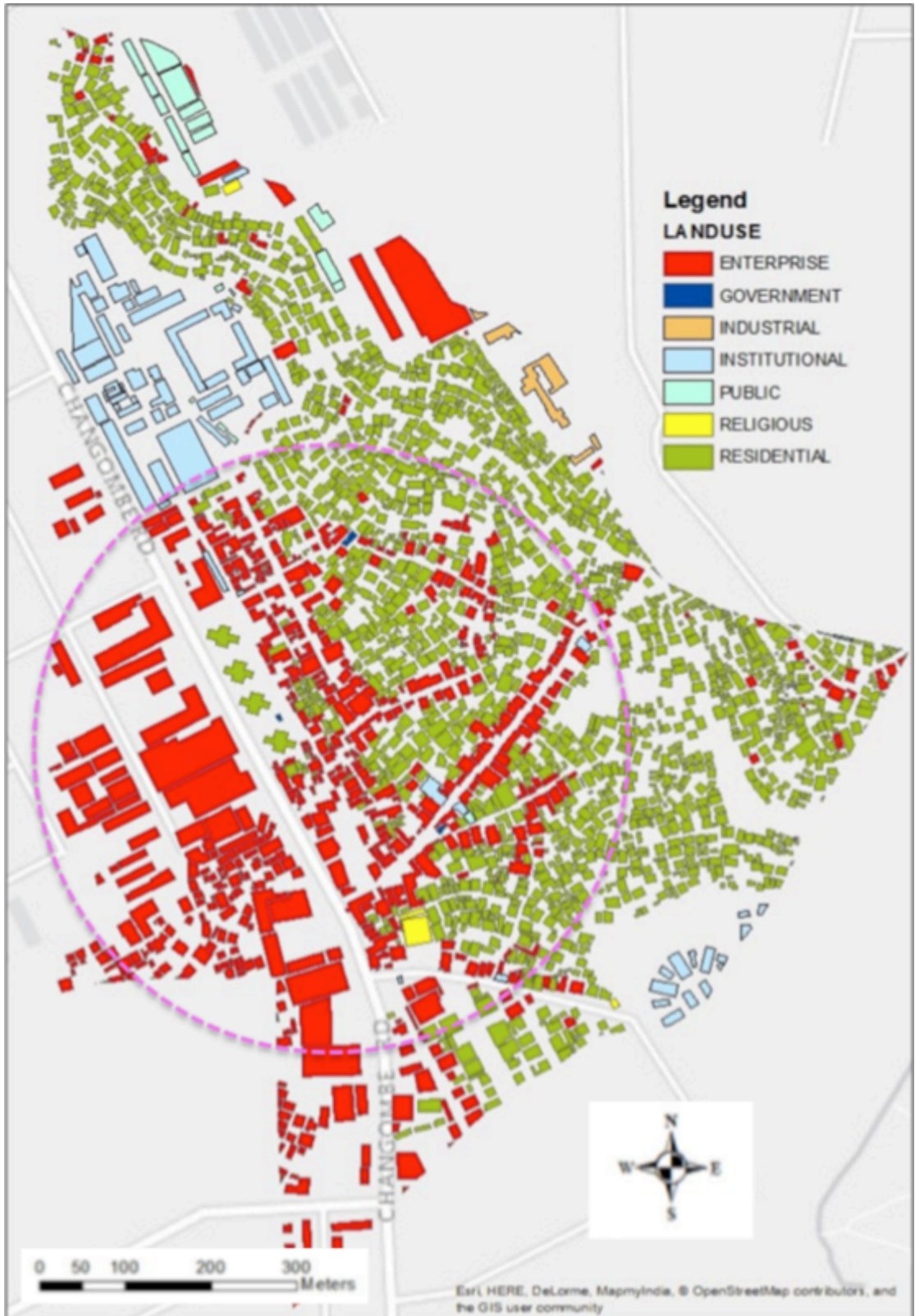
After analysing the citywide context, Section 5.3 examines aspects that affect the spatial patterns and functions of EAHs within the settlements. The first part provides a spatial analysis of general land use patterns to examine the overall spatial distribution of activities in each area. The second part analyses transportation and upgrading. The previous section determined that the road network acts as an important locational driver of economic activity because it increases accessibility to customers and resources. A small-scale analysis is necessary to determine if the road

network or any upgrading impacts where enterprises choose to operate locally by increasing accessibility or any other potential reasons. This section provides important information for the next part of the spatial analysis, which examines the spatial patterns of EAHs in more detail – specifically, the locations of enterprises by business type, e.g. clothing, furniture, food/drink, etc. These business types are then divided even further into sub-classes of each group, e.g. carpenter, tailor, cobbler, materials, etc. By creating a visual representation of the spatial distribution of EAHs for analysis, it is possible to determine whether any patterns emerge, and if so, whether these patterns affect how the EAHs function, or conversely if the processes of the EAHs have affected how the spatial pattern of the settlement has evolved.

5.3.1. Land Use

To perform the assessment of spatial patterning and factors that might affect that patterning, e.g. transport, upgrading, etc., it was first necessary to map out the land use of each settlement within an ArcGIS environment, as illustrated below in Figure 5.2, Keko, and Figure 5.3, Manzese. The methods used to undertake this analysis are explained further in Section 3.6. The land use categories adopted include: enterprise, government, industrial, institutional, public, religious, and residential. ‘Enterprise’ is the primary land use category in the analysis, as this refers to businesses within the study area. Both informal and formal businesses are included within this category, as it has become clear through qualitative research that informality is difficult to conceptualise within the context of EAHs (see also Chapter 6). These businesses agglomerations include both large stores, primarily the large furniture shops in Keko, and micro-enterprises, such as carpenters or home-based businesses such as *mama lishe* (micro-enterprises selling cooked food, often sold out of one’s home). In order to provide a clear visual representation of the results, ‘enterprises’ have been marked in red in Figure 5.2 and Figure 5.3. Due to resource and time constraints, the study focused on the areas within each settlement with a clear clustering of specialised enterprises and high levels of economic activity, which have been marked using a purple dashed line in each map.

Figure 5.2: Keko building use



Source: Esri 2011 "World Light Grey Base"; University of Dar es Salaam

Figure 5.3: Manzese building use



Source: Esri 2011 "World Light Grey Base"; University of Dar es Salaam

Initial spatial observations found high levels of mixed land use in both Keko and Manzese, including commercial and residential land uses in close proximity. Often an enterprise will be located in the front room of a residence, having been rented out by the owner, or residences will be used for home-based enterprises, e.g. *mama lishe*, tailors, etc. In addition, to residences and small-scale enterprises, large-scale manufacturers and commercial enterprises are also located in close proximity to the case study sites. This confirms the findings by Hays-Mitchell (1993) that micro-enterprises excel in these areas due to accessibility to local small-scale manufacturers as well as national-level commercial products.

The spatial analysis in Figure 5.2 and Figure 5.3 shows clear evidence of the existence of the economic activity hub in both settlements through clustering of enterprises. However, one aspect the spatial analysis of the land use was surprising in that, for both Keko and Manzese, enterprises are clustered around the road network, rather than scattered throughout the slum area, which may have been expected if businesses were predominantly home-based enterprise. Although the research may not have identified all home-based enterprise, those with any external sign of activity were noted. These research limitations were discussed in Section 3.8; however, the clustering is very clear and the conclusion drawn from the spatial analysis would have probably remained the same even with unlimited time and resources. Figure 5.2 and Figure 5.3 show clearly that the enterprises are less scattered and there is strong evidence of clustering, which suggests accessibility is important at the local and citywide scale. Residential areas lie further within the settlement. In the case of Keko (Figure 5.2), the natural landscape is probably a factor in the spatial patterning, as there is a river located further within the settlement. Businesses located deep within the settlement would risk losing their source of income when the river floods during the rainy season. In Manzese, there are more scattered businesses, as shown in Figure 5.3. However, this may be because Manzese is not as isolated or affected by flooding. Also there are more settlements surrounding Manzese, which would increase the transport-network within and around the settlement.

The importance of the transport network is also a result of the city's outward growth as the areas studied were originally residential. As the city expands and roadways are upgraded and asphalted, accessibility to customers and resources also increases within and around the informal settlements. The clustering appears to increase with roadway classification levels and level of upgrading, and therefore as traffic flow increases. This corresponds with Bromley's (2000) hypothesis that entrepreneurs may prefer these locations as a way to gain access to customers, as it is common for vendors to sell along roadways to people stuck in traffic. This would also increase access to customers who use public transport to travel to and from the settlements, as well as making their business more easily viewed from the road increase their customer base. In addition, road access would also enable businesses to move goods more easily. For example, in Keko, access to a road would make it much easier to move furniture or large materials. In Manzese, this is not as crucial as textiles are smaller and easier to carry, indicating the roads themselves increase the customer base.

There are other potential reasons that could influence the locational choice to cluster along roadways. A surprising aspect was that the EAHs are both located in commuter areas. Initial interviews determined that many of the entrepreneurs commute to the settlements, rather than live within them, particularly in Manzese. By locating in close proximity to a road, there is also increased access to public transport. Another possibility examined in Section 5.3.2 is that upgrading is more likely to occur first along major roadways such as Morogoro Road in Manzese and Chang'ombe Road in Keko. Asphalted roads improve drivability, making it easier to transport goods and draw in more customers who use vehicles. Improved roadways typically indicate improved drainage, which would prevent flooding of businesses during the rainy season. These upgrades could also mean upgrades to the electrical grid, which is important for many businesses, such as carpenters who require electrical tools to build furniture or tailors who use sewing machines. The clustering along roads could also depend on business type or level of formality. For example, a furniture store would have a larger external customer base while a *mama lishe* would have a more

internal, low-income clientele, making locational choice less crucial to business sustainability. In addition, an entrepreneur acting without a business license might choose to operate further within the community than one who has a business license to prevent complications with tax collectors or government officials.

All of the potential reasons behind locational choice cannot be determined solely through spatial analysis, making qualitative analysis crucial in understanding the locational drivers of business within the case studies as developed in Chapter 6. However, initial findings indicate that accessibility to customers and resources provided by road networks is an important factor in the spatial distribution of EAHs, both as a driver of business location as well as affecting their operations and functions.

5.3.2. Upgrading and Transport

The analysis of general land use within the settlements suggests that in addition to road access, transport and upgrading also play a role in the locational choice of enterprises within EAHs; therefore, this section will analyse the transport network and the effects of upgrading within Keko and Manzese.

Upgrading

The researcher was not able to obtain spatial data for the upgrading performed by the Community Infrastructure Upgrading Programme (CIUP), as the upgrading was carried out in Keko around 2013 and in Manzese perhaps 10 years' ago; however, observations determined that upgrading appears to affect the spatial patterns and land use within the informal settlements. The majority of commercial use was clustered along upgraded or asphalt roads, with residential areas further back in the community, and commonly located along unpaved roads, as illustrated in Figure 5.4 below. The image on the left illustrates an upgraded road within Manzese that connects to the primary road in the area, Morogoro Road. The image shows that the

road has been asphalted, and while not visible in the photo, there are also large drainage ditches along both sides of the road. The upgrading has drawn large amounts of commercial activity – *wachinga* (plural of *machinga*, or street trader) line their stalls along the streets and stores operate behind them. The image on the right illustrates an internal street in Keko that has not been upgraded. The road is primarily residential and lacks any commercial activity apart from perhaps home-based businesses such as *mama lishe* or businesses that would attract more low-income, local consumers. The upgrading of these roads has exacerbated the clustering as the smaller dirt roads located within the interior of the settlements are often too narrow and degraded for motor vehicles to access.

Figure 5.4: Photos illustrating land use type based on level of road upgrading



It was confirmed through an interview with the Principal Commissioner of Development Office and overall coordinator of the CIUP, that both case study areas have been upgraded in various stages through the CIUP, which began in 2005 (MG3 2015) (refer to Table 3.4 in Chapter 3 for the list of Interviewees and assigned names chosen for anonymity). In the interview, the commissioner was asked about the CIUP upgrading and how this has affected the spatial patterning of the settlement. The commissioner explained, “The separation of land use is not part of the CIUP but was realised after the upgrading project. After the project, businesses began to appear following the roads because the number of roads and their accessibility increased” (MG3 2015). According to the commissioner, the implementation of asphalt roads increases the value of the land, which draws more formal businesses to the area – causing many property owners and previous residents to rent out their property

(MG3 2015). Interviews confirmed high levels of property renting, discussed further in Chapter 6. The increase in land value has resulted in the development of new policies to re-plan and re-develop many areas, including Keko and Manzese, in order to capitalise on potential economic opportunities (MG3 2015).

The introduction of new surfaced entry roads as part of the upgrading process likely draws in new business as they offer increased accessibility to customers and resources. However, it is important to note that while road upgrading increases commercial activities, other forms of upgrading may decrease commercial activity. For example, in a study of the upgrading effects in Hanna Nassif, another informal settlement in Dar es Salaam, commercial activities declined in houses on the side of the road where drains were put in, both because access to properties was limited by narrow pedestrian bridges over the drains and because the business was unable to spill out onto the road (Lupala 1995). Due to limitations in data and time, a thorough spatial analysis of the upgrading could not be performed. Therefore, the effects of upgrading, or lack of upgrading, on enterprises will be examined within Chapter 6 which discusses the policy restraints and challenges, rather than in the spatial analysis.

It was unexpected that government buildings, e.g. *mtaa* and ward offices were not located along primary roadways, but further back and placed almost randomly within the community. The reasoning behind the location is unknown, but it could be either a way of incorporating the office into the community and making the officials more approachable to residents and business owners, or providing more oversight of the community. This could also be the only space that was available at the time. It was also noted upon observation that the roadways around the LGA buildings had been upgraded before the surrounding residential areas suggesting a political influence on expenditure. In Keko and Manzese, the roads and drainage systems around the *mtaa* and ward offices were of much better quality and clearly cleaned regularly. Potential reasons could be that: the *mtaa* officers wanted to attain status by demonstrating that their areas were well-organised; that these were areas they observed frequently

so were given priority; or because of undue influence in funding allocation. The *mtaa* were not asked why this occurred as their cooperation was necessary for the completion of the research, therefore further research would be necessary in the future.

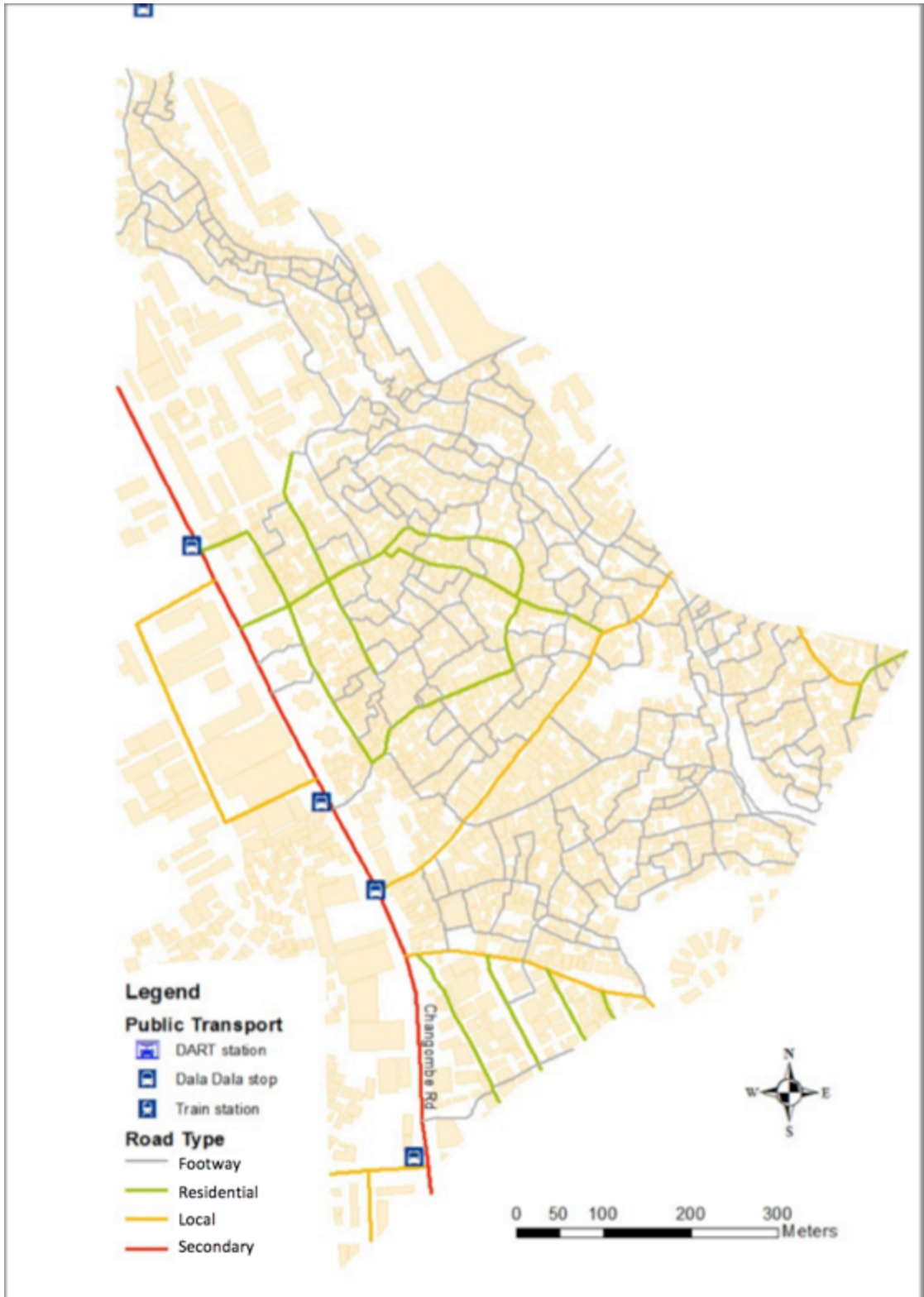
Figure 5.2 and Figure 5.3 have illustrated the strong connection between land use patterns and accessibility, which are an unintended consequence of the upgrading of low-income settlements. Based on the large number of enterprises and their locational preferences, it is likely that these upgrades have further strengthened the connections between accessibility and the success of micro-enterprises within these settlements and their dependence on them for the sustainability of the EAHs.

Transportation Networks

Transport accessibility is linked to commercial potential as illustrated through the highly differentiated land use in relation to accessibility. Based on the initial land-use analysis and evidence of strong clustering of businesses along roadways, illustrated in Figure 5.2 and Figure 5.3, it appears the transport network has a great effect on the locational drivers of enterprises, the spatial patterning within the settlements, and the locational drivers of EAHs. It was thus necessary to examine the transport network within the settlement.

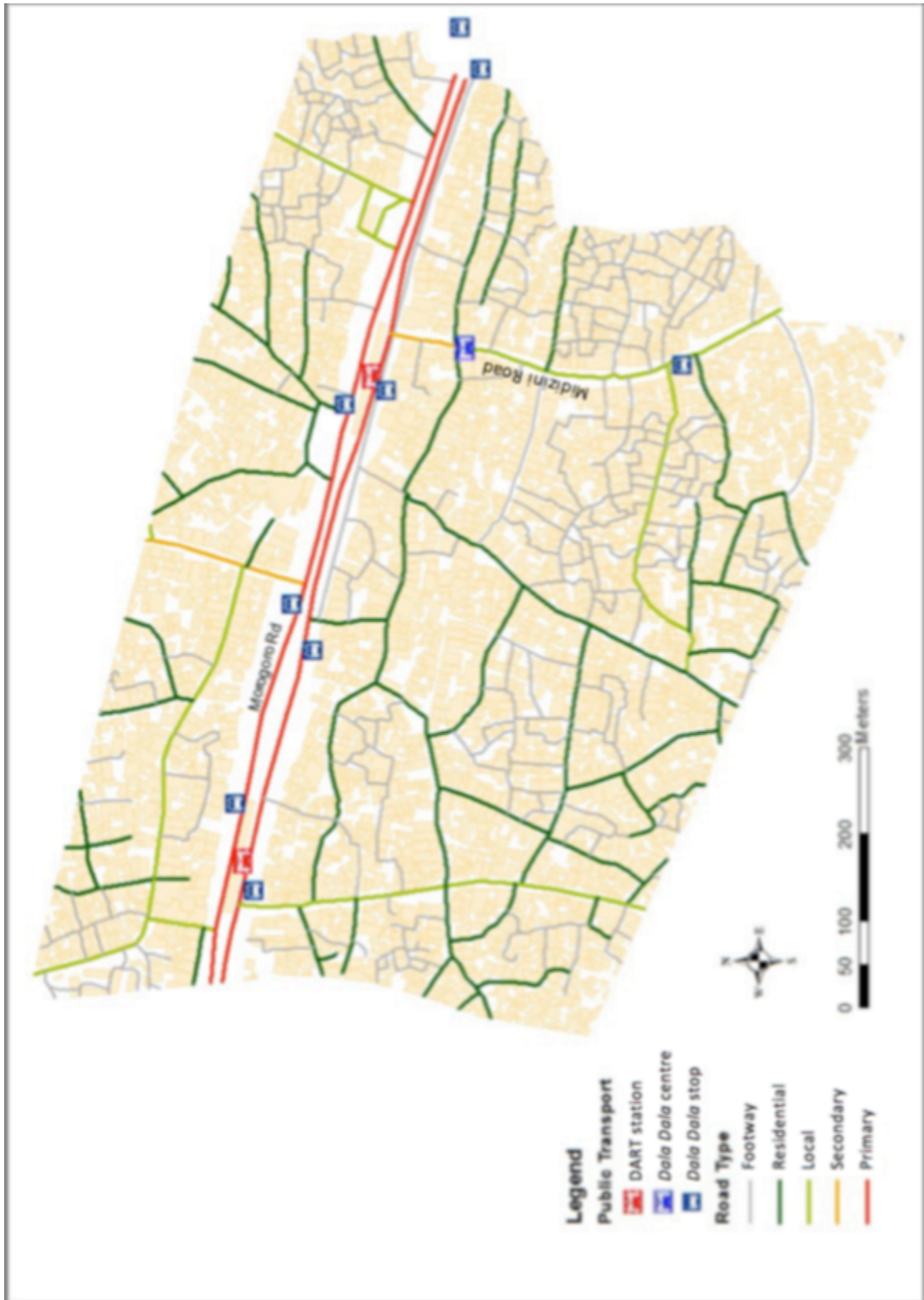
In order to assess the transport network within each settlement, the researcher first assigned a road classification to each road polyline within ArcMap to provide visual representation of the road network and hierarchy, as discussed in Section 3.6. The public transportation points were mapped out based on observations and satellite imagery (see Figure 5.5, Keko, and Figure 5.6, Manzese, below).

Figure 5.5: Keko road classifications and public transport



Source: University of Dar es Salaam; University of Twente, Faculty of Geo-Information Science and Earth Observation; and University of Dortmund

Figure 5.6: Manzese road classifications and public transport



Source: University of Dar es Salaam; University of Twente, Faculty of Geo-Information Science and Earth Observation; and University of Dortmund

The roads were assigned classifications based on observations and satellite imagery. These classifications include: primary, secondary, local, residential, and footways (see Table 3.5). As discussed in the methodology in Chapter 3, these classifications were created based on a combination of UK and Tanzanian road classification, but some new descriptions of the classifications were created for the this research in order to adequately describe roads and the level of upgrading in informal settlements. For example, roads that have been asphalted and can carry cars but act as access roads to the settlements and residential areas have been assigned as ‘Local roads’. ‘Residential roads’ have the potential to bear motor vehicles in terms of width, though it would not be optimal for a small-low riding car as they are still dirt roads. On the other hand, ‘footways’ are completely inaccessible for motor vehicles because they are far too narrow and substandard in terms of quality, and therefore can only be used by pedestrians or sometimes motorcycles.

Observations confirm that roads classified as primary, secondary, and local are the first to be upgraded. This is likely due to limited government resources and the high levels of traffic operating along these roads. Morogoro Road is the main road running through Manzese classified as ‘primary’. Morogoro Road provides for regional traffic movement leading to Morogoro, a large city almost 200 km West of Dar es Salaam,

Figure 5.7: Morogoro Road



and beyond. This road has been upgraded to the highest standard due to its status as a major transportation route. It has been paved and given an underground drainage system that is well maintained. It is also one of the roads included in the city’s new rapid bus transit network, or

DART (Dar Rapid Transit) system, that was under construction at the time of the research, illustrated in Figure 5.7. During the time this data collection was performed, the DART, or new city bus system, was still in the process of being built. DART is expected to replace the *dala dala* as the principal form of public transit along the primary roads once it is complete. Evidence of the strong correlation between transport accessibility and commercial potential can be seen in Figure 5.7, as the image illustrates *wachinga* using the currently non-operational DART stations as a base for selling their wares. The *wachinga* would wait at these stations until traffic increased causing the cars to slow down, and then move between the cars along the road to sell their goods to the passengers.

Chang'ombe Road, illustrated in Figure 5.8 below, is the main road running through Keko. Chang'ombe Road has been classified as 'secondary' because it connects Keko and other residential areas to Julius K. Nyerere Road, shown in Figure 5.1. Julius K. Nyerere Road is a primary road that runs from the CBD out to the airport. Chang'ombe Road also connects to Kilwa Road (illustrated in Figure 5.1), another primary road that leads to Lindi, a town in south eastern Tanzania, close to the Mozambique border. Figure 5.8 illustrates how Chang'ombe Road has been paved and large drainage ditches have been built along both sides of the road to avoid flooding. However, the upgrading does not have the same standard as that of Morogoro Road and as

Figure 5.8: Chang'ombe Road

Figure 5.8 shows, there is less economic activity clustered along the roadway. Shops line the road, but there is a lack of the street trading activity that was clearly noticeable along Morogoro Road, despite the high traffic volume. As street



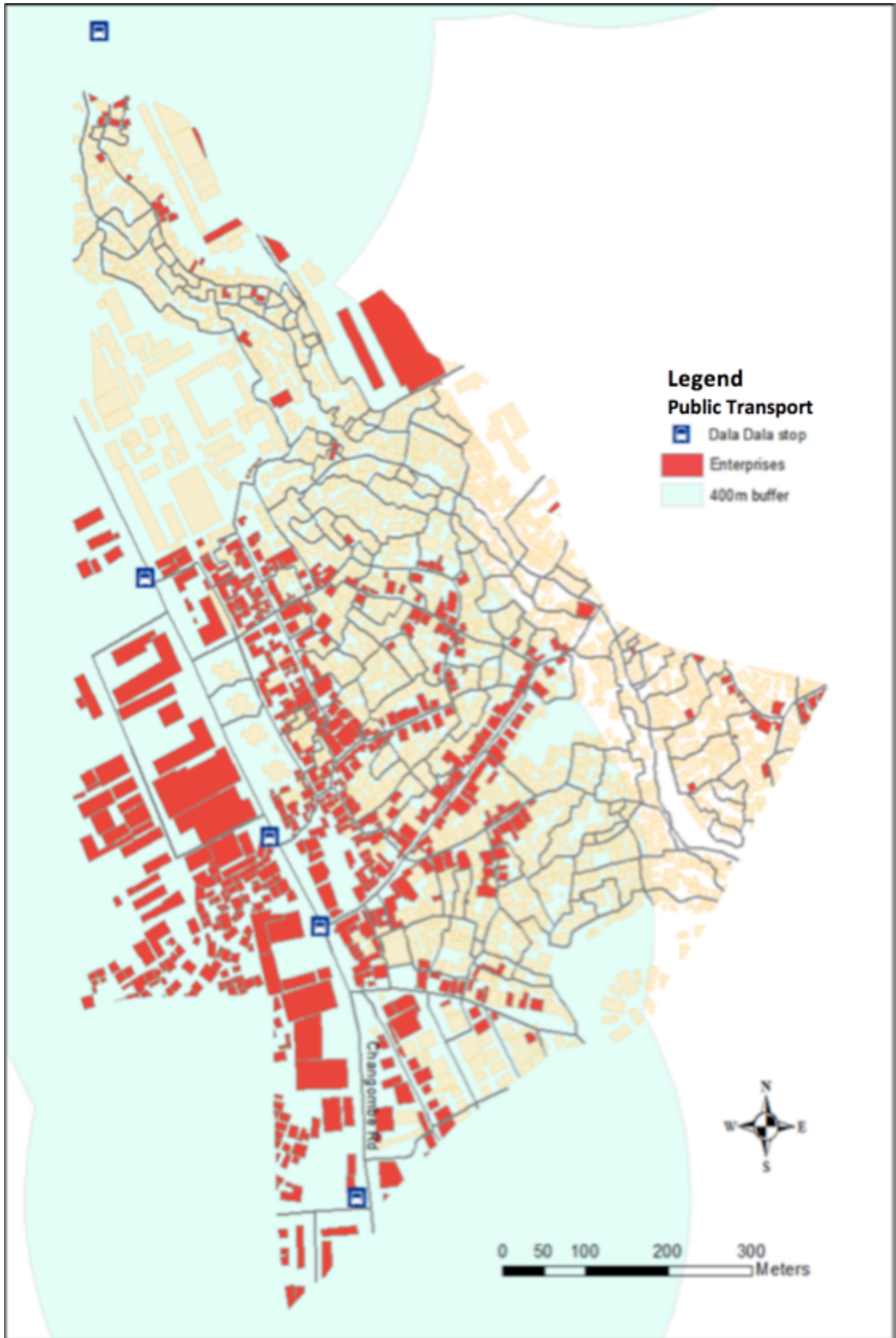
trade was not the primary focus of the research and there were no *wachinga* present to interview, the reason for the lack of street trade is unknown. One possible explanation for this could be an effect of the drainage ditches that were built as part of the upgrading programme, as was the case in Hanna Nassif (Lupala 1995). Figure 5.8 shows that the drainage ditches are very large and uncovered, making them difficult to cross on foot. This limits access and prevents the businesses from spilling out onto the road. On the other hand, it could simply be that the *wachinga* choose not to operate here due to the industrial specialisation of furniture. The industrial specialisation in Manzese is textiles, which are easy to carry and sell on the street, while street traders could not easily sell furniture. Another explanation could be Chang'ombe Road's status as a secondary road its main function is to give access to residential areas. Therefore, external customers would be drawn specifically for the furniture industry, while local customers would likely buy goods such as clothing or food closer to home, making the *wachinga* unnecessary. There may also have been recent enforcement against street traders when the research was being carried out. Further research is necessary to fully understand this lack of street trade in this area.

As evidenced in the photos and when compared with the maps of land use in Figure 5.2 and Figure 5.3, as well as the maps of transportation networks in Figure 5.5 and Figure 5.6, it is clear that enterprises cluster along wider, upgraded roads. Because these roads are wider than those in the surrounding area, they also provide access to public transport. Public transport is an important aspect of accessibility; therefore, it was necessary to analyse the accessibility of DART and the *dala dala* in relation to enterprises within the settlement, illustrated in Figure 5.9, Keko, and Figure 5.10, Manzese.

Public Transportation

For public transport, both the new DART system and *dala dala* (mini-buses) were taken into account. The *dala dala* are local buses that offer low-cost transportation throughout Dar es Salaam. For the analysis, the DART and *dala dala* stops were located—using satellite images and observations, as the city’s spatial data does not include them in the transportation dataset. The points were classified as: DART stations – raised platforms along the road where the rapid buses will stop, as illustrated in Figure 5.7; *dala dala* centres – areas where many *dala dala* stop as they are centrally located areas that act as connection points to travel to different areas; and *dala dala* stops, or designated places along the road that *dala dala* were observed stopping, although there are no signs or indication of any kind that would inform passengers these stops exist. Train stations were also included but it is important to note that trains are used primarily for transportation of goods on a national scale. There may be cases where people will jump onto the sides of the train cars or stow away in them in order to travel at no charge, as is often the case in India, but this was not observed during the research. However, train stations are important to note as potential places to purchase goods. There may be instances where *wachinga* or local entrepreneurs buy goods at a reduced price from train operators before they arrive at their final destination, though again this was not witnessed and is therefore speculation. The public transport points were buffered at 400 meters, or at a pedestrian scale, in order to determine ease of access to these locations for entrepreneurs and consumers. The maps are illustrated in Figure 5.9 and Figure 5.10 below.

Figure 5.9: Keko public transport



Source: University of Dar es Salaam; University of Twente, Faculty of Geo-Information Science and Earth Observation; and University of Dortmund

Figure 5.10: Manzese public transport



Source: University of Dar es Salaam; University of Twente, Faculty of Geo-Information Science and Earth Observation; and University of Dortmund

Based on the 400-meter buffer placed around each DART or *dala dala* point (indicated in blue), access to public transport is readily available for most areas of both settlements. Figure 5.9 and Figure 5.10 indicate that almost all of the enterprises found in both settlements are located within a 400-meter radius of a *dala dala* stop. Close proximity to the *dala dala* stops increases access to consumers as well as providing an important source of public transportation for the entrepreneurs. As further explored in Section 6.2.2, interviews determined that many of the entrepreneurs commute to the settlements, therefore close proximity to these stops is important for reducing transportation costs and time spent traveling to and from home. Due to the large quantity of *dala dala* stops, these settlements probably act as commuter hubs, which draw in more customers, both local and external, which would also act as a draw for business opportunity.

In Keko, enterprises clearly clustered around roads with a definite increase in residential land use outside of the 400-meter buffer, as illustrated in Figure 5.9. Home-based enterprises could exist in these areas that were not observed but those specialising in the furniture industry are clearly located within a close proximity to the *dala dala* stops. Observations determined that a large quantity of formal enterprises, such as furniture stores, cluster around the *dala dala* stops, probably to increase access to consumers, as these stores would have more resources and funding to purchase optimal spaces. It was also observed that unlicensed furniture sellers, identified as furniture showrooms were located further back in the settlement. These locales were likely chosen due to a lack of business license as well as a lack of funding to purchase optimal spaces, but locational drivers are further examined in Chapter 6. However, both informal and formal furniture stores are located in close proximity to the roads and within 400 meters of *dala dala* stops, indicating that these specialised industries choose to locate in close to proximity to these stops, possibly to increase visibility. Keko is different to Manzese, in the existence of a train station located nearby, but the station was outside of the area

researched, making it impossible to determine if the train stations affect the locational choice of businesses. East of the area surveyed there is a small locality, which is outside of the 400 meter radius for *dala dala* routes. Here a separate cluster of enterprises has emerged. Because this area is outside of the study area, it is not shown on the map, but another road leading to the Keko Medical Centre lies directly behind this cluster. There are many more enterprises along this road but the locations of *dala dala* stops were not recorded as it is beyond the detailed analysis area.

Manzese showed a similar pattern with clusters of enterprises around *dala dala* stops, as illustrated in Figure 5.10. The major difference was the existence of the DART stations as well as a *dala dala* centre. The DART stations do not appear to affect the locational choice of enterprises, as there are not noticeable clusters around these stations and enterprises are located all along Morogoro Road. Observations determined that these stations are much more important to the *wachinga* but this may change once the DART system is operational. The spatial analysis does show that there is a particularly large cluster of enterprises around the *dala dala* centre. This indicates that the theory regarding the importance of commuter hubs was correct, and commuter hubs likely play an important role in attracting economic activity, as these areas would increase access to consumers. As with Keko, there is a small cluster of enterprises outside of the 400-meter radius south of the area surveyed. Again, what is not shown in Figure 5.10 is a road to the South of the study area. This road also has a large number of enterprises but because it was outside the area for detailed analysis the *dala dala* stops are not shown.

Transport networks are clearly linked to the emergence of EAHs due to the accessibility they provide for entrepreneurs to reach goods and services and the accessibility they afford to customers. Larger, upgraded roads not only provide easier access to deliver goods to and from enterprises, but also act as a catchment for a

wider area. Customers may be local or external, passing through the areas as commuters or coming specifically because of the industrial specialisation. In addition, upgraded roads have urban drainage and therefore offer some protection against flooding. This reduces the risk to individual enterprises, which is crucial as many of these businesses are informal and lack insurance. The importance of accessibility as a locational driver is further examined in the qualitative design aspect of the research in Chapter 6; however, the spatial analysis results provide evidence to support the hypotheses in the existing literature regarding the importance of accessibility as a key locational driver in informal economic activity (Bromley and Mackie 2009; Bromley 2000; Iyenda 2005).

5.4. Spatial Patterns of EAHS

In order to determine how EAHS function and examine their operation and processes, it was necessary to examine the spatial attributes of the settlements beyond general land use categories. Following the general land use and transport analysis of Keko and Manzese, the enterprises were divided up into various business classes. These business classes were then divided into business sub-classes, indicated in Table 5.1. An examination of the spatial characteristics and potential patterns of business type and sub-classes of the industrial specialisation for each settlement will provide a better understanding of how EAHS function and the extent of the clustering within each settlement as well as potential reasons behind these clusters.

Table 5.1: Business classes and sub-classes

BUSINESS CLASS	BUSINESS SUB-CLASSES
CLOTHING STORE	WOMEN'S WOMEN'S AND MEN'S CHILDREN'S KANGAS (TRADITIONAL TANZANIAN DRESS) MEN'S USED CLOTHES SHOES BAGS ISLAMIC DRESS UNIFORMS
ELECTRONICS	APPLIANCE STORE PHONE TOP-UP
FOOD/DRINK	MAMA LISHE BAR RESTAURANT BUTCHER DRINK SHOP KIOSK FISH MARKET GROVERY MAIZE MILL
HOMEWARE	HOMEWARE
FURNITURE	FURNITURE STORE (FORMAL) SHOWROOM (INFORMAL)
GARAGE	GARAGE
GUESTHOUSE	GUESTHOUSE
OTHER	BETTING CENTRE CHARCOAL MUSIC STORE PRINTING STORE FREEZER STORAGE PHOTOGRAPHY SHOP
PERSONAL	BARBER BEAUTY SUPPLY HAIR SALON PHARMACY PHARMACY (NATURAL)
CLOTHING	COBBLER TAILOR TAILOR (USED CLOTHES)
MATERIALS	HARDWARE PAINT GLASS METAL WOOD FABRIC COBBLER SUPPLY
CONSTRUCTION RELATED	CARPENTRY WELDING PAINTING APPLIANCE REPAIR

The figures produced for this analysis are provided for clarity of Section 5.4 discussion:

Table 5.2: List of Figures

Keko		Manzese	
Fig 5.11: Map of Business Classes	35	Fig 5.15: Map of Business Classes	45
Fig 5.12: Getis-Ord High-Low Clustering Analysis Business Class	37	Fig 5.16: Getis-Ord High-Low Clustering Analysis Business Class	47
Fig 5.13: Map Furniture-Related Business Sub-classes	41	Fig 5.21: Map Clothing-Related Business Sub-classes	53
Fig 5.14: Getis-Ord High-Low Clustering Analysis Furniture-Related Business Sub-classes	44	Fig 5.22: Getis-Ord High-Low Clustering Analysis Clothing-Related Business Sub-classes	55

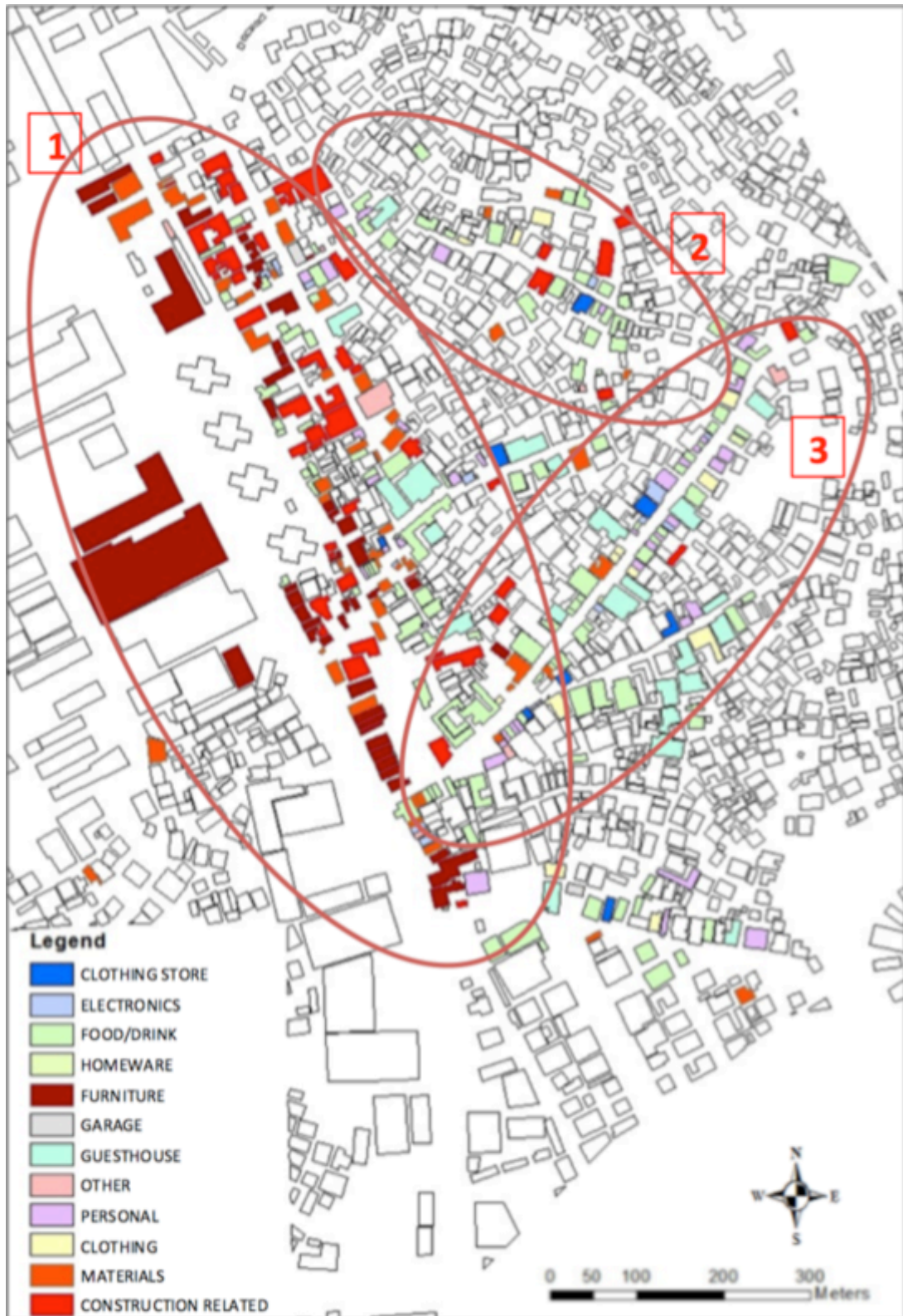
A four-stage method was used:

- 1) Maps were created of the business classes for Keko and Manzese (Figure 5.11 and Figure 5.15) The maps focus on a subset of the entire area, as discussed in Section 3.6, to provide a more accurate detailed analysis due to time and resource limits.
- 2) A high/low cluster analysis of business classes was performed to provide statistical evidence for the results using the Getis-Ord General G statistic (Figure 5.12 and Figure 5.16). The Getis-Ord General G tool measures concentrations of clustering within an area to establish where high clusters occur and which are more dispersed. A high index value indicates cluster patterns that cannot result from random chance.
- 3) Maps of business sub-classes were created based on the industrial specialisation of each settlement (Figure 5.13 and Figure 5.21). For Keko, **furniture related** sub-classes, e.g. carpenters, furniture stores, etc., were mapped out while in Manzese **clothing related sub-classes**, e.g. tailors, cobblers, fabrics, etc., were mapped.
- 4) High/low cluster analyses were also performed for these sub-classes in order to determine the statistical significance of clustering based on the industrial specialisation as well as general business types (Figure 5.14 and Figure 5.22).

Specialised sub-classes were chosen for spatial analysis rather than other business sub-classes because the focus of the research is to provide a better understanding of EAHs within informal settlements. Therefore, to meet the research objectives, it is more important to focus the spatial analysis on the business type and specific sub-classes, though future research could examine the spatial significance of other business type sub-classes within these settlements using the data and findings collected for this research.

5.4.1. Keko Business Classes

Figure 5.11: Keko Business Classes



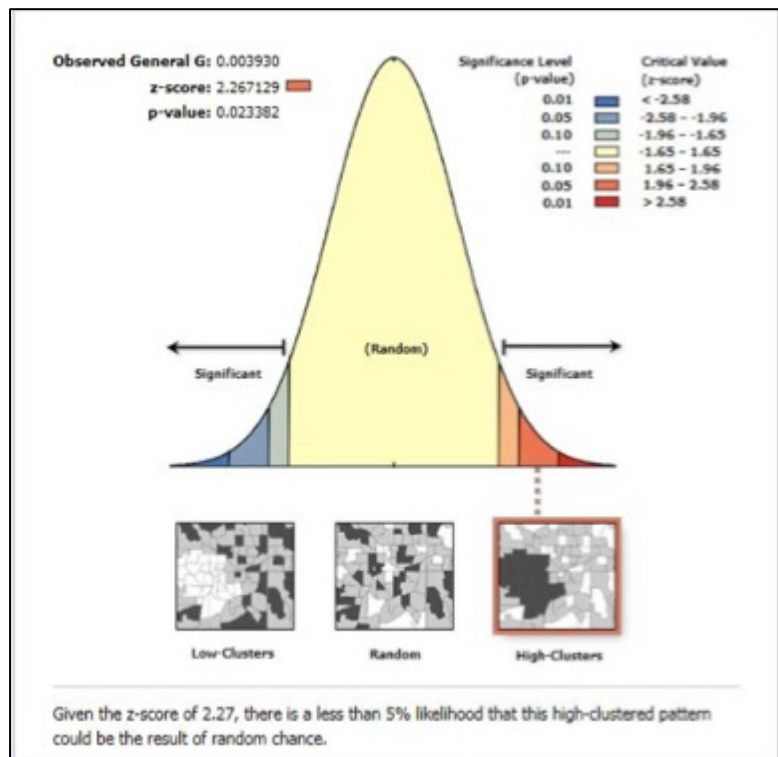
Source: University of Dar es Salaam

The map based on business class in Keko indicated some interesting findings (see Figure Keko Business Classes). As furniture is the industrial specialisation of the area, furniture-related enterprises – furniture stores, informal showrooms, suppliers of materials (e.g. hardware stores, fabric, wood), specialist sectors (e.g. carpenters), etc. – were purposely displayed in various shades of red in order to provide easy identification. Other business types such as clothing stores, electronics, clothing manufacturers, etc. were displayed in lighter colours like greens and blues in order to provide a contrast that would make pattern identification easier and provide a valuable visual representation.

The visual representation (Figure 5.11) indicates the existence of cluster patterns based on business type that would not be evident simply through observation or qualitative research. This initial conclusion of the existence of cluster patterns has been confirmed through a statistical analysis with the Getis-Ord General G high/low clustering tool. The results, shown in Figure 5.12 (see the box below the bell curve highlighted in red), found that there is less than 5% likelihood that this high-clustered pattern could be the result of random chance. The various levels of clustering are illustrated in the three

boxes below the bell curve in order to provide a visual representation of the types of clustering, or lack of clustering, that found in the analysis. The analysis found high level of clustering by business type within a relatively condensed spatial distribution, indicating that underlying

Figure 5.12: High-Low Clustering Keko Business Class



processes have played a role within the spatial distribution. These underlying processes and spatial patterns have been examined within this spatial analysis.

The results in Figure 5.11 indicate that furniture-related enterprises are primarily clustered together close to the main road, therefore the road is clearly important in the creation and sustainability of the economic agglomeration. This cluster has been marked as Circle 1 on the map. Circles 2 and 3 consist of alternative business types, such as clothing and food, and are discussed later. The previous section has provided a context for Chang'ombe Road, which this cluster is based around. Chang'ombe is a relatively large and upgraded road with several *dala dala* stops along both sides. This indicates that both personal and public transportation along this road is readily accessible.

The importance of the road network indicates that cluster patterns for furniture enterprises are not based on internal trade within the settlement, but rather suggest clientele from outside the settlement. Furniture stores need to maximise turnover by being easily visible to external customers, whether those customers have been drawn to the area specifically for the furniture industry or are just made aware of its existence when passing on the *dala dala*. The roads might also play a role in clustering patterns because furniture makers need large supplies of timber and upholstery materials, which need to be transported by vehicle. Thus, vehicle-accessible roads would be crucial for these enterprises. These areas also provide more space than plots inside the informal settlement, where density levels increase, as suggested by Sliuzas' (2004) study of informal settlements using GIS technology. It is likely that furniture makers put more capital investment in larger spaces, such as a shed that would also provide protection for tools and materials in the rainy season. These enterprises would also require more employees, as furniture making is not an enterprise that can be easily done on an 'own-account' basis. Furniture stores and showrooms would also require much larger spaces that offer protection for their goods in any season. The width and upgrading level of Chang'ombe Road seems to offer the space needed for these enterprises.

Based on the ages of many businesses (learned from the initial interviews to be averaged between 15 and 25 years) and the timing of the CIUP upgrading, it does not seem likely that the upgrading has caused this clustering, as most of the furniture stores had been there long before the upgrading took place. However, upgrading might have exacerbated the clustering by drawing in more furniture-related enterprises. By improving drainage, the likelihood of flooding decreases, lowering the risks in loss of tools or goods, and therefore income, faced by enterprises. Additional upgrading along the main road, such as to the electrical grid, would also be advantageous to carpenters who require electricity to use their tools. The extent of the upgrading within Keko was not researched in detail due to time constraints but it would be of interest for future research to consider the effects of upgrading on enterprise within informal settlements, as much research has previously focused on the effects for residents.

Based on initial interviews, the furniture-related enterprises probably clustered together as a way to reduce costs if they formed connections between each other. For example, a carpenter would save time and money by visiting a textile supplier or a hardware store that is close by. Therefore, it also makes sense that fabric, wood, or hardware supply stores would locate close to carpenters thus decreasing competition with material suppliers that are located farther away. Similarly, carpenters try to locate nearer to furniture showrooms (informal furniture dealers) and furniture stores (formal furniture dealers) in order to sell their finished products to these dealers or customers of these dealers by offering finished furniture at a lower price. By locating in close proximity, the carpenters increase the visibility of their goods for the stores and showrooms, increasing the demand and reducing competition, and also reduce the distance they needed to carry the products. Further spatial analysis on the sub-classes of furniture-related enterprises later on in this section provides more insight into the potential causes and operations of this cluster, which are further explored in Section 6.2.2.

While furniture-related enterprises were the primary focus of the research due to the industrial specialism within Keko, patterns of other business types also emerged. Two mixed-use business clusters were found along interior roads within the settlement, including enterprises such as food, clothing stores, beauty supplies, etc., marked by Circles 2 and 3 on Figure 5.11. The analysis of general land use has illustrated that residential areas mainly surround these clusters and the transport analysis has illustrated that these roads are more easily accessed by pedestrians than vehicles. In addition, *dala dala* would not be able to access these areas. This indicates that local, low-income clientele sustain these businesses, rather than an external clientele like the furniture industry.

It seems logical that survivalist businesses such as food and clothing would locate as near as possible to their potential customer base, making the locations of these clusters understandable. However, it is unexpected that guesthouses are also located so far into the settlement. It seems more likely that guesthouses would locate near a main road, as their customer base would be external and made up of individuals passing through the area who would see the guesthouse from the road. If the guesthouses were only a few rooms in someone's existing house it may explain why they are located further back; however, these guesthouses are more substantial, as they are made up of more than 10 rooms and are only used as a guesthouse. The reasoning for this may be that an informal land market exists within the settlement and that guesthouses generate less income than furniture makers, so are located on land with a lower value and away from the main road frontage. In addition, the furniture makers are probably more profitable, enabling them to afford the premiums of locating their business on the main road, pushing out other potential business. On the other hand, it could be the furniture industry has resulted in the need for guesthouses, with customers travelling long distances to purchase furniture or drivers delivering materials such as wood or fabric. According to two of the guesthouse owners (2015), they chose their locations, as the majority of their guests are transport drivers delivering goods to the area. As a result of this relationship, the guesthouses have been built as close to the furniture enterprises as possible in order to reduce competition and create connections with the enterprises.

5.4.2. Keko Furniture-Related Sub-Classes

Figure 5.13: Keko Furniture-Related Sub-Classes



Source: University of Dar es Salaam

In order to spatially analyse the cluster of furniture industry specialisation within Keko, the business sub-classes for furniture-related enterprises were also mapped out, in Figure 5.13. The clustered pattern of specialist business types, shown in Figure 5.11, does not seem to apply in the sub-classes of furniture enterprises. The furniture stores (formal) and showrooms (informal) seem to congregate around the road as predicted in Sections 5.2 and 5.3, which is probably due to the importance of visibility in attracting customers and access to transport in the movement of goods. However, there do not appear to be any cluster patterns of the sub-classes, such as carpenters or material supplies. While all the furniture-manufacturing businesses are located near to each other, there does not appear to be any pattern indicating connections or patterns as to the movement of goods and services within the larger cluster.

As mentioned previously, the furniture stores and showrooms are located as near to the road as possible, probably to increase accessibility to consumers and transport. However, initial analysis of the interviews provided an alternative reason behind these locational choices. The interviews with the formal furniture storeowners determined that these businesses appear to have survived in the area the longest, indicating that the business type is more sustainable in terms of profitability; therefore, the success of the business seems to affect the spatial patterning and its connections. The reason these businesses have survived longer may also be a result of their level of formality, as a business license may have been easier to obtain in the past and/or has afforded them protection from potential corruption or seizure of goods and closure. Their length of operation may also have afforded them more prominence with consumers.

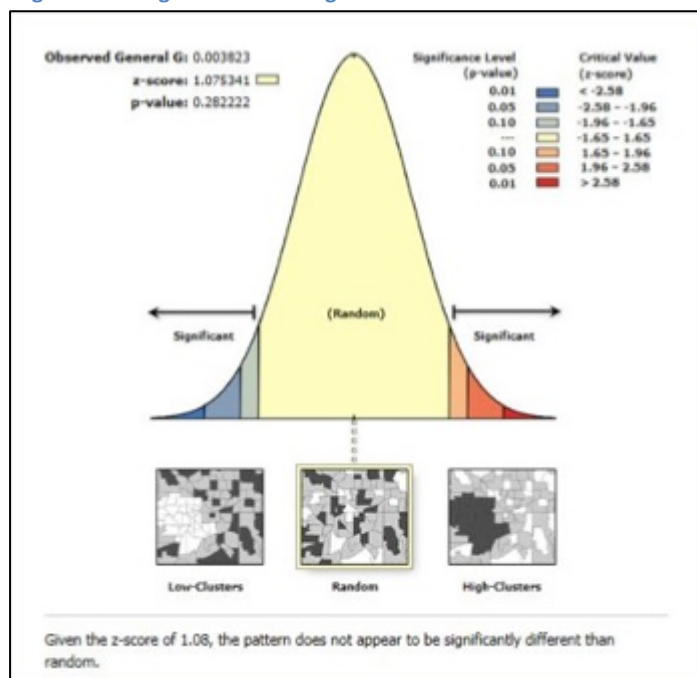
Whatever the reason these businesses have survived for so long (some 25 years or more), it seems that these businesses intentionally located along the road, choosing optimal business locations while space was available, and originally drawn to Keko, either because the early furniture-makers lived in the area or because of accessibility to the port where furniture could be purchased before it was made locally – as was confirmed by one of the well-established furniture store owners (Interviewee F 2015) – and brought back to Keko to be sold using Julius K. Nyerere Road. Over time, the success of these businesses appears to have drawn in other furniture-related and manufacturing enterprises, e.g. carpenters and material suppliers. The spatial analysis suggests that newer businesses, with less financial resources and often no formal business license,

start up either in the periphery of the settlement, where the proprietor already has use rights, if not ownership, or in cheaper premises with poorer accessibility within the settlement. Either way, Figure 5.13 illustrates those businesses, e.g. carpenters and material suppliers, while not having a specific spatial pattern, appear to start up as near to the furniture stores as possible. This theory is further assessed in Section 6.2.2, but the flexibility and ingenuity of the informal economy and micro-entrepreneurs in securing a share of the economic opportunities afforded by economic networks and value chains corresponds with the findings of Lyons, et al. (2008) in their study of African micro-entrepreneurs in international value chains. Like the African traders seizing opportunities offered through complex and differentiated trading networks in Guangzhou, the micro-entrepreneurs in Keko have found a way to seize the opportunities presented through trade networks in their local communities.

The complexity of trades needed to support the furniture industry, and the significant spin-off in terms of livelihoods from the main industry is evident in Figure 5.13. In Keko, it appears that, as one industrial specialism succeeds, others are drawn to the area. The lack of patterning discussed is likely due to the importance of proximity in this industrial specialism. Thus is created a 'near enough' situation, confirming Hays-Mitchell's (1993) hypothesis that reasonable spatial proximity in an area of high-intensity mixed land use is crucial to micro-enterprises. The high/low clustering analysis (Figure 5.14) confirmed no significant spatial pattern in terms of sub-classes.

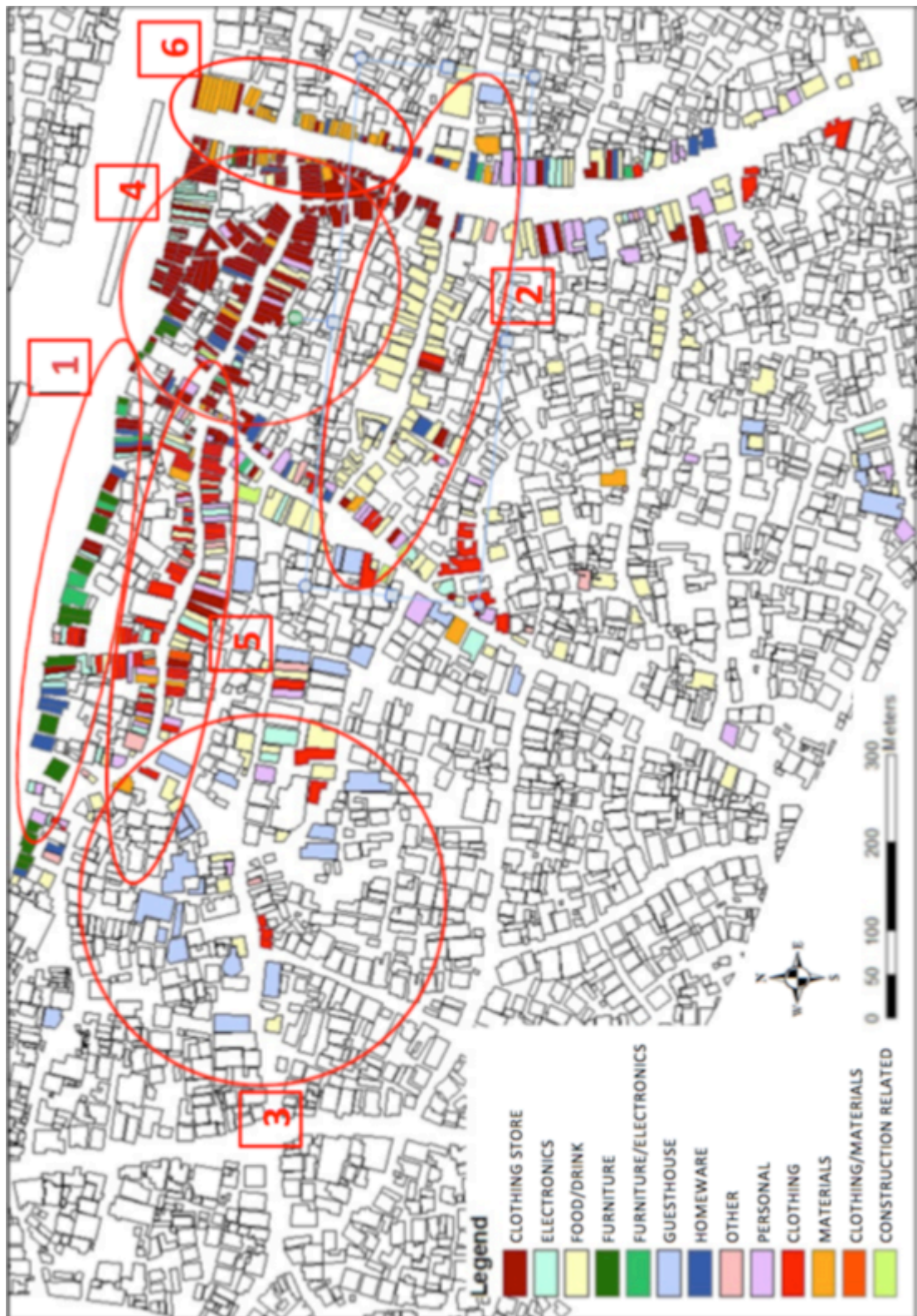
Figure 5.14 shows the clustering pattern of business sub-classes was 'random' (the box below the bell curve highlighted in yellow). This corresponds with the theory, and indicates that connections have likely been formed following the creation of the enterprise. The qualitative analysis will assess this theory in the next chapter.

Figure 5.14: High-Low Clustering Furniture Sub-classes



5.4.3. Manzese Business Classes

Figure 5.15: Manzese Business Classes

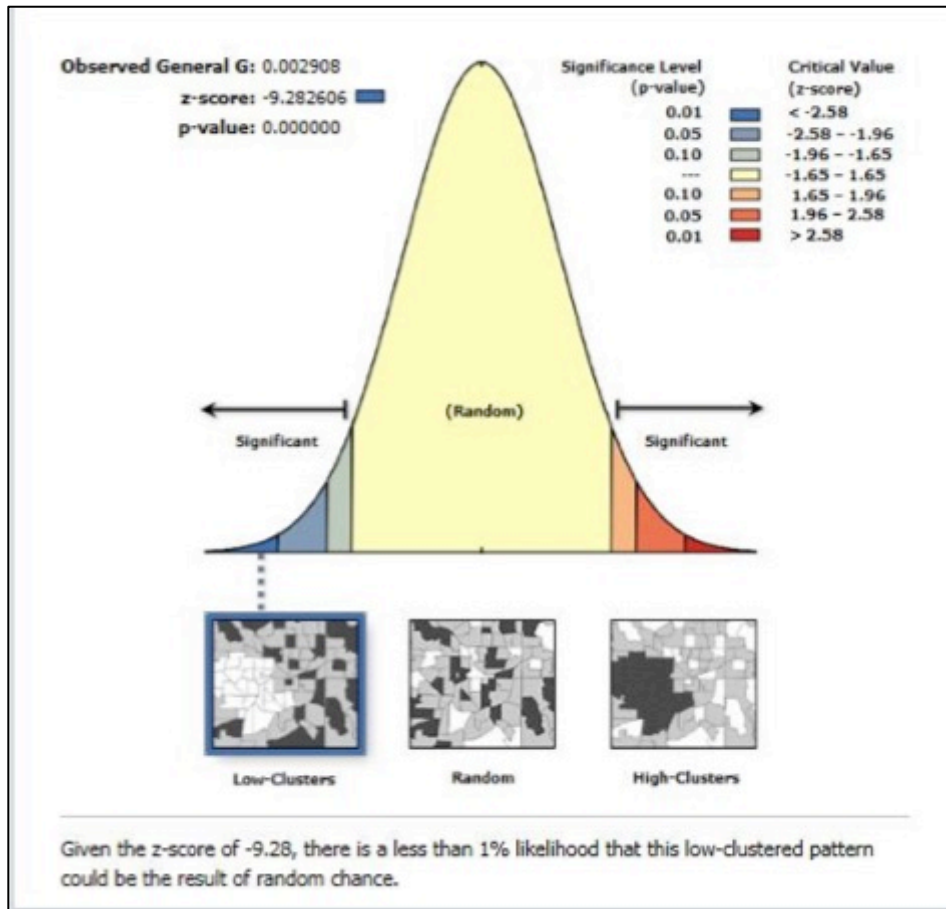


Source: University of Dar es Salaam

The spatial analysis of business classes in Manzese, illustrated in Figure 5.15, provided even more interesting results than the analysis of Keko. As the industrial specialism within Manzese chosen for this research was clothing-related enterprises, clothing stores have been displayed in dark red, while clothing-related industries such as tailors and cobblers have been displayed in bright red. Material suppliers, such as fabric supplies and cobbler materials, have been displayed in orange. These colours make identification of the specialist enterprises easier for visual analysis. However, despite the focus on clothing-related industries due to time and resource constraints, Manzese has many industrial clusters, as the spatial analysis shows. Furniture-related enterprises have been displayed in greens, food and drink enterprises such as *mama lishie* or grocers have been displayed in light yellow, and other enterprises such as guesthouses or home ware suppliers have been displayed in various shades of blue. At first glance, it is clear from the visual representation (see Figure 5.15) that Manzese shows even higher levels of cluster patterns than Keko. These patterns were noticeable through observations but not to the level the spatial analysis has indicated, providing evidence of the usefulness of GIS technology and new research methods in the examination and understanding of informal settlements.

Despite the visual evidence of the existence of cluster patterns within Manzese, the spatial pattern was confirmed through statistical analysis using the Getis-Ord General G high/low clustering tool as with Keko. The results, illustrated in Figure 5.16, determined that there is a less than 1% chance that the spatial pattern could have been a result of random chance, while Keko had a less than 5% chance. The analysis found high levels of clustering by business type as with Keko, but not within a condensed spatial distribution, identified as 'low-clusters' in the box highlighted in blue below the bell curve. In Manzese, the clusters are more extensive, or distributed across a wider area, creating a low-cluster pattern. This indicates that underlying processes play an important role in the spatial pattern of businesses, which will need to be examined further through both spatial analysis and qualitative analysis.

Figure 5.16: High-Low Clustering Manzese Business Class



In terms of industrial clusters that are not related to the clothing industry, there are three evident clusters within the area researched. The first is a cluster of furniture-related enterprises, which have been marked as Circle 1 on Figure 5.15. It is interesting that the furniture-related enterprises are clustered along Morogoro Road, much like the furniture cluster found in Keko. As discussed in the transport analysis, Morogoro Road is a wide and upgraded road, which provides good access to customers. The upgrading prevents flooding and therefore loss of goods. In addition, the businesses can spill out onto the streets when enforcement is light, allowing for more products to be displayed. It also provides easy visibility, which maximises product turnover and allows for easy movement of goods through the access to transportation. Therefore, it seems likely that that the accessibility provided by the main road as well as the importance of non-local clientele for this industry have influenced locational choice. It is unknown how old these businesses are due to the focus of the research on clothing-related enterprises in Manzese, but it would be

interesting to determine through future research if these businesses have simply followed the road, or if they have potentially seen the success of other industries in the area and saw an opportunity to meet a demand that previously did not exist. Further examination of the qualitative analysis of Keko's enterprises may provide insight into why this pattern is also seen in Manzese.

The second cluster that is unrelated to the clothing industry is a cluster of food- and drink-based enterprises further south in the community, marked as Circle 2 on Figure 5.15. Observations of the case study confirmed that the cluster of food-related enterprises located further into the community is in fact a market where locals and others passing by on the bus transit route will often stop to purchase food, as shown in Figure 5.17. Observations and the transport analysis within Manzese has determined that the road is in fact a 'footway', meaning it is inaccessible for motor vehicles, is made of dirt, and is substandard in terms of upgrading, e.g. there are no drainage ditches and is littered with potholes. The road is also very dense in terms of buildings on both sides. It appears most of the food and drink enterprises along this road are either stalls or the frontage of a residence. Based on the type of road, as well as the businesses found, it seems likely that the majority of clientele are low-

income and local. This cluster may have existed prior to the creation of the other specialist industrial clusters but it is unclear from the qualitative analysis how this market came into being as time restraints prevented thorough research into other industrial clusters.

Figure 5.17: Manzese Food Market



The final cluster unrelated to the clothing industry is a cluster of guesthouses in the western part of the settlement, marked as Circle 3 on the map. Interestingly, the guesthouses in Manzese, like Keko, are also located internally within the settlement. In addition, the cluster of guesthouses is surrounded by roads classified as 'residential', as indicated in the transport analysis in Section 5.3.2. These roads are wide enough for cars but are made of dirt and typically have drainage ditches on one side or not at all. These roads are not heavily travelled, making it unlikely that those traveling to and from Dar es Salaam using Morogoro Road would see them. As in Keko, it does not seem logical to locate in these areas rather than along a large road, where potential clientele would be able to easily see the guesthouses while travelling.

Field observations of an altercation outside of one of these guesthouses suggested an alternative reason for the location of these guesthouses. The interpreter explained the altercation was between a husband and wife when the wife had found her husband in the hotel room with what the interpreter assumed was a prostitute. The interpreter explained that these guesthouses were probably used for these purposes, though time restraints as well as potential safety concerns prevented any further investigation into the types of guests or their reasons for staying at there. However, it is important to note that this suggestion by the interpreter and was not confirmed and it may simply be the case that guesthouses are used by drivers delivering materials in or outside the settlement or by other local travellers.

The spatial patterns of the clothing-related industries in Manzese are of particular note for this research. Figure 5.15 illustrates that all of the clothing-related industries have formed separate clusters based on business type, e.g. clothing stores, material suppliers, and clothing manufacturers, and that all of the clusters are located within close proximity to each other. This reflects the spatial proximity seen in the analysis of Keko, and may have been caused by similar underlying reasons regarding the complexity of trades needed to support the industry and the supplemental growth of the industrial cluster as part of a growing EAH based on the success of preceding enterprises.

Upon first examination, there is a conspicuous cluster of clothing stores, e.g. selling shoes, bags, women's clothing, etc. (the sub-classes will be further analysed following the analysis of business type) in the northeast corner of the research area, along Morogoro Road. It has been labelled as Circle 4 in Figure 5.15. Next to this cluster to the west, along a back road is a third cluster of clothing enterprises, e.g. tailors and cobblers. This cluster has been labelled as Circle 5. Finally, east of the cluster of clothing stores along Midizini Road, is another cluster made up of material suppliers, e.g. fabric stores, cobbler supplies, etc. This cluster has been labelled as Circle 6. Looking at the map, it becomes visually evident that the entire clothing-related industry appears to be based around one road, with the industry expanding outwards from here. This indicates some kind of spatial patterning associated with the development of the area, potentially as a result of the processes within the EAH and/or as a way to add value to individual enterprise by forming economic connections – reducing costs and perhaps competition. But the question is then, what about this area has resulted in the creation of this EAH?

Figure 5.6 in Section 5.3.2 has confirmed that the road behind Morogoro Road where the cobblers and tailors are located has been classified as 'residential'; therefore, it is wide enough for cars but is made of dirt. Observations confirmed that there is a drainage ditch on the northern side of the road where the cobblers and tailors have set up, but there are none where the clothing stores have located. The entire road is technically wide enough

for small vehicles, although it is littered with potholes and has been worn away on the sides from flooding. In addition, the section of road where the cobblers and tailors are located is filled with trash from excess fabric

Figure 5.18: Residential road with cobblers and tailors



that they have thrown out (see Figure 5.18) and the clothing stores have spilled out onto the road (see Figure 5.19), making it barely passable for two people side-by-side in some areas. Based on the substandard quality of the road, even after CIUP upgrading, it does not seem likely that the road itself has attracted these enterprises. The area would not offer adequate accessibility to consumers or transport; therefore, there must be another reason these businesses have chosen to operate in this area.

Figure 5.19: Residential road with clothing stores



An examination of the transport analysis provides a potential explanation for the creation of the EAH. The third cluster related to the clothing industry is a cluster of material suppliers, identified as Circle 6 in Figure 5.15, along Midizini Road. The transport analysis has classified Midizini Road as 'secondary' between Morogoro Road and the *dala dala* centre, and 'local' south from the *dala dala* centre. Midizini Road has been upgraded; therefore it is paved and has drainage ditches on either side. Another *dala dala* stop exists near the corner of Midizini Road and Morogoro Road. Based on observations as well as Manzese's location within the city, the area appears to act as a commuter hub, providing for transport exchange where people can continue their journey between the CBD and smaller residential areas. In addition, customers travelling to and from the food market would use this road, providing passing trade. As women traditionally manage the household in Tanzania, it makes sense to situate fabric and clothing stores in an area they frequent regularly. This reasoning would also explain the presence of *wachinga* along these two roads. The *wachinga* and EAHs appear to share many common traits based on initial spatial observations.

In addition, Midizini Road provides easy access to transportation, allowing entrepreneurs to move goods such as fabrics into and out of the area. The location near Morogoro Road also provides easy accessibility to and from Kariakoo, (See Figure 5.1), or the Urafiki textile mill, located less than 2km west of this cluster along Morogoro Road. The Urafiki Company was established in 1968 with assistance from the Chinese government and specialises in *kanga* and other textiles, such as sheets, curtains, or even fabrics for clothing. A *kanga* is a traditional dress worn by women in Tanzania, as well as other parts of eastern Africa, illustrated in Figure 5.20. It is a large piece of fabric that comes in a variety of beautiful patterns and colours, and is wrapped around the waist like a sari. Traditionally, the *kanga* will also have some sort of saying written in Kiswahili that is supposed to represent how the woman wearing it is feeling on that particular day. By locating in close proximity to the textile mill, fabric suppliers and stores selling *kanga* could purchase their goods directly from the company and then sell them to locals or external customers travelling through the commuter hub. It seems that the establishment of the Urafiki textile mill resulted in the creation of this EAH, but this would need to be confirmed through analysis of the age of micro-enterprises in Manzese, as well as potential connections entrepreneurs may have formed with the company. The examination of business sub-classes relating to the clothing industry will provide a more thorough explanation of potential causes of the spatial distribution found in Manzese's EAH.

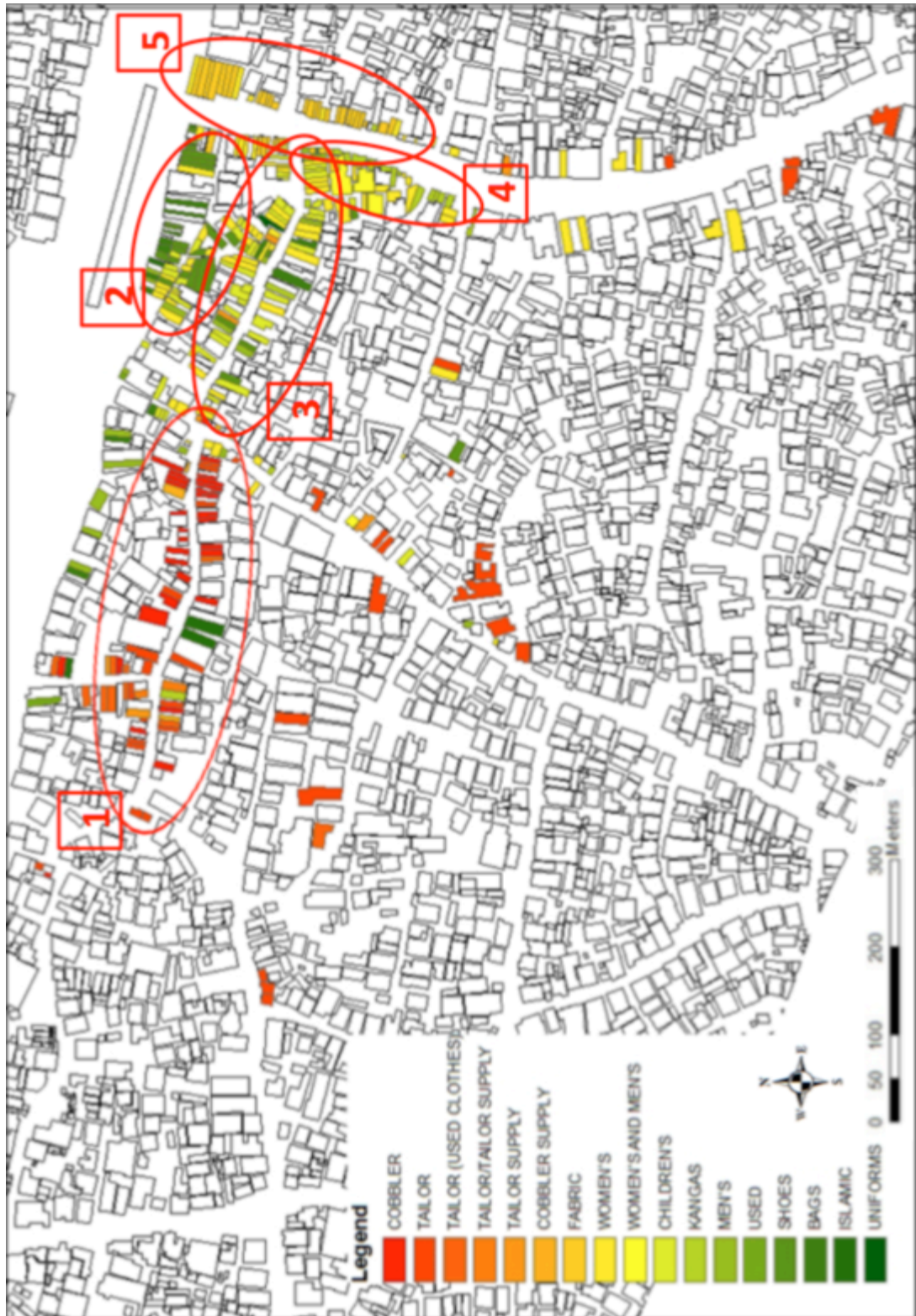
Figure 5.20: Traditional kanga dresses



Source: <http://shawnaquilina.blogspot.co.uk/2013/05/african-kanga-african-art-post-1010.html>

5.4.4. Manzese Clothing-Related Sub-Classes

Figure 5.21: Manzese Clothing-Related Sub-Classes



Source: University of Dar es Salaam

In order to provide a more detailed assessment of the spatial patterns relating to the clothing industrial specialism, a spatial analysis of the business sub-classes has been performed, illustrated in Figure 5.21. Proximity to the Urafiki textile mill may have led to the creation of this agglomeration economy, as fabric suppliers and *kanga* stores sought an economic opportunity by locating near to the company in a heavily populated area that also acts as a commuter hub, providing accessibility to consumers as well as transportation. Other clothing-related enterprises may have followed.

Initial examination of the spatial analysis found evidence of sub-clustering among the business sub-classes. Another high/low cluster analysis was performed to confirm these initial findings, illustrated in Figure 5.22. The analysis found similar results to that of the cluster analysis by business type, with less than 1% chance that the spatial distribution could be the result of random chance. The boxes below the bell curve again indicate this spatial patterning as ‘low-cluster’ (highlighted blue). In addition, the results determined a low-cluster spatial

distribution – the clusters extend out over a wider space and are not all located within a condensed area, as was the case in Keko. This indicates that underlying causes have affected the spatial distribution of these businesses. The spatial analysis of business sub-classes may provide insight into these underlying causes.

Figure 5.22: High-Low Clustering Clothing Sub-classes

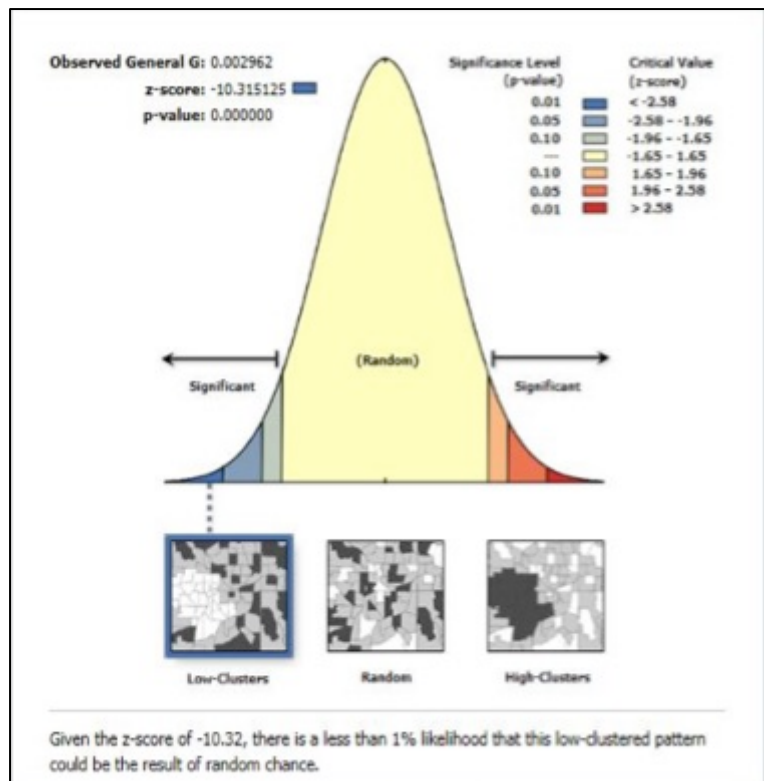


Figure 5.21 illustrates the existence of several clusters within the clothing sub-classes. The first and most evident cluster is made up of a group of cobblers and tailors along the residential road, marked on the map as Circle 1. It became evident through observations that the tailors and cobblers are probably in the low-income bracket based on their work environments (see Figure 6.4), which has been confirmed through initial interviews with these entrepreneurs. They were typically observed working in very small, cramped spaces with used materials, sharing tools with their neighbours. Given their low-income levels, it seems likely that the cobblers and tailors choose to work in close proximity to each other, despite assumptions that this might increase competition, in order to save on costs by sharing tools or even materials with one another. In addition, they may be unable to afford rent on high-value land, which would explain the small spaces and area they choose to operate in. Another potential reason they might choose to operate on low-value land and along this back road is their level of formality. It is unlikely that they would be able to afford a business license earning such low income, making it harder to find spaces to work. These areas might also be more hidden from view, affording them fewer run-ins with government officials such as tax collectors or the LGA, as discussed further in Chapter 6.

When examining the business types, illustrated in Figure 5.15, it appears that the clothing stores make up one large cluster, but upon further analysis of the business sub-classes, it becomes evident that this large cluster is actually made up of smaller sub-clusters. While this is evident from observation in Manzese, the significance of the level of clustering is not manifest until examined within a GIS environment.

The large cluster of clothing store enterprises is divided up into three sub-clusters; the first is a cluster of stores along Morogoro Road selling shoes and handbags, identified as Circle 2 in Figure 5.21. There are a few clothing stores mixed in selling men's, women's and children's clothing; however, the focus is on shoes and bags. Based on the transportation analysis, it is evident that a *dala dala* stop exists on Morogoro Road right in front of this cluster. The question is why the entrepreneurs

choose to sell these items in this location and in such close proximity to one another, which would increase competition. Interestingly, these are also items the *wachinga* often sell along the street right in front of these shops. It would appear that this would greatly increase competition but there may be underlying reasons this cluster has formed. Many people in Dar es Salaam walk, and the streets are often very dusty, so shoes often need replacing. The cobblers make and repair shoes, and both they and the tailors were observed producing handbags with leftover materials which are sold nearby. It has also been observed that shops commonly agree with *wachinga* to sell items for them on the street, increasing turnover (Lyons and Brown, 2009: 780)

The second cluster of sub-classes that makes up part of the larger clothing store agglomeration is a group of clothing stores that have been identified as Circle 3 in Figure 5.21. This cluster is made up of stores primarily selling clothing items for men, women, and children with a few specialty stores, e.g. uniforms, used clothing (clothes donated from other countries and sold at much lower prices) and Islamic clothing, interlaced between them. Based on the transportation analysis, it is evident that this cluster is just to the west of the *dala dala* centre, which would explain the locational rationale. In addition, the street these stores operate on is located just to the north of the food market, illustrated in Figure 5.15. This location thus provides access to both external and internal clientele.

The final sub-clusters may prove to be the most important in understanding the spatial patterning and potentially how the EAH was formed. The first is a group of *kanga* stores along Midizini Road, labeled as Circle 4 on the map. The second is an agglomeration of fabric suppliers on the corner of Morogoro and Midizini Roads, identified as Circle 5. As discussed in the spatial analysis of business types (Section 5.4.3), the Urafiki textile mill is located less than 2 km away from this EAH, and specialises in textiles. The company is particularly known for their *kangas*. Given the history and proximity of the Urafiki Company, it seems likely that the *kanga* shops and fabric suppliers formed formal-informal economic connections with the Urafiki Company that have grown over time and led to the growth of the sector specialism

of the EAH found today. Their optimal location along Midizini Road and proximity to the *dala dala* stops indicates that this cluster was among the first to appear while these locations were still available. The success of these enterprises likely resulted in the formation of the EAH as they were followed by other clothing-related enterprises, e.g. clothing stores, cobblers, and tailors, who saw an opportunity to earn a living through the EAH's value chain. By capitalising on the economic opportunity of offering goods and services to the clothing stores and *wachinga*, the micro-enterprises have created a 'near-enough' situation (Hays-Mitchell 1993), eventually consolidating into an EAH as entrepreneurs saw and captured these economic opportunities offered by the formation of value chains.

The map shows that there are several other clothing-related enterprises that occur outside these clusters and seem randomly placed, mainly tailors. These appear to primarily be businesses run out of someone's home, in which case the front part of the house has been converted into a place of business. There are also likely to be hidden enterprises that have not been included in the analysis, for example home-based industries of tailoring, childcare, cooked food preparation etc. Limitations in time and resources prevented a thorough examination of every possible business existing within the study area, but it would be interesting to examine the role of these enterprises within the EAH in future research.

5.5. Concluding Remarks

As the use of GIS in development research is relatively new, there were difficulties in combining data and in performing certain analyses, as there is limited existing data available for many developing cities. The combined spatial analysis on a citywide scale and small-scale of the case studies has resulted in several insights regarding the formation and operations of EAHs that would not have been possible without the use of GIS technology. It has been suggested in the literature that urbanization has been decoupled from economic growth in the case of sub-Saharan Africa, resulting in widespread prevalence of the informal economy (Fox 2012; Turok and McGranahan

2013). The 'over-urbanisation' (Fox 2012) seen in sub-Saharan African cities like Dar es Salaam, has resulted in self-generated urban development, or anarchic urbanisation. The analysis here has provided evidence that there are very clear urban development processes being driven by economic and locational drivers.

Locational analysis of the case studies on a city-wide scale has determined that existing literature findings are largely correct regarding the importance of accessibility and centrality as locational drivers of informal economic activity. The rationale behind locational choice is linked to accessibility of consumers and resources, though in some cases, e.g. guesthouses, it was not possible to adequately explain locational choice based on their spatial pattern. The analysis determined that both of the case studies, in Keko and Manzese, are located within a reasonable distance of the city centre and Kariakoo. In addition, both case studies are located either on or very close to main roadways that lead directly to the city centre. These locations provide easy access to goods and services and their centrality results in heavy traffic flows around both EAHs – providing them with a large consumer base. Qualitative analysis in Chapter 6 provides more insight into the locational rationale but initial spatial analysis has found that the road network and commuter hubs, as well as accessibility to Kariakoo or other sources of products, e.g. the Urafiki textile mill, appear to play an important role in the creation of EAHs.

Location may also have been affected by outside or historical factors. Keko is closer to Kariakoo and the port, where imported furniture could have been purchased and easily transported to the stores before local furniture manufacturing began. However, the residential areas surrounding Keko, while substantial, are not as extensive as those found around Manzese, which may be why there is a clear focus on furniture, whereas Manzese and the areas around it offer many industrial specialisms. Thus the original locational advantages allowed the specialised manufacturing sectors to expand into the agglomeration economies seen today. It seems likely that the clothing industry in particular would have started this way, as Kariakoo is much further from Manzese than Keko, and the proximity of the Urafiki textile mill provided a convenient source of products nearby. However, while the

spatial analysis can provide insights and suggestions on the locational rationale for EAH formation, the qualitative analysis provides in Chapter 6 further evidence to support the spatial analysis.

Detailed analysis of the case studies on a local scale resulted in remarkable findings in terms of the clustering of land uses. It was thought that if industries were largely home-based they would be distributed throughout the settlement, but it is clear from the analysis that enterprises tend to locate along better quality roads, driven by accessibility. Although some home-based enterprises may have been missed in the fieldwork these are likely to be small, this clustering along roadways seems to have been intensified by road improvement and upgrading schemes, although the information obtained did not reveal the extent to which this consolidation took place after the upgrading. The clustering along roadways provides further indication that accessibility plays an important role in locational rationale. The roadways provide access to transport, allowing the enterprises to move goods easily using vehicular transportation, which is particularly important in the movement of large items such as timber and furniture. The roadways also provide access to customers, by locating along a major roadway like Morogoro Road, the public transport routes, and the increased pedestrian traffic flow of commuter hubs.

The spatial analysis of the case studies found interesting results in terms of clustering by business type and business sub-classes as well. Keko illustrated clusters of business type but not business sub-classes, indicating that proximity plays an important role in the sustainability of the furniture industry; however, while a complexity of trades is needed to support the industry, there is no need to form sub-clusters, as this may increase competition for entrepreneurs. In Manzese this was not the case. Clusters were visible not only on a business class level but also in business sub-classes. In addition, in Manzese there appeared to be clear spatial links within the economic networks and value chains, as each of the specialist sub-clusters were all located along or near one road. This may indicate that agglomerations add value to individual enterprise within the clothing industry by allowing businesses to form

connections between each other, potentially saving costs and increasing income by sharing tools and customers, or locating near suppliers and potential stores. It may also be the case that proximity resulted in the formation of economic connections as a way for entrepreneurs to protect themselves given that many operate informally. The connections would provide a form of security in case of closure or other monetary concerns. In any case, these connections seem to be an important foundation in the sustainability of the EAH, as entrepreneurs may purchase goods or services from other entrepreneurs they know and build trust through the linkages they have created. Therefore, it seems likely that the industrial specialism itself, as well as the economic networks and value chains associated with it, also plays a role in the formation and operations of the EAH.

Based on the initial spatial analysis, the EAHs in Keko and Manzese seem to have similar underlying causes behind their formation. Certain economic demands or supply opportunities attracted specific enterprises, e.g. fabric suppliers or *kanga* stores in Manzese drawn by the proximity of the Urafiki textile mill, or formal furniture stores in Keko drawn by the accessibility to the port or demand for furniture in that area. The success of these enterprises attracted similar businesses associated with that industry. The industrial specialism continued to expand as entrepreneurs saw economic opportunity to become part of a larger value chain and meet a demand that had not been previously available. The complexity of enterprises and the linkages they have created as part of the formation of EAHs seem to affect their spatial distribution through the creation of clusters. These findings are further analysed in Chapter 6 to provide a more complete understanding of the EAH agglomeration processes.

The findings are significant both for policy and upgrading approaches. The provision of low-income housing areas without centrality, e.g. on the urban periphery, means that it is likely to be difficult for such a vibrant economic environment to emerge, limiting people's livelihood choices. Existing literature has already found that the displacement of vendors from central locations to peripheral locations has a negative

outcome on their economic success (Bromley 1998; Bromley and Mackie 2009; Donovan 2008; Mackie, Bromley and Brown 2014). In addition, upgrading of low-income settlements, particularly road improvement, creates new commercial potential, which could be recognised in cross-sectoral integration approaches. By attracting enterprises to these areas, the overall value of the area will also increase, resulting in more economic growth and opportunity for those living within the settlements. Therefore, it would be more advantageous for the economic growth of the city to upgrade the centrally located urban settlements such as Keko and Manzese prior to the peripheral settlements. However, initial interviews held with government officials found the opposite to be true in Dar es Salaam, as peripheral settlements are easier to upgrade due to the existing city infrastructure. This is examined further in Section 6.5, which discusses the policy drivers influencing EAH formation. However, what is largely unrecognised in urban policy is that the widespread clearance and redevelopment of informal settlements may well disrupt the complex livelihood networks and economic agglomerations of the sort found in Dar es Salaam.

The spatial analysis has found that small-scale enterprise shapes the urban area and acts as a driver of spatial development. The spatial analysis found unexpected evidence of strong clustering, rather than scattered business use, as well as indications of consideration behind locational choice as these clusters are located in accessible commuter hubs. These findings suggest that the informal economy does not simply 'absorb victims' of globalisation (Yuzon 2005) as some of the literature suggests, nor is it a case of random, or disorganised development in any available space. Chapter 6 will continue this examination and provide the qualitative analysis to deepen the understanding of EAHs and the theories that could not be explained simply through spatial analysis.

Chapter 6: Economic and Social Processes of EAH Development

6.1. Introduction

This chapter analyses the economic and social processes that underlie EAH formation, to providing a more complete understanding of the individuals and enterprises that contribute to the EAHs. This chapter thus deepens the understanding of EAHs by examining the business agglomeration processes, socio-cultural dimensions of the EAHs, wider economic links and value chains, and policy context. The qualitative data reveals the subtle and nuanced features that are vital to the functioning of the agglomeration and elements of the informal economy, which could not be uncovered using spatial analysis alone.

A key objective of the research as outlined in Research Objective 2b was: to deepen the understanding of EAHs through examining EAH agglomeration processes, the socio-cultural dimensions of the EAH, the wider economic linkages and value chains of the EAHs, and policy drivers of their formation. The literature review and spatial analysis have provided insight into the drivers of EAHs and how they function, but while providing important theoretical and visual representations and insight into the drivers and operations of EAHs, can only provide observational understanding of EAHs. Thus, the qualitative analysis based on interviews with business operators and other key informants was used both to confirm the validity of the spatial analysis, but also to explore the motivations of individual workers and entrepreneurs, the socio-cultural dimensions of their work, and the wider economic linkages and value chains of the furniture and textile activity clusters in Keko and Manzese.

The data in Chapter 6 is drawn from semi-structured interviews with local government authorities, ministry and city council officials, as well as local entrepreneurs. During the fieldwork, 33 interviews were performed with small business entrepreneurs in Keko and 44 in Manzese, both selectively and opportunistically sampled based on different types of enterprise in order to provide as much detail about enterprises operating within the EAHs as possible. The sampling ensured that at least two or three interviews were performed with each type of key enterprise within the hubs, e.g. carpenters and furniture stores in Keko, and tailors and clothing retailers in Manzese. Other enterprises, e.g. *mama lishe* and home ware

shops, were also interviewed in order to gain an understanding of the economic processes of the agglomeration. By performing many interviews with different types of enterprise relating to the sector specialism, the interviews provide an understanding of the formation and operations of the EAH while uncovering themes based on the type of enterprise.

The entrepreneurs were asked open-ended questions to provide in depth feedback and allow for personalised responses and opinions. The responses were grouped into themes and analysed qualitatively, but some of the questions were also coded to enrich the analysis as there were clear patterns emerging in the answers on themes relating to drivers of informality, enterprise, and location. These themes were derived from analysis of the interviews, as there were commonalities among the responses of entrepreneurs. The coded results were then analysed using SPSS. In addition, seven follow-up interviews were carried out with previously-surveyed entrepreneurs who had particularly relevant stories to tell (Interviewees A-G), as discussed in Section 3.5.2. These interviews were relevant to the direction of the analysis because they raised points made by many entrepreneurs within the EAHs and identify key themes or aspects that are not sufficiently explained through analysing economic and business characteristics.

The chapter is divided into five sections. Section 6.2 examines the economic and locational drivers of EAHs based on the analysis of the interviews to understand the processes behind the formation and agglomeration of the EAHs. Section 6.3 tells the stories of the seven in-depth interviewees in order to highlight broader themes of EAHs, particularly relating to socio-cultural dimensions of the EAHs in order to understand the importance of social capital and the solidarity economy that makes up an EAH. Section 6.4 examines the wider economic linkages and value chains of EAHs, examining the importance of these networks and value chains and how they act as underlying drivers of spatial patterning and urban development processes. Section 6.5 examines the policy drivers of EAHs and how policy and challenges faced by enterprises affect the formation and operations of the agglomeration. Finally the last section discusses the findings and conclusions of the qualitative analysis.

6.2. Economic and Locational Drivers that Create an EAH – Processes of an Agglomeration

6.2.1. Importance of Business Choice

The interviews sought to determine the occupational and locational drivers for entrepreneurs in selecting their business sector in order to deepen the understanding of EAHs and their agglomeration processes. The semi-structured interviews were analysed thematically, coded where appropriate and augmented with information from the in-depth interview

A key objective in the interviews was to determine why entrepreneurs chose their occupation in order to determine underlying information such as the impact of clustering or advantages of specialisation, as discussed in Section 3.5.2. The responses were analysed to determine any common themes. Answers were open-ended but included a number of similar responses, which were grouped together, as indicated in Table 6.1. The majority of respondents in Keko indicated earning income as the primary reason for their enterprise (41.4%), while in Manzese the majority indicated lack of other employment (21.3%), though this was followed by earning income (16.3%). Lack of education was also cited and was higher in Keko (17.2%) than in Manzese (7.5%). These responses confirm more traditional drivers of informality as a form of survival outside of the formal sector (ILO 1972; Tokman 1978), indicating that livelihoods are commonly chosen to provide food and shelter rather than out of enjoyment or the advantages provided by the informal sector as suggested by the structuralist or pluralist theories. Significantly, in Manzese where education levels were higher than in Keko, 12.5% of interviewees also said they enjoyed doing the work and 13.8% said they liked being independent (Table 6.1).

Table 6.1: Reasons behind the creation of an enterprise

REASONING	EXPLANATION	KEKO	MANZESE
Earning Income	A way to earn money	41.4%	16.3%
Experience	Received training or worked in profession previously	12.1%	15%
No Education	Interviewee thought a lack of education prevented them from finding other work	17.2%	7.5%
Enjoys	Enjoy doing the work	6.9%	12.5%
Self-Employment	Entrepreneurs prefer to be independent and work for themselves	1.7%	13.8%
Low Operating Costs	Do not require much start-up funding for products or workspace (common among the <i>wachinga</i>)	0%	2.5%
Social Connections	Knew someone in the area or profession who helped them start their business	1.7%	3.8%
Lack of Other Employment	Have looked for other jobs, potentially in the formal sector, but could not find any	15.5%	21.3%
No Competition	Little to no competition in the particular profession in that area	3.4%	6.3%
Religious Reasons	Those who chose to sell religious items (Islamic clothing stores) because of their strong religious beliefs	0%	1.3%

It is interesting that, in response to an open-ended question, so many of those interviewed specifically state ‘lack of other employment’ and ‘no education’ as reasons they chose their occupation, as it seems unlikely given the context of the city and the size of the IE that so many respondents would have looked for employment within the formal sector. It was noted in Chapter 3 in the discussion on research limitations that a number of entrepreneurs in Manzese did not want to be involved in the research because they had been interviewed before (perhaps because Manzese is relatively accessible to the University of Dar es Salaam) but nothing had changed within the community. It may be that the respondents had experienced this type of research before and thought their answers would lead to change. While it is impossible to know what influenced these responses, they do highlight the extensive level of poverty in the city and the inability of the government to meet the needs of an expanding population, as well as potential drivers for those choosing to operate within the EAHs.

Given the seeming reliance on the IE for survival, the interviews found an unexpected result in that a large number of respondents in both case studies said that they enjoyed their work, had prior experience (were trained) in that particular skill, and or preferred to be self-employed rather than working for somebody else. This was particularly evident in Manzese, but also found amongst some interviewees in Keko. For example, Interviewee F, a carpenter in Keko, explained that he worked as a carpenter until he was able to save enough money to start his own business. His reasoning was, “it is better to work for myself – I make enough money to support my family and do not have to take orders anymore” (Interviewee F).

Interviewee G, an assistant at a *kanga* shop in Manzese, expressed similar views, wishing to be self-employed but lacked the means to do so. This desire for independence appears to be strongly engrained within the business culture of Dar es Salaam and might explain the number of informal enterprises, as it may be easier to be independent outside the formal sector. This flexibility of operating informally suggests an argument against de Soto’s legalist perspective of the IE as a response to political barriers (de Soto 1989) or the traditional theories of informal employment as a necessity for survival (ILO 1972, Tokman 1978). Enjoyment of one’s work and the independence provided through self-employment is more in line with the pluralist or structuralist theories that many choose to operate informally, in order to regain the control and individuality in one’s livelihood that is lost in the formal sector.

6.2.2. Locational Choice and Clustering

Locational Choice within the City

A specific focus of the research was to determine the potential drivers and operations of these economies and examine the agglomeration processes that initiate and sustain them. This leads to the question of what draws business entrepreneurs to these particular locations and why they form EAHs. The literature review examined multiple theories regarding spatial characteristics within the IE but a number of references agreed that centrality and accessibility are crucial in reducing

costs and increasing income (Bromley and Mackie 2009, Brown et al 2010, Walsh and Maneepong 2012, Bromley 2000). To understand locational choice, interviewees were asked why they chose to operate in Keko or Manzese, indicated in Table 6.2.

Table 6.2: Drivers of location on a citywide scale

REASONING	KEKO	MANZESE
From Area	15.2%	11.4%
Specialised Centre for Sector	69.7%	70.5%
Relocated	3%	4.5%
Lack of Competition – Specialism	0%	6.8%
Transport Network	6.1%	0%
Unknown	6.1%	6.8%

The analysis found interesting results, and seemed to confirm Bromley’s (2000) hypothesis that high concentrations of operators become well known and attract other operators. As Table 6.2 indicates that 69.7% of respondents in Keko suggested that they chose to operate in Keko because it is well known throughout the area for furniture-related enterprise, and 70.5% of respondents in Manzese chose Manzese because it is well known for clothing-related enterprise. This would appear to confirm the hypothesis from the spatial analysis – that certain key businesses such as furniture stores or *kanga* stores may have appeared in the area first, drawn by proximity or accessibility to resources and were followed by similar enterprises seizing opportunities to become part of a larger value chain. As these areas become better known for a sector specialism, e.g. furniture manufacture or clothing, other enterprises and related trades are attracted to the area as suggested by Bromley (2000). The clustering of specialised enterprises would attract more customers to the area, adding value to individual enterprise. This clustering will be examined in greater detail in the sections below.

The Importance of Commuter Hubs

An unexpected finding from the interviews was the number of entrepreneurs who commute to the settlement each day for work. It had been anticipated that many of the workers would have set up businesses because they lived in the area. As illustrated in Table 6.3, in Keko, 58.8% of the entrepreneurs commute from other

parts of the city, and in Manzese, 48.3% commute. This confirms the hypothesis discussed in the spatial analysis (Section 5.3.2.) that commuter hubs, or key transport interchanges, offer entrepreneurs and customers economic opportunity, and are linked to the formation of EAHs. Commuter hubs offer accessibility to transportation networks, allowing easy movement of goods as well as access to resources and customers. This has not been previously examined as an attribute of economic activities within informal settlements and is an important finding for the understanding of EAHs.

Table 6.3: Percentage of entrepreneurs who commute

	KEKO	MANZESE
Commute	58.8%	48.3%
From Area	41.2%	51.7%

i. Renting within commuter hubs

Existing literature frequently examines home-based enterprises in informal settlements (Carr et al 2000; Ezeadichie 2012) and it is often assumed that the resident who owns or rents the property has started the business. While this is the case, particularly among women who can take care of the house while earning money on the side, the research found that in a majority of the businesses interviewed, enterprises are run in rented spaces – often a front room within a residence or separate space – rented by the resident. The resident might not even own the property and rents out the space to make extra income.

As Table 6.4 shows, the majority of entrepreneurs of those interviewed were working in enterprises where the premises were rented. In Keko, 69.7% of the enterprises rent space, while in Manzese 79.5% rent their operating space. Even some of the *wachinga* indicated that they have arrangements with adjoining businesses, whereby they pay a shop owner to operate on the street in front of their stores; however, the majority of *wachinga* stated that they neither rent nor own the property as indicated in the table. It may be the case that in Keko, many residents realise the importance

of the furniture industry in the area and decide to start their own business, as they already own the property. This was the case for Interviewee A, part of a wood selling collective, who explained that she and other widows or women who needed income started their business because they lived in Keko and realised they could make a living by selling wood to furniture-making enterprises in the area. They started out in one of the women's home, although they eventually earned enough to rent a larger space. A carpenter (2015) explained that he operated out of his parents' house in a communal courtyard because he saw that he could make a decent wage through the furniture industry after growing up in Keko. In both cases, the businesses originated in their homes to save the costs of renting elsewhere.

Table 6.4: Percentage of entrepreneurs who rent / own property

	KEKO	MANZESE
Rent Space	69.7%	79.5%
Own Space	30.3%	2.3%
Neither (<i>Wachinga</i>)	N/A	18.2%

In Manzese, it may be the case that property is more difficult to obtain, as it is such a well-known area, and as discussed with the City Council, it is 'prime land with a great deal of gentrification occurring' (MG1 2015). Entrepreneurs may have no choice but to rent property in order to take advantage of the opportunities offered by the clothing industry in the area. What is interesting in Manzese is the discrepancy between the number of commuters (about 50% of respondents – Table 6.3) and the number of entrepreneurs that rent space to operate their business (almost 80% – Table 6.4). This would indicate that the entrepreneurs do in fact often live in the area, but rent locations within the economic agglomeration, rather than saving costs by operating out of their homes as seen in Keko. The profits gained by operating within the cluster of clothing-based enterprises must outweigh the costs saved. This indicates the importance of renting within EAHs, as people are not simply operating a business out of their homes in order to produce income as a survival response. This knowledge creates a new concept of EAHs as a complex but thriving economy and the desire to rent a space within the agglomeration contributes to the processes of the EAH.

Three patterns emerge from the findings:

- a) people who commute to an area to join an established EAH;
- b) people who lived in the area and started a business because of proximity to the EAH and worked from home, and
- c) people who started at home but whose business had grown so moved out to rent property nearby.

Based on the analysis of all interview responses from Table 6.2, almost 70% of interviewees in both Keko and Manzeze chose the area because of the sector specialism. Table 6.3 indicates that about 41.2% of all respondents in Keko and around 51.7% in Manzeze were from the corresponding areas, which would indicate that many respondents might choose the business based on their proximity to the EAH. However, Table 6.3 indicates that almost 50% of respondents in both Keko and Manzeze commute into the area for work. Therefore, it was necessary to calculating the percentage of renters who either commute or do not commute, as illustrated in Table 6.5, to determine if b) or c) is more common. The research determined that in Keko, 38.5% of respondents rent a space and are from the area, indicated that a) is the most common outcome. In Manzeze, however, 55% of the business owners renting their space are also from the area, confirming that c) is the most common, with many people who lived in the area starting a business within their home but whose business had grown so they moved out to rent a property nearby. All of these calculations combined indicate that a) and c) are more common outcomes than b).

Table 6.5: Percentage of renters who commute / do not commute by settlements

	KEKO	MANZESE
Rent and commute	61.5%	45%
Rent and do not commute	38.5%	55%

This analysis adds to the literature regarding informal economic activity, as many debates have already proven that households are often used for income generation (Gough and Kellett 2001; Lall et al 2006; Mahmud 2003; Sinai 1998). The research suggests that a characteristic of EAHs is when it moves beyond a cluster of home-based enterprise to draw new enterprises or foster expanding indigenous enterprise. Entrepreneurs do not simply operate out of their homes in these areas in order to

earn a survival income. Therefore, the research adds to these debates by arguing that the home-based businesses are an important starting point in the process of creating of a large agglomeration that is substantial enough to allow enterprises to expand and rent alternative spaces. They have created their own agglomeration economy with many complex networks and value chains that extend outside of the settlement and likely include formal-informal as well as global connections.

Locational Choice Within the Settlement

The spatial analysis found that within the settlements, enterprises were not scattered as may have been predicted within a low-income area, but that there was strong clustering of enterprises around the road network. This clustering indicates that entrepreneurs prefer areas near markets or heavily trafficked roads as customers congregate around these areas rather than moving further into the settlement. To provide qualitative evidence of the drivers of locational choice within a settlement, interviewees were asked why they chose the space they currently operate in. The results were categorised and are illustrated in Table 6.6 and indicate interesting findings. Again, these were open questions, but responses were comparable enough to be placed into a relatively small number of categories.

Table 6.6: Locational drivers of enterprise on a local scale

REASONING	KEKO	MANZESE
Access	22.6%	6%
Economic Connections	11.3%	0%
Customers	41.5%	43.4%
Availability	24.5%	22.9%
Near Home	0%	6%
Near Market	0%	18.1%
Low Cost	0%	2.4%
Other	0%	1.2%

In both Keko and Manzese, the majority of enterprises selected their location based on access to customers, in which case they are often located near to a road, market, or *dala dala* (bus) stop where customers are readily available. This is a logical choice for a furniture store or clothing store, where they are selling a final product to

customers, rather than providing a service to another enterprise. The second most common reason behind locational choice was availability of space. In this case, entrepreneurs, such as Interviewees D and E, (two cobblers who co-own a business in Manzese) chose their location simply out of need because they could not find a better space or, in the case of these Interviewees, could not afford a better space. This indicates that many entrepreneurs are willing to take any space within a particular area, as they know they will still have customers as a result of proximity to a well-known sector agglomeration. This response was more common in Keko, though only slightly, and may be connected to the larger proportion of entrepreneurs working at home.

The findings determined differences between the locational drivers in Keko and Manzese, evident in Table 6.6. In Keko, access and economic connections were the only other drivers of locational choice identified within the settlement. For the purposes of the research, 'access' refers to the access to the transportation network, while 'economic connections' refers to proximity to similar enterprises with whom they have an economically advantageous arrangement, whether that is to provide goods or services, or simply to share tools and profits. In Keko, access to transportation may be more important than in Manzese as many entrepreneurs have to move large goods such as couches, wood, or other furniture and related materials. According to Interviewee C, many businesses compete for locations along the main road as it provides accessibility to transport and makes the movement of goods and furniture much easier. As a result, formal enterprises also compete for these locations and informal enterprises are often either bought out or forcibly removed to make way for them (Interviewee C, 2015).

The complexity of trades needed to support the furniture industry in Keko appears to be another driver of locational choice, though it did not seem to be as important as access to resources or customers. A painter in Keko gave 'economic connections' as a reason for locational choice because by locating in close proximity to other carpenters rather than the roadways, he actually earned a higher income because

the carpenters did not have to travel as far for a service. The painter (2015) explained that they simply 'carried their chairs and other products over and he would paint them'. In addition, he had easy access to supplies such as paint and brushes, as there were multiple suppliers along the same road further inside the settlement. Therefore, it is likely that accessibility is a more important attribute of business location in Keko than Manzese, as the goods are heavier and more difficult to move.

In Manzese, 18.1% of the businesses said they locate based on proximity to the local market, which was a surprisingly low percentage given the spatial analysis showed strong clustering of enterprises along the road networks around the market, though there were scattered businesses further within the settlement. However, this would seem to support the theories in the spatial analysis (Section 5.4.3) that entrepreneurs selling clothes may choose to operate close to the market in order to increase accessibility to their primary customers – women. This theory was confirmed by a *machinga* in Manzese (2015) selling clothing and jewellery, who stated that he wanted to be as close to the market as possible because 'women going to the market' shop more than men, so he chose to sell these items to increase his income. Interviewee B also confirmed that his primary customers consisted of people traveling to the local market.

Other reasons given in Manzese for locational rationale were access to transport and nearness to one's home. The importance of access to transportation networks may not be for the same reason in Manzese as it is in Keko. None of the interviewees discussed the importance of transport for goods as they did in Keko, probably because clothing and related supplies and materials are not as cumbersome as furniture and furniture-making supplies. While the entrepreneurs in Manzese do travel to Kariakoo and Ubungo (Interviewee B, D, E, and G) to collect materials and resources, e.g. fabric, used clothes, shoes, etc., the supplies are not difficult to move in and out of shops. Therefore, it is more likely that access to public transport is important to increase access to customers. Interviewees B and G both cited the *dala dala* stops as important in their locational choice because many of their customers

are those using the public transport. This supports the finding that commuter hubs and transport interchanges are an important aspect in the formation and sustaining of an EAH.

Thus it appears that various reasons related to supply and demand provide the rationale behind locational choice, resulting in similarities found throughout the most relevant literature such as centrality and accessibility (Bromley 2000; Bromley and Mackie 2009; Brown et al 2010; Walsh and Maneepong 2012). While the results of the spatial analysis suggest that accessibility and centrality seem to play a role in agglomeration processes of EAHs, the qualitative findings indicate that for individual entrepreneurs, these are not necessarily the key drivers in location. In-depth qualitative research reveals more about the factors of agglomeration and their subtle functionings than spatial analysis alone.

Based on the interview findings within these EAHs, new businesses are attracted by the existing concentrations of enterprises and the specialism of the area. In addition, being close to home seems to be important for many entrepreneurs, though the findings did not confirm that home-based enterprises are the primary economic activity in low-income areas. Many interviewees, such as Interviewees A and E, lived near the area but still rented out spaces closer to the economic cluster, again confirming the findings that people may have started at home but then moved out to rent a property nearby. There is an almost circular nature to the processes of the agglomeration in that many local entrepreneurs may start a business in a particular industry because they live near an EAH – though why they moved to the area might be unrelated to the EAH – but then add to the agglomeration of the EAH. It has been demonstrated elsewhere that there is a tendency for street traders and other IE operators to cluster in sectors that they observe to be successful (Bromley 2000). These entrepreneurs then encourage others to adopt similar strategies given that they have witnessed the success of businesses as they live in close proximity.

Locational rationale also appears to be influenced by the goods being produced and sold. Access to transport and connections with other businesses are important spatial drivers in Keko, indicating these are significant influences in the operations of the furniture industry. In Manzese, proximity to the local market and any other increased access to customers was an important consideration for entrepreneurs, as transportation and connections may not be as significant in the operations of the clothing industry. Therefore, accessibility and centrality are probably more important as spatial characteristics and drivers of the economies on a citywide scale, but other factors must be taken into consideration on a local scale, and these factors are important in the understanding of how EAHs form and continue to operate.

The literature review defined an EAH, but the question is then how to identify one – when does a clustering of businesses form an economic agglomeration? In Keko and Manzese, it would appear that three characteristics identify an EAH:

- 1) The number of businesses operating in a particular sector;
- 2) A range of specialisms within a sector, e.g. furniture; and
- 3) The proportion of people in a sector renting, which suggests that it is important for their business to be in a particular locality, and that their profits are sufficient to cover both rent and operating costs.

Characteristics 1) and 2) are the key identifiers of an EAH, as a certain number and a comprehensive range of businesses are necessary to create an economic agglomeration; however characteristic 3) indicates the success of the EAH. If the EAH were not successful, business owners would be more likely to operate out of their home rather than rent a space, as they would not have the funds to cover rent and operating costs. Both Keko and Manzese can therefore be identified as EAHs and successful economic agglomerations, despite their informal nature.

6.3. A Solidarity Economy: Socio-cultural dimensions of the EAH

6.3.1. The Entrepreneurs who Make Up an EAH

The qualitative aspect of this research provides more flexibility in understanding social phenomena as argued by Holland and Campbell (2005). Through interviews and observations within Keko and Manzese, the research aimed to provide a better overall understanding of EAHs, how they emerge and characteristics of entrepreneurs and their networks, and the processes and spatial patterns that develop as a result of these drivers. The EAHs are different from agglomerations of larger scale businesses because of the solidarity that appears to exist between operators. The EAH is about more than making profit; it involves a system of social networks that allow people to support each other. Therefore it is important to understand these socio-cultural characteristics alongside the economic-locational characteristics as discussed in Section 6.2.

The analysis of the 77 interviews provided a broad understanding of the agglomeration processes of EAHs, as well as some insight into the role of socio-cultural dimensions and wider economic linkages and value chains. As noted in Section 3.5.2, to provide more detailed understanding of the characteristics of entrepreneurs within EAHs, seven interviewees from the 77 were chosen for return interviews to provide in-depth case studies. The researcher considered analysing the themes individually, but felt the interviews were interesting enough to choose seven and tell their story based on their role in the EAH. The stories told are important to the analysis and the broad range of backgrounds illustrates the ethnic diversity and cultural mix from poverty to success stories. These seven interviewees were carefully selected because they raised certain themes or aspects of the EAH in the first interview, which are not sufficiently explained through analysing economic and business characteristics.

The in-depth interviews allow for a more detailed examination of the broader themes identified in the literature review regarding socio-cultural aspects of the informal economy and are important to understanding how EAHs emerge and operate. These themes include: religion and ethnicity; the importance of social capital and interlinked business relationships; the coexistence of solidarity and competition within an agglomeration economy; and the progression of enterprises from poverty to potentially successful businesses. The seven return interviews provide a representation of the entrepreneurs who operate within EAHs to analyse these themes and determine the relevance of existing literature in EAHs. This section provides a short profile for each respondent chosen. All interviewees will remain anonymous in order to protect their identities, as discussed in the methodology. Each individual story is revealing of some of the interesting connections within and between individuals and businesses, expressing some of the socio-cultural facets of how an EAH functions. The themes taken from the interviews will be synthesised for analysis in Section 6.3.2 following the detailed descriptions.

Interviewee A

Interviewee A is a woman in her 50s, who is one of sixty co-owners of a collective wood supply enterprise in Keko. This enterprise is located just outside the detailed study area but within the Keko settlement. The enterprise was chosen as a case study because it provides wood to many local carpenters within the area, despite being located deep within the interior of the settlement.

The sixty members of the collective are from different tribes and religious affiliations, a common theme discovered during the fieldwork. Religious choice and ethnicity appear to have little or no role in the formation of EAHs or connections within them in Dar es Salaam, fitting with the finding by Vullers and Korner (2013), which states that Tanzania has historically little inter-religious violence – an exception among many African countries. According to Interviewee A (2015), most of the group members are widows who lacked income. They needed to feed their families but could not find employment due to a lack of education and experience. The majority

of these women came from Keko and therefore ‘saw the growing furniture business’ (Interviewee A 2015). This gave them the idea to sell wood to the local carpenters, and have been doing so since 1997. Again, this indicates a certain combination of circular logic and coincidence involved in a local individuals’ participation in an EAH, but it is this combination that is perhaps also what sustains it.

Interviewee A explained that the members of the group were unable to obtain loans or a business license individually; however, by joining together they were able to receive a loan from the bank and obtain a license, thus moving a little towards formalisation. This confirms that furniture is a large-scale industry, requiring more management and investment than the clothing industry in Manzese. Because the business is so large and well established, there is little competition from other wood suppliers in the area. This suggests that the cooperative was originally formed as a way of competing with other enterprises, but eventually grew so that it could ‘lock out’ others who may want to enter the market.

Figure 6.1: Interviewee A



Operations, however, are largely informal. The cooperative makes over 600,000 TZS per day, which is then divided among all sixty members equally, each receiving only about 10,000 TZS. This is less than \$5 per day, but a reliable income source and a large daily amount for a group that is not a formal cooperative. Trust is a core

foundation of the business, as the group is not operated in a formal manner. While different people specialise in different aspects of the work, e.g. cutting, transport, accounting, etc., there is no one person who is in charge or owns the business. The work and income is divided evenly, indicating that the employees must work together and trust each other in order for the business to operate successfully.

Proximity to the furniture-making business in Keko as well as the location of the settlement within the city were both important for their business. According to Interviewee A, the wood is brought in on private trucks from Kilwa Kisiwani and Liwale. Keko's location near the CBD and near major roadways in and out of the city provide accessibility to goods and transport. The co-owners then cut the wood so it can be sold primarily to local carpenters in Keko, who are often working informally. They sometimes sell to formal furniture companies in the area, e.g. Keko Furniture and Kushaba Furnishings, thus demonstrating the complexity of formal-informal linkages. The established furniture industry within Keko provides access to a constant suppliers and customers. Interviewee A (2015) explains that they are happy in this area because the area is so popular among furniture makers and carpenters so 'it is good for business.'

Interviewee B

Interviewee B is a *machinga*, or street trader, who works selling used clothes and sunglasses at a wooden stand along Morogoro Road in Manzese. Initially, the researcher had intended only to interview established business owners within each EAH thus omitting itinerant traders, but due to the number of the *wachinga* in Manzese, eleven interviews were conducted as part of the 77 to get a sense of the role they play within the EAH, as discussed in Section 3.6.2. Interviewee B is one of those itinerant traders, in his early 20s, Muslim, and a member of the small Pogoro tribe located in south central Tanzania. He earns anywhere from 30,000 to 70,000 TZS per day.

The group of ten is made up of a variety of tribes and religions and according to Interviewee B, these factors had nothing to do with the connection they formed. By sharing a stall, they are able to reduce cost and earn more income. In addition, they form an important social network. If someone is sick or has a problem, they contribute money to help them. If they do not have a product that a customer wants, they can send them to another vendor who does have it, and earn a tiny commission. Once again, reciprocity is an important finding in the success of the *wachinga*. The size of the group reduces crime as it discourages potential theft. It also helps protect their location, which is highly valued as it is right in front of the bus stop.

Figure 6.2: Interviewee B



As in any agglomeration economy, competition is a concern for the entrepreneurs of the EAH; however, in the EAH this competition must exist alongside solidarity. According to Interviewee B, the *wachinga* compete for ideal locations to operate their stalls or tables and the preferred location is in front of the *dala dala* (bus) stop because most of their customers are those commuting via public transport. By working together, they reduce competition with other street vendors, which they would be unable to do working individually. Thus while helping each other survive, entrepreneurs must also compete with each other within the area.

Interviewee B started selling products for others, but like many he desired to be self-employed and eventually earned enough capital to buy his own products and start a business. He goes to the shops in Kariakoo to buy used clothes from other countries, and then brings them to the tailors in Manzese to be repaired and resized. Apparently he does not buy clothes that come from the US because, “they are too big” and require more time to be resized. He then sells the clothes that have been repaired to people who have come to shop at the local market or to those traveling on *dala dala*. He began selling sunglasses in addition to used clothes because none of the other *wachinga* nearby were selling them and he had no competition; however, once he started doing well, others began to follow suit and now multiple vendors sell sunglasses. “If others see a business is doing well, they copy it” (Interviewee B 2015). This form of competitive ‘copying’ could be seen as part of the EAH driver, supporting Bromley’s (2000) theory of agglomeration formation that informal entrepreneurs will be attracted to a cluster based on the success of enterprises already operating within the cluster.

According to Interviewee B, he was originally located in Ubungo, the major bus terminus, further along Morogoro Road at its intersection with the outer ring at Sam Njoma Road, but was removed by the government so he came here; however, this area is not safe either because the government tries to remove them but they have nowhere else to go. Interviewee B (2015) explains:

“The government comes to destroy the stall and takes the products. They use weapons to remove us but we just come back later. They are not coming now because of elections but they usually come multiple times in a year.”

In addition, he cannot get a license or a loan because the business is too small and he does not make enough capital, plus it is not a good area to work as it is along the street. According to Interviewee B, he would like it if the government were to build a market nearby for him and the other *wachinga* to sell their goods in peace. However, it is to be noted that many off-road markets for street hawkers are unsuccessful because their margins are so small they cannot afford to move (Mackie et al 2014).

Interviewee C

Interviewee C is a carpenter from Keko. He is in his 30s, is Muslim, a member of the Mwela tribe, and commutes to Keko from Mbagala. He earns between 100,000 and 150,000 TZS per month. According to Interviewee C (2015), he originally came from Bagala and was a fisherman; however, he did not earn enough to support himself and his family. A friend advised him that there was work and opportunity in Keko, so he sold his boat and used the earnings to move to Dar es Salaam and start this business. He would like to go back to fishing once he has enough capital to support himself and buy better equipment.

Figure 6.3: Interviewee C



Interviewee C moved to Dar es Salaam in 2005 and was taught carpentry by the previous owner of the business. He bought the business in 2010 after receiving a loan from the Keko Furniture Association – a local community group – as well as family and friends, and now has three men working under him. According to Interviewee C, Keko is the best place for him to operate a business because it is where he learned his trade and Keko is well-known for its furniture industry so there are a large number of customers. In addition, he is well located along the main street, Chang’ombe Road, which is unusual for unlicensed carpenters.

According to Interviewee C, many businesses compete for locations along the main road but they are often removed for formal enterprises. Being located along the main road is very important as they often have to move furniture in and out and it is more difficult the further into the settlement a business is situated. He has easy access to the main road but the rent is low enough for him to afford materials and make a decent living. Interviewee C explains that business and social connections are important in Keko, meaning links of trust. He has connections with other shops such as hardware stores and wood suppliers, including Interviewee A because he can buy supplies for his business close by and at a fair price. He has also formed connections with other carpenters in the area. According to Interviewee C, the carpenters often share equipment and work if they need extra help or expertise. This way they can create more capital and work. However, there is a fine line between the connections formed to save on costs and competition among carpenters. They must compete with one another to sell their products to formal and informal furniture stores as well as individuals. To reduce competition, Interviewee C primarily sells to private customers around Keko or Dar es Salaam, rather than furniture companies such as Keko Furniture because his goods are “not high enough quality” (Interviewee C 2015).

According to Interviewee C he does not have a business license. He explains that this is because the business is not large enough to get a license and the licensing process takes too long. He explains: “We go round and round in circles with the government offices. We must go back repeatedly and the officials do not do their jobs” (Interviewee C 2015). Yet, despite not having a license he still pays taxes to municipal government officials, and if he cannot pay his taxes, the tax collector shuts down the business until he can pay.

Interviewees D & E

Interviewees D and E are cobblers who co-own a business in Manzese. Interviewee D is a man in his 50s, a Christian, and a member of the Pare tribe. Interviewee E is a man in his 40s, a Muslim, and a member of the Makua tribe. Interviewee D originally came from Kilimanjaro and when he finished primary school, there were not enough secondary schools for everyone to receive an education. Therefore, he learned shoe-making from other cobblers and moved to Dar es Salaam to earn a higher income. Interviewee E was originally from Dar es Salaam and learned the trade because there was a lack of employment opportunities and he needed to earn an income.

Interviewees D and E had previously worked near to each other on the same street and became friends over time. They decided to work together as co-owners because they could not afford the rent individually. They started working in this location over 10 years ago and chose it because of the high pedestrian traffic as it is near both the market and Morogoro Road. Now, because they are well established, their customers know them and often return. Together, they earn about 20,000 – 30,000 TZS per day between them.

According to Interviewees D and E, they mainly get goods and supplies from local shops in the area, but will sometimes travel to Kariakoo to buy materials. Their primary customers are

Figure 6.4: Interviewees D & E



local residents or shoppers passing buy and often *wachinga* will buy the shoes from them and then sell them along the road. They sometimes make arrangements with *wachinga* they know well and will give them the shoes without paying upfront. The *wachinga* then sell the shoes and bring back a portion of their earnings and whatever they were unable to sell. As with Interviewee A (Section 6.3.1), trust is crucial in this arrangement, as the cobblers must be able to trust that the *wachinga* will return the products and income. They also formed connections with other cobblers in the area by sharing tools and equipment, or if there is too much work, they might distribute it to other cobblers. This way they can save money they would have spent on tools, and increase their capital by obtaining additional business.

Interviewees D and E do not have a business license because they do not have enough capital to obtain one. They tried to get one by receiving a loan from the bank, but they had a very short amount of time to return the money. Interviewee D then had an accident and they could not make enough capital to pay the loan back in time, and are now unable to get another loan as their credit is not good. Interviewees D and E explain that they would like to be relocated to a government market, where they will have a better location and their business can be promoted, but they do not want to leave Manzese, as this is a well-known area for the clothing industry.

Interviewee F

Interviewee F is the most successful of the case study interviewees chosen and a clear example of how an enterprise can progress within the informal economy. He is in his 50s and the owner of Kushaba Commercial Enterprises in Keko. His enterprise makes anywhere from 100,000 – 1,000,000 TZS per day depending on sales. Interviewee F originally came from the Mwanza region in the 1980s with the goal of starting a shop selling food or clothes, but was employed as a carpenter. He eventually saved enough money to obtain a license and start his own business in the late 1980s and decided to continue selling furniture, as it is not a seasonal business like clothing or food. According to him, he chose to operate in Keko because it was close to his home; however, unfortunately it is not clear if he was employed as a

carpenter in Keko or outside of the area. Therefore, it is unclear if the furniture industry already existed or if he was one of the original furniture suppliers in the area. His enterprise now includes the formal shop along the main road, which employs 8 people, and a manufacturing and finishing site just down the street, which employs around 30 people.

According to Interviewee F, the enterprise obtains the wood from private sellers in Mtwara, Tabora, Southern Tanzania and Mozambique. They usually buy materials and other tools or hardware they need from local stores in Keko or Kariakoo. They make the furniture themselves at their manufacturing and finishing site in order to earn more capital, as it costs less to employ carpenters and workers than to buy the final products. Their customers vary from people looking for home furnishings to institutions, e.g. schools and hospitals, to government offices to large companies such as the Tanzania Port Authority.

Figure 6.5: Interviewee F furniture store



Due to the size and success of the enterprise, there is not much need to form connections with other furniture stores in the area, but Interviewee F explains that they do have community connections in order to share advice and ideas or solve problems within the local area. For example, Interviewee F is a member of the Keko

Furniture Association that provided funding for Interviewee C. This indicates that a business can 'exit' an EAH in terms of social and economic connections once a certain level of income and stability is obtained; yet Interviewee F chose to continue these connections as a way of remaining part of the community. However, despite the size of the enterprise, there is still a great deal of competition in the area with other formal furniture companies. In order to reduce competition, Interviewee F chose to make better quality goods, unlike Interviewee C who chose to do the opposite. It may be the case that among formal furniture stores, EAHs drive up quality and make prices competitive for customers, which could be a driver to operate informally.

Despite having a business license, Interviewee F says he still has issues with the Dar es Salaam City Council (DSM CC) regulations. The authorities often come up with new regulations or taxes they must pay. In addition, the DSM CC wants to move the enterprises to Kigomboni, and have already moved a few local companies. For Interviewee F, this presents a problem, as Keko is already established as the main furniture centre in the city. In order to prevent loss to these enterprises, Interviewee F believes they should all be moved together to create a new furniture industrial centre elsewhere.

Interviewee G

The final informant amongst these case studies is Interviewee G, an assistant at a *kanga* (women's traditional fabric) shop in Manzese. Interviewee G is in his late 20s, a Muslim, and a member of the Mwela tribe. He originally came from Lindi and now lives in Manzese. He started working at this shop because it was the only job he could find due to unemployment and a lack of education. According to Interviewee G, he would much rather work for himself but it is not possible because he does not have enough capital or experience. This desire to work for oneself has been a common theme among many of the interviewees examined.

According to Interviewee G, another man owns the shop but he runs it most of the time. The shop has been there for about 15 years and earns about 200,000 TZS per

day. The owner was able to obtain a license to start the business by taking out a loan from NMB Bank; however, Interviewee G explains this is much more difficult to do now than it was 15 years ago. Therefore, it may be the case that the more established an EAH becomes, the more difficult it is for an enterprise to progress within the highly competitive environment.

The owner of the shop primarily obtains the *kangas* from the Urafiki Textile Factory, down the road, but will also sometimes buy them from the Chinese and Indian shops in Kariakoo. These connections between formal and informal enterprises have been determined as a common theme through the interview process. They then sell the *kangas* to women who come to the local market or are traveling on the *dala dala*. Interviewee G explains that the owner has formed connections with other *kanga* shops in the area. For example, if there are some samples in another shop that they do not have, they will sometimes share the supply or send customers to that shop instead. In return, that shop will give commission on the sale, again distinguishing the importance of reciprocity and cooperation in the success of businesses that make up an EAH. In this way, they can increase capital and by helping each other, form social connections.

Despite connections with other local *kanga* stores, there is still acute competition, because stores with more capital have a larger supply and can sell more goods. However, the location of the store gives them a competitive edge as they are located right in front of the *dala dala* stop, and therefore there is a large customer base.

Figure 6.6: Interviewee G Kanga Shop



6.3.2. A Sharing Economy – The Case Studies Understood

The next section looks at the key crosscutting themes that arose from the in-depth interviews, which provided insight into the diversity of individual enterprises that make up an EAH. These include the importance of solidarity and socio-economic connections, the role of religion and ethnicity, the progression from poverty to success, and how solidarity and competition exist parallel to one another within these economies. The in-depth case studies have provided insight into the individual enterprises that make up an EAH, and identified several common themes that are important in the understanding of EAHs.

Despite competition within the EAH, one of its core characteristics is the sharing and support network that: enables people to work together; enables people to share space; ensures that everyone receives a minimum income; assists those who are sick or unable to work; spreads the cost of expensive tools, e.g. sharing tools; ensures that local businesses can buy from others at a fair price; works through commission for others; provides informal loans when needed; employs apprentices and provides job training; and provides protection and insurance in case of government intervention.

This sharing economy enables small-scale operators to survive shocks and stresses as a kind of income-smoothing strategy that assists individual entrepreneurs to set up, become established and accumulate, and ensures that profits from the EAH are – to a degree - shared. The agglomeration also ensures a regular flow of customers, which provides another form of security. Therefore, there are the normal expected economic advantages of agglomerations found in conventional industrial clusters, such as reducing transportation costs, increased market access, and increased supply and demand for labour, but the EAH also has other aspects that provide securer livelihoods for thousands of people in a kind of solidarity economy. However it is important to note that there are the normal expected economic disadvantages of agglomerations found as well, particularly a highly competitive environment.

Elements of competition have been noted, such as the competition between businesses for ideal locations, and response strategies such as the formation of cooperatives to reduce competition.

Forms of solidarity such as trust, cooperation, and reciprocity are important elements in the operation and success of a both EAHs in Keko and Manzese. Without trust, the cooperative of wood suppliers in Keko (Interviewee A) would not be able to function. The *wachinga* in Manzese rely on reciprocity and cooperation to earn an income, as their businesses are more prone to government intervention and short-term eviction. All of these elements are crucial parts of the support network that form EAHs. The complex economies can easily be destroyed by insensitive urban planning, such as the relocation plans for the furniture stores in Keko feared by Interviewee F, that do not recognise the complexity, extent of livelihoods support and importance of business connections with local areas of intense business activity.

The literature review examined social connections as a potential driver of informal activity (Hays-Mitchell 1993, Harris 2014), but the interviews found that established social connections were not particularly important in the creation of the EAHs studied in Dar es Salaam. Some people interviewed, such as Interviewee C, did say they were 'advised by friends to come here and start a business' in which case they might have had rural connections and come here for that reason. In most cases, however, connections were formed following the creation of businesses as a result of proximity. These social connections within EAHs are very important, and once established, play an important role in the function and operation of these EAHs. The examination of these connections substantiates the argument by Hays-Mitchell (1993) – that social connections provide access to information and knowledge, as well as financial support and resources; and compensate for the weakness of the internal resources of micro-enterprises, providing support in times of crisis. While the primary driver of economic connections within the EAHs is economic, the underpinning social connections created through proximity result in important social constructs.

The formation of social connections following the creation of businesses may be a distinguishing pattern of agglomeration economies, though many sources cite social capital as a crucial part of informal economic networks (e.g. Hays-Mitchell 1993; Portes 1998). But as questioned by Lyons and Snoxell (2005), is this social capital deliberately created (Coleman 1988 as cited in Lyons and Snoxell 2005) or is it a by-product of sociability (Putnam 1995 as cited in Lyons and Snoxell 2005)? In EAHs, it would appear that social capital has been deliberately created for the most part, confirming Coleman's findings (1988 as cited in Lyons and Snoxell 2005), as elements of solidarity and social capital such as trust and reciprocity are necessary for the sustainability of the agglomeration. However, this social capital exists alongside competition, which is sometimes a driver of the cooperation and sociability within the EAH.

The Role of Religion and Ethnicity

Another hypotheses within the literature review suggested that religion and ethnicity might affect the dynamics of the EAHs in terms of formation and operation, as this is common in other African and Asian cities (Harris 2014). Therefore, it was important to determine the role of religion and ethnicity in the formation of social and economic connections – whether economic connections are made through existing social channels or if they have any effect on the creation of new ones. In Dar es Salaam, the roles of religion and tribal ethnicity were surprisingly limited in terms of their effect on business operations in both case studies. Tanzanian policy has managed to resist the integration of politics and religion, though according to Singh (2011: 42), the predominant religions (Christianity and Islam) “co-exist with a great deal of political control that is exercised over Muslim affairs.” Despite the growing sense of inequality felt by some Muslim groups, it is notable that in Tanzania as a whole, religion is a predominantly personal matter and people are very tolerant of others' religious beliefs (Kironde 2015; Msoka 2015), which could explain the lack of significant association between religion and business. Tanzania may be unusual in

this respect, for example Brown et al (2010) found very different patterns of street trading in West Africa between Muslim and Christian communities.

The study found that Manzese is a primarily Muslim community in terms of residents as the area is historically Muslim; however, the businesses are very mixed. When asked about business connections based on religious background, the most common response was that it played no role. For example, Interviewees D and E (2015) are prime examples of two people from completely different religious and ethnic backgrounds who run a business together. During the interviews, it was discovered that many of the entrepreneurs live in other areas and commute to work, which could explain the differences in religion between residents and business owners. Similarly, tribal ethnicity seems to play no role in the formation of business connections in Manzese, as there were 22 tribes identified out of the total number of 77 interviews. The most common tribes were found to be Chaga originally from Kilimanjaro at 15.9% and Pare also from the Kilimanjaro region at 15.9%.

Keko is similar to Manzese in that religion and ethnicity seem to play no role in businesses. Interviewee A (2015) co-owns a business with 59 others who all come from different religious and ethnic backgrounds suggesting a considerable level of trust in its operation. Several entrepreneurs live in the area and many commute from other areas to work. Of those interviewed in Keko, about half the respondents were Muslim and half Christian. When asked about the residential makeup of the area, some answered primarily Muslim and others said it is very mixed so it is difficult to confirm. Interviewee C explained, "The Muslims live in the old parts...along the main roads. Christians have moved in recently and live in the edges." Despite the area being mixed ethnically and in terms of religious background, there is still some spatial differentiation as to where these groups live. While this may play some role in the spatial patterns of businesses within the EAHs, this is likely a result of migration and historical residency within the city or possibly due to proximity to religious buildings, e.g. a mosque or church.

Dar es Salaam and the coastal regions of Tanzania are primarily Muslim, due to Arab colonial history, and the inland of Tanzania is predominantly Christian due to European colonial history (Kironde 2015). As a result of rural-urban migration, the mixture of religions is increasing and plays a role in the spatial patterning of these settlements. A large percentage of the interviewees in both case studies had migrated to Dar es Salaam, which could also explain religious and tribal mixtures. According to the results, 51.5% of the respondents in Keko had migrated to the city and in Manzese, 88.6% of the respondents had migrated to Dar es Salaam. Several respondents mentioned that common tribes in the area include Zaramu and Chaga – the Zaramu are the tribe native to Dar es Salaam and the Chaga are from Kilimanjaro and are well known as entrepreneurs. However, overall the findings indicate that in Dar es Salaam, tribal ethnicity plays almost no role in the creation of EAHs, as the city is more mixed ethnically and religiously than rural areas such as Kilimanjaro or Moshi where the majority of people are Chaga and Pare and practice Christianity.

Based on the findings, the demographics of the areas were found to play little role in EAH formation or operation. Tribal ethnicities and religious choice vary widely and are probably more important in understanding the residential makeup of the case studies than the businesses. Following the creation of businesses, connections between businesses appear to be formed for purely economic purposes within EAHs. This was the case for several of the seven follow-up Interviewees and was a common occurrence within both EAHs. Rather than forming business associations based on ethnic and religious similarity, entrepreneurs realise that economic growth and development of micro-enterprises can be achieved by reducing any impediments to trade. Interviewees A, D and E are key examples of those who have chosen to improve their business through establishing close working relationships between diverse groups of people. This indicates that social tolerance is an important factor in the sustainability of an EAH in Dar es Salaam, and diversity benefits individual businesses.

The Role of Social Capital

EAHs are different from existing business agglomerations because of the solidarity element that sustains its complex agglomeration processes. The social capital found within EAHs allows small-scale operators to survive shocks and stresses through elements of solidarity such as trust, co-operation, and reciprocity. These aspects are not characteristic of a conventional formal economy, but are identifiable in a sharing economy and have created an environment where the EAHs can thrive and expand. By creating a new conceptualisation through greater understanding, urban policy and planning practices may be able to better recognise the complexity and extent of livelihood support within these agglomeration economies, providing justification for their protection rather than dispersal.

Informal-formal connections have proven to be a common and necessary part of the operations of EAHs. This theme was often raised in the existing literature on the economic context of the informal economy (Chen 2004; Cross 1998; Davies et al 2010; Hays-Mitchell 1993; Tokman 1978) (Section 2.2.1). Despite the informal nature of many of the enterprises, there are still many connections between the informal and formal sectors, which are also based on trust and social capital. For example, Interviewee A, from the wood collective, has connections with both informal and formal carpenters who buy their wood. These reciprocal relationships result in continued business for the wood suppliers and the quality and competitive pricing incentivises both formal and informal carpenters to continue their relationship with the wood suppliers. Interviewee B (a *machinga* in Manzese) buys or receives goods on loan from licensed shops and then sells them on the streets without a license. The *wachinga* have formed a connection based on trust with both formal and informal enterprises, which benefits both parties. The concept of informality is difficult to pinpoint in the context of Dar es Salaam, as in many developing cities, as a business may be compliant in one aspect (e.g. paying tolls) but non-compliant in others (e.g. unlicensed). Therefore, it is necessary to create a new conceptualisation of informality, as discussed further in Chapter 7, of elements that form a successful

EAH, based on elements of growth, expansion and sustainability while also being self-perpetuating outside a formal regulatory environment.

Common reasons for operating informally include political and regulatory barriers as suggested by De Soto's theory, which argues the IE is a response to excessive legislative costs and regulations (1989). In many cases, individuals are unable to obtain a license or start a business on their own, as they are too small. However, the social and economic connections that make up the EAH can provide solutions to these barriers through cooperation. Interviewee A from the wood collective is not operating informally, as the group does possess a business license, but it was necessary for the members to combine their funds together as a large group in order to obtain the license. Interviewees D and E had a similar background in that they combined their funds to rent a space and save on costs for materials and supplies. Social capital is also important as a way to share profits and increase capital among entrepreneurs as many – Interviewees B, C, D, E and G – explained they would often share customers or recommend customers to each other. This indicates that despite the impediments of regulations and barriers such as cost in the creation of a new business or traditional economic challenges such as competition, entrepreneurs are able to circumvent these barriers and challenges through their connections. Therefore, social capital sustains the EAH by not only enabling micro-enterprises to survive shocks and stresses, but also help in the expansion and growth of the EAHs.

In many cases, individuals are unable to obtain a license or start a business on their own, as seen with Interviewees A, B, D and E. Analysis of the interviews found that larger groups are formed to save costs and reduce risks to the enterprise and competition. Of the 77 interviews, 18 enterprises comprised at least two owners, though only four enterprises were run by three or more owners. Enterprises made up of three or more owners all stated that competition was a common problem for them, but they experienced less competition by creating an enterprise large enough to outcompete individuals operating alone and were able to earn more income, allowing them optimal choice of location. Nearby competitors operating individually were unable to compete due to higher costs of operating alone, indicating that

cooperative processes necessitate exclusionary ones as well. *Wachinga* in particular form strong connections – both social and economic – but the micro-entrepreneurs often form connections to reduce costs and increase income.

Interviewee B was chosen as a case study for the *wachinga* because he represented several respondents in terms of responses and common themes that emerged from the interviews, particularly the importance of social capital in earning income and providing security. Observations of, and interviews with the *wachinga* found that they have a much stronger sense of community and economic connections than the micro-enterprises. Interviews with several *wachinga* indicate that this is a way of protecting themselves, as they are more vulnerable to external action, e.g. political response, than the established businesses within the EAH. Interviewee B (2015) stated, “If one is sick we all help.” Others, including two other *wachinga* interviewed outside of the returning seven respondents, made similar comments and explained that they helped one another by looking after each other’s stalls or goods, or even trying to help each other financially in case of illness or death. They own and operate stalls together in order to save on costs; they pool their money for one person to buy the goods from Kariakoo; they communicate prices and styles with each other and ask each other for advice; they also send customers to each other and share the profit.

While economic and social connections have no evident role in the creation of the EAHs, they appear to play a role in retaining coherence in an EAH over time. For example, these reciprocal relationships may discourage businesses attempting to relocate elsewhere. They might encourage reciprocity over time, particularly in terms of relationships of trust between vendors and sellers, e.g. an entrepreneur who sends a customer to another vendor trusts that they will share their profits, pay commission, or reciprocate in return. This might encourage an internal coherence to EAHs as part of a process of stabilisation rather than of formation, contributing to the conceptualisation of a successful EAH. This has not been previously examined in the literature, building a new argument for the importance of the internal social connections that make up agglomeration economies in EAHs.

Progression and Competition

Despite operating outside the formal regulatory environment, the EAH has clear agglomeration processes, and its growth provides cost saving through close proximity but also in a highly competitive environment. Within this competitive environment, there is opportunity for progression from poverty to success, though it is difficult to succeed as in any economy. Interviewee G was an example of an enterprise that gained success operating within the informal economy to become an established and highly successful business. High degrees of specialisation allow these enterprises to be successful, and this success draws in other competition, creating a circular pattern that sustains the EAH and drives its expansion.

An unexpected finding from the research was the desire for self-employment, or rather the idea of being in control of livelihood choices in a context of widespread support systems. This desire to work for oneself has been a common theme, raised by many of the interviewees. The desire for self-employment is probably driven by a complex set of factors including comparisons with other forms of work and income as well as the security self-employment provides. Interviewees B, F, and G exemplify the desire for self-employment at various levels of formality and income. From the *machinga* (Interviewee B) to the successful entrepreneur (Interviewee F), they work up from small beginnings, earning enough money to start their own enterprise, whether formal or informal, in order to support themselves and no longer rely on others for income. Therefore, the informal economy allows scope for job progression and career development. Informal economic activity illustrates the pluralist ideology, providing alternative forms of employment and the opportunity to control one's own livelihood.

While the analysis has made it clear that solidarity and themes such as trust and reciprocity are crucial for the operations of the EAHs, there are also clear themes of competition between the entrepreneurs as with any agglomeration economy. A *machinga* selling sporting goods and clothing in Manzese (2015) noted that the *wachinga* do not send customers to established businesses, but rather to other *wachinga*. This response indicates that not all types of business regard each other

equally, adding to the complexity of the social bonds within EAHs and how these social bonds operate alongside competition between businesses. People are more likely to 'look after their own', suggesting that there is a set of complex non-economic ties, which are not easily measurable. Bromley (2000) examined the ties between street vendors and the lack of unanimity between those vendors and established stores, or even other 'groups' of street vendors. Bromley (2000) links these connections to the response to police brutality or policy regulations against street trade. These complex ties seem to suggest that there are strong social connections between *wachinga*, as policy regulations oppose street trade and informality in Dar es Salaam, discussed in Chapter 4. Their desire to look out for one another rather than established business could also be a way of resisting the existing policy regulations. Despite the social bonds between the *wachinga*, they have also formed different types of connections with other businesses within the EAH. For example in Manzese, they have established formal-informal and informal-informal connections with entrepreneurs such as tailors or cobblers, as discussed previously. All of these actions are replicated by established businesses within the EAHs. These connections form the value chains and networks that sustain the EAH.

EAHs provide an important source of economic opportunity as such a large proportion of people in Dar es Salaam work in informal employment. For many, poverty and lack of education means they have limited employment possibilities within the formal sector. The flexibility of own-account work seems to play an important role in sustaining the informal economy and acts as a driver for entrepreneurs. The sector specialisation associated with these EAHs draws businesses to these locations as they either already know the trade or can learn one. In this way, they can be self-employed and do not necessarily need to go through the difficult regulation process. By re-conceptualising informality, developing cities such as Dar es Salaam could provide legitimacy to informal activity, as suggested by Cross's pluralist approach (Cross 2000; Cross and Morales 2007). By accepting informality, rather than trying to find solutions to eradicate it, there is an opportunity to create new economic centres, potentially allowing for economic growth and development within informal settlements like Keko and Manzese.

6.4. Economic Drivers of Urban Development Processes

This research is unique in that the combination of spatial and qualitative analysis provides a clear visual representation of the urban development processes being driving by economic value chains and networks. The spatial analysis suggested many theories regarding urban processes; however, qualitative analysis has enabled the research to analyse these theories. This section aims to provide a clearer understanding of the spatial patterning and urban processes that are driven by underlying economic networks and value chains.

In addition, the section examines the extent to which the economic activity clusters in Keko and Manzese are linked to broader economic networks within Dar es Salaam. The EAHs are connected to the economy on a wider urban scale as well as a global scale. Section 6.4 has examined the importance of social capital within the settlements but the findings have indicated broader linkages both within the city and globally, as discussed by Lyons et al (2013) in their examination of value chains between Chinese manufacturers and African micro-enterprises. These linkages can be formal-informal, drawing on ideas put forth by Hays-Michell (1993) Chen et al (2006) and Charmes (2012), who argue that there are more linkages between the formal and informal sectors than traditional theories of the informal economy recognise. This section seeks to examine these linkages on a local, citywide, and global scale.

6.4.1. EAHs and Value Chains

Existing literature, (Benjamin 2004; Bromley 1978, 2000; Bromley and Mackie 2009) provided an important examination of the economic role of street trade and informal or formal micro-enterprises as drivers of spatial development, but has not examined how small-scale enterprise shapes urban areas. The cluster patterns seen in Section 5.4 raised many questions that could not be explained through visual analysis alone and required the qualitative analysis to provide more depth of understanding. The interviews and observations allowed the research to determine what kind of

economic value chains have been formed between micro-enterprises, as well as wider economic networks that extend beyond the EAH. This section seeks to examine how economic drivers and networks formed these spatial patterns within the settlements through an examination of the qualitative data.

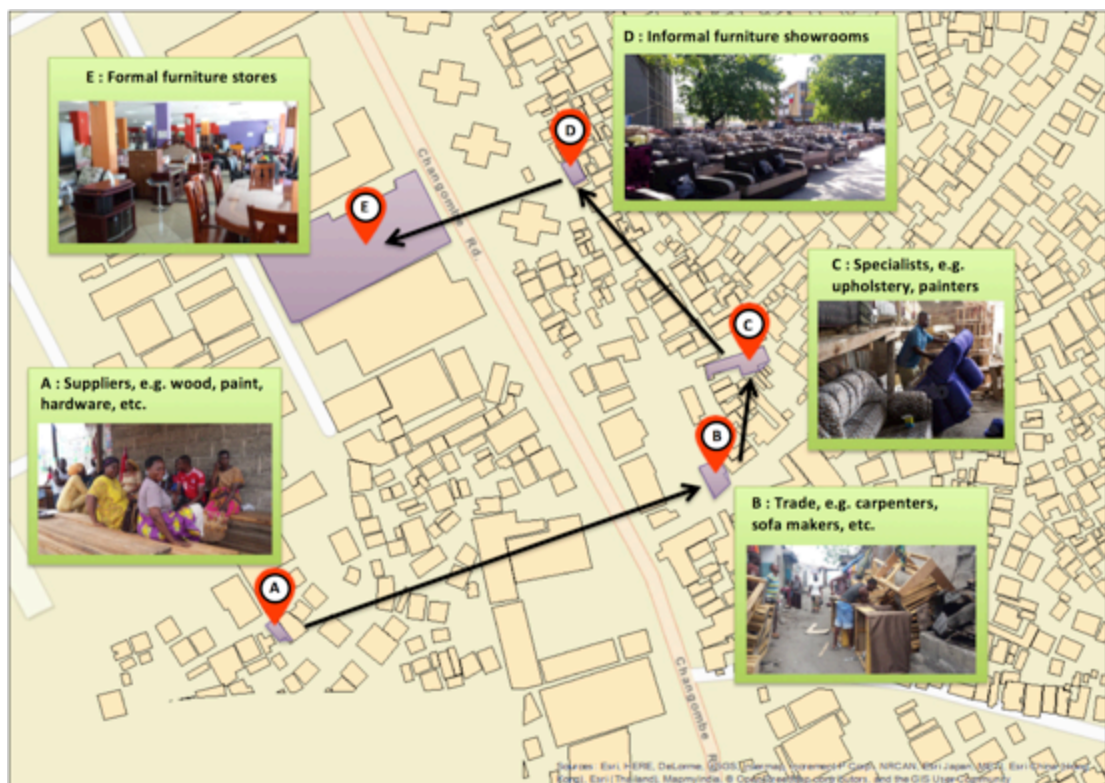
The internal and external connections associated with the EAHs have proved more complex and more far-reaching than expected. For example, the cooperative of Interviewee A mainly sells to carpenters in Keko but purchases wood from other parts of Tanzania such as Liwale. Interviewee B purchases clothes from Kariakoo and brings them to the tailors in Manzese to be resized. Interviewees D and E purchase supplies from local shops in Manzese and have formed connections with the *wachinga*, who sell their products on the street for a cut of the profit. Interviewee F purchases wood from outside Keko, but purchases tools and supplies from local shops in Keko and Kariakoo. Interviewee G stated that the owner of the *kanga* shop, like several others in Manzese, purchases *kangas* from the Urafiki Textile Mill, as well as informal and formal shops in Kariakoo. Based on the case studies and the interviews overall, many of the entrepreneurs have been found to purchase products and tools from Kariakoo or even local shops within Keko and Manzese. By forming economic networks and value chains, these entrepreneurs are thus contributing to the formation and sustainability of the EAH.

Keko

Within the case studies there were clear flows of goods and services based on the specialisation of the area, as illustrated in Figures 6.7 and 6.8. It is important to note that these figures display one particular value chain uncovered in the qualitative analysis in order to illustrate a general point regarding the flow of goods and services. A typical route of an internal value chain in Keko is shown in Figure 6.7. The internal value chains begin with the supply of materials and goods necessary for furniture-making, e.g. wood supply, hardware stores, paint supply, fabric supply, etc. (label A, Figure 6.7). Trades, such as carpenters, sofa makers, welders – any sort of trade involving furniture making, follow this (label B). Following the making of furniture, specialists such as painters or upholsterers finalise the product to be sold

(label C). The final furniture products are then sold to the informal showrooms (label D), which then sell the products to individuals, companies or formal furniture stores (label E). Figure 6.7 illustrates how the product moves from one enterprise to another, and given the product is furniture, it makes sense that the enterprises are located close to one another. This would explain the patterns seen in the spatial analysis of Keko. The interviews determined that the businesses established for longer had achieved a more accessible location on Chang'ombe Road or an upgraded internal street, either because the area was less developed when they first started or that their profits have allowed them to move into more expensive premises. In contrast newer businesses were located in cheaper premises with poorer accessibility in the interior of the settlement. As a result of locating in close proximity to one another, there is a more dispersed spatial pattern, but there is still an evident clustering of the furniture sector.

Figure 6.7: Illustration of an Economic Network and Value Chain in Keko



Key: A = wood suppliers; B = carpenter; C = upholstery; D = informal showroom; E = formal furniture shop

Source: Esri 2009 "World Street Map"; University of Dar es Salaam

Manzese

Based on analysis of the qualitative data, the clustered spatial patterns found in Manzese were more likely to be linked to the value chains associated with the clothing industry. The value chains found in Manzese are similar to those seen in Keko, and a typical route of an internal value chain in Manzese is shown in Figure 6.8. The suppliers sell fabric, cobbler, or tailor supplies (label A) to craftsmen or tailors (label B), who in turn sell their goods to individuals or larger clothing stores in the area (label C). The craftsmen or tailors might also sell their goods to the *wachinga* (label D), who sell the goods on the street. In some cases, as with Interviewees D and E, the *wachinga* will form social connections with cobblers or tailors and will take the clothing on credit to sell on the street. At the end of the day, they will share the profits of sales with the cobblers or tailors and return the goods they were unable to sell. Other entrepreneurs, both *wachinga* and established vendors, buy used clothes from Kariakoo, the largest shopping area in the city centre, and a centre for imports and money-lending, and bring them back to the tailors to be adjusted or repaired and then sell the clothes on the streets. These on-going relations indicate a strong trust between the seller and the vendor, which also perhaps solidify the EAH over time and reproduce a particular social network between vendors and sellers.

Figure 6.8: Illustration of an Economic Network and Value Chain in Manzese



Key: A = fabric suppliers; B = tailor; C = clothing vendor; D = *wachinga*

Source: Esri 2009 "World Street Map"; University of Dar es Salaam

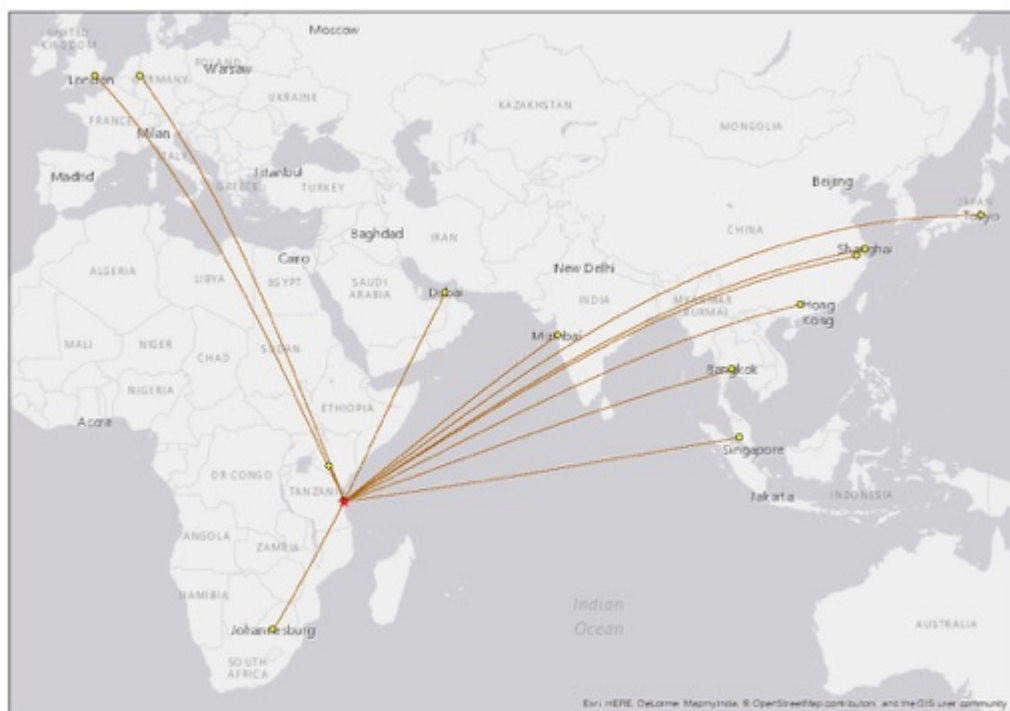
The levels of income, as well as what is being sold by the different enterprises in the value chain explain the cluster patterns found in Manzese. The cobblers and tailors earn the least amount of money with none earning more than 50,000 TZS per day. Even the *wachinga* reported earning more than this on average, but as cobblers and tailors sell to clothing stores, their proximity to those stores are the important locational factor. The clothing and *kanga* stores earn the highest income, which seems to enable them to afford prime locations near *dala dala* stops and the market. These locations provide them access to their primary customers – external customers – the majority of whom are likely drawn by the local market or the commuter hub. Based on the number of respondents who explained that they chose to operate in the area because it is a specialised industrial centre, the clustering of shops is more likely because they have been drawn by the success of existing businesses. This would also explain the high number of respondents who stated that competition is a common problem in the area.

It appears from this analysis that the nature of the EAH is only partly constituted by the economic and social connections or the specialised industries that make up the clusters. The physical characteristics of the item being sold, and the economic sector, make a crucial difference to the nature of that network. Furniture cannot be physically lifted around the streets, while clothing and shoes can. This allows the network at Manzese to expand much further on the ground through individual *wachinga* who can sell the products to those people in cars, further down the streets or in other areas, and perhaps create a denser web of connections across a wider area. This could explain the increased and more complex clustering of sub-classed enterprises visible in Manzese, while Keko is clustered around the basic business sector of furniture. For example, the cobblers and tailors, while still located in close proximity to clothing stores, do not need to be as near because the products are not as cumbersome as a piece of furniture. The combination of these factors has resulted in different visible spatial patterns in Manzese compared to those in Keko.

6.4.2. The Global Reach of EAHs

An important aspect of EAHs discovered through the research is their connection to the urban and global economy, which defines them as an agglomeration economy, but one that the regulatory environment simply does not accommodate. In both Keko and Manzese, it became apparent that the EAHs were part of a much larger economic network, which spread out into the wider urban and global economy. These networks include both formal and informal enterprises. The majority of material supplier enterprises, e.g. fabric, wood, etc., in both case studies obtained their goods from Kariakoo or elsewhere. In Manzese, many of the *wachinga* also obtained clothes or items to sell from Kariakoo. In order to better understand the flow of goods and the global connections these EAHs may have, 22 open-ended interviews were undertaken with formal and informal entrepreneurs in Kariakoo. Entrepreneurs were asked where their goods came from and if they knew where the goods end up – particularly if entrepreneurs from Keko and Manzese purchase goods from them. Following these interviews, some of the global supply chains were mapped out, as illustrated in Figure 6.9. The map illustrates the known locations of the product sources provided by the entrepreneurs in Kariakoo.

Figure 6.9: Global Connections



Source: Esri 2011 "World Light Grey Base"

The map clearly indicates that these EAHs are part of a much larger global network. By entering the locations of product sources into a database and then uploading the database into ArcGIS, the programme was able to provide a visual representation of the global networks of which these EAHs form part. Common places to obtain supplies included China, Dubai, and India, though there were many others, as illustrated in Figure 6.9. Several of those interviewed in Kariakoo indicated that they themselves went to places like China and India to buy supplies and then bring them back to sell. Many businesses will join together to send one person to another country to bring back goods for multiple businesses. These sorts of connections save them time and money, and by going to the countries themselves, they are able to ensure quality control and pay less for the goods than they would buying them at the docks from Chinese or Indian companies, as was suggested in the research done by Lyons et al. regarding African traders in Guangzhou (Lyons et al 2008).

Unfortunately, those interviewed in Kariakoo were much more suspicious and less open in their responses than in Manzese and Keko. While they were willing to disclose the country of origin of the goods, they were not willing to discuss how the connections were formed. Future research could examine how they learned about particular suppliers and how the connections are formed, as this could be knowledge that is passed around within the EAHs and another part of the process that binds them together.

6.5. Policy and Business Challenges

The policy context in which EAHs operate is quite poorly attuned to their needs. Policy agendas such as formalisation and extending the tax base, and the problem of corruption particularly amongst local enforcement officers, affect enterprises within EAHs by hindering their opportunities for growth. Urban planning policies do not take into account micro-enterprises or consider the importance of the EAHs in providing a securer livelihood to thousands of people. In addition, businesses face challenges such as lack of infrastructure or even basic services such as electricity or water. By examining the policies and other challenges faced by micro-entrepreneurs, the

research improves the understanding of the IE and EAHs, potentially adding to future recommendations based on the research findings.

Throughout the interview process, the 77 micro-entrepreneurs were asked about potential problems they faced, e.g. flooding, crime, waste disposal, etc., discussed in Section 6.5.2 below (see also Appendix 5). Entrepreneurs were also asked about policies or regulations that affect their business and any effects of upgrading – good or bad – and any upgrading they would like to see in order to improve their business. As discussed in Section 3.5.2, the municipal government, and various DSM CC officials were interviewed in order to examine existing policies and views of the informal sector and the settlements, Keko and Manzese, in particular (see Appendices 4 and 6). The government officials were interviewed after other interviews had taken place to ask about specific problems raised by entrepreneurs such as lack of basic services and the impact of policies such as upgrading or taxation of businesses without a license. This section examines the results of those interviews to better understand current policies and challenges faced by micro-enterprises within EAHs. The first section examines the policies and challenges from a citywide perspective while the second section examines these policies and challenges from the settlement level to provide more detailed information for the case studies.

6.5.1. The Role of EAHs Within the City of Dar es Salaam

Analysis of the interviews of both municipal government and DSM CC officials, as well as an examination of the existing policies (see Section 4.4.2) found that planning and economic policies follow the traditional Western approach towards informal settlements and informality. Policies such as business formalisation (recognition, registration and taxation of businesses) and property regularisation (mapping, titling and taxing property, and provision of basic services) are pursued in an effort to reduce informality and unplanned development, and increase tax revenue.

The formalisation approach in Dar es Salaam includes both the provision of infrastructure including drainage, as many of the areas are low-lying and liable to

flooding, electricity, improved water supplies and road surfacing. According to the MKURABITA informant, the people living and working within the settlements desire formalisation and regulation in order to increase their income and improve their livelihoods. “The IE does contribute to the overall economy, but very little...people need the right of occupancy to get loans and access to tenure...to expand their business, and contribute to the overall economy” (MG2 2015). However, there are many impediments and bureaucratic legal procedures that prevent formalisation (Msoka and Ackson 2017).

Formalisation reforms proposed by MKURABITA have not been implemented because Tanzania does not have a single unified legal framework regarding the IE, making compliance by the working poor difficult (Msoka and Ackson 2017). The existing legal framework regarding street vendors and other informal activity actually defies the provisions of the constitution, which protect the right to work, own property, and protects such property (Msoka and Ackson 2017). The laws regarding the right to occupation and access to land are also contradictory. The Land Act advocates the importance of giving the right to access land to all citizens; however, municipal regulations inhibit access to land as permits and licenses are required for any person to use land, which are difficult for the working poor to obtain (Msoka and Ackson 2017). Therefore, the municipal laws do not accommodate the working poor, but marginalise them and reforms are necessary to rectify the current legislation.

According to the MKURABITA representative interviewed, the settlements continue to grow, and in parallel efforts continue to try and reduce informality by providing easy ways to formalise, but the process is very expensive (MG2 2015). It costs up to 2 billion USD to formalise a settlement the size of Hanna Nassif (MG2 2015). This is relevant to EAHs because the existing formalisation process seeks to recognise and document land tenure within the settlements. Given the cost and timely process of formalisation, regularisation, or titling of property, and provision of basic infrastructure, this approach does not seem like an effective solution to reducing informality or informal settlement growth. During the interview process, the DSM CC officials were asked if the LGA might be helpful in the formalisation process,

however, the interviewees all responded that the LGA staff do not have the required education or training in regulation or development policies to improve the efficiency of the process (MG1; MG2; MG3). The primary role of the LGA in formalisation or regularisation is to act as an intermediary between the government and the community.

Neither land-tenure formalisation nor regularisation takes businesses into consideration in the process, although business licensing is another strand of the programme. According to the MKURABITA official, it is possible to formalise the entire city but it will be slow and needs to be well-planned and researched in advance (MG2 2015). However, based on the current process, it does not appear that research has been performed in either settlement as it does not take into account the importance of an economy that provides income opportunities to thousands of people both living in the settlement and other parts of the city. Keko has not been formalised but the Ministry of Lands, Housing and Human Settlements Development (MLHSD) provided infrastructure resources and residential licenses (short-term license agreements used in informal settlements) in Manzese (MG1 2015) and the CIUP has done upgrading in both Keko and Manzese (MG3 2015). Overall, a lack of resources and funding make regularisation, formalisation, and upgrading difficult to implement in Dar es Salaam.

While the analysis has shown that centrally located urban settlements would benefit the overall economy a great deal, by allowing centrally located businesses to remain connected to markets and suppliers, both the National Land Policy of 1995 and the Land Act of 1999 focus upgrading initiatives in peri-urban areas (MG2 2015, MG1 2015, MG3 2015). These areas are formalised, regularised, or upgraded as a way to prevent further informal settlements. “It is much easier to address the problems before they happen rather than after” (MG2 2015). In addition, because peri-urban settlements are less dense, they are easier to control and regulate (MG1 2015). Despite this focus on peri-urban settlements, according to the City Council representative, there are already policies in process to redevelop both Manzese and Keko (MG3 2015), as outlined below.

Redevelopment Proposals in Manzese and Keko

The EAHs and industrial activities within Manzese and Keko have greatly increased the economic opportunities within the settlements, increasing the value of the land, which seems to be another feature of EAHs, thus exacerbating the risk of gentrification or redevelopment. As a result, the government has taken notice of the areas and redevelopment plans have been considered for both areas. In Manzese, there is currently a plan being developed that would see the building of high-rise buildings with residences on the upper floors and shops for businesses on the lower floors (MG3 2015). Keko is also under consideration for redevelopment but it is not as prioritised as Manzese due to the lower land values (MG3 2015). Interviews held with officials in the DSM CC provided more insight into these plans. This section will briefly examine the redevelopment being considered.

According to a principal town planner of DSM CC, there is already a plan in place to redevelop both of these areas:

“Manzese is prime land so there is already a policy in process to redevelop the area. The area has much gentrification going on so the land needs to be used more efficiently – possibly building high rises for the families with businesses and shops on the lower floors. The people will have to be relocated though, so the policy is still being developed. Keko will also be redeveloped and the furniture businesses will need to be relocated to an area nearby that can be better organised.” (MG1 2015).

There is an interesting positioning of informal businesses and existing markets as ‘ineffective’ as opposed to ‘using the land more efficiently’. This concept and the argument that businesses need to be ‘better organised’, suggesting that existing businesses are ‘dis-organised’, paints a picture of the current agglomerations as disorganised and ineffective, when in fact the research suggests that they are highly organised and effective. The point about moving them to ‘an area nearby’ is unspecific and seems a very offhand remark, illustrating a lack of understanding of the importance of location for the economic success of the EAH. This view is clearly

expressed with little understanding of the complex economic functions and linkages in areas such as Manzese and Keko, and the impact on livelihoods and local economic development that redevelopment may have.

An interview with a MKURABITA official indicated that the government would like to transform these micro-enterprises into second or third-tier businesses. According to the interviewee, the government is actively promoting research to examine ways of formalising these enterprises and expanding economic development and growth for the entire city (MG2 2015). “Without study, there can be no improvement as there is no way to know what the problems are or if there are any concerns that need to be acted on” (MG2 2015). This response highlights the government’s desire to formalise the sector, as a way of increasing control and raising revenue, incidentally boosting business, but with some sympathy for the needs of micro-enterprises.

According to the DSM CC, the upgrading will require relocation (MG3 2015), though this approach is probably driven by land value capture than a desire for upgrading as upgrades have been performed without relocation in other settlements. Based on the description of the redevelopment plan given by the DSM CC, it does not appear that the council or municipal government has considered the needs of the residents or entrepreneurs within the settlements. The economic agglomerations occurring within the settlements, and the complex economic and social processes that result in the formation and sustaining of these agglomerations seem to have been largely overlooked as well as the extent of disruption that would result from relocation. In addition, it does not seem that the redevelopment plan will promote micro-enterprises, or provide for the needs of the existing residents of the settlement, as it seems unlikely either will be able to afford land prices within the areas following the redevelopment.

This once again comes back to the issue of displacement from central locations, negatively affecting the economic success of informal and micro-enterprises currently operating within the informal settlements (Bromley and Mackie 2009; Bromley 1998; Donovan 2008; Mackie, Bromley and Brown 2014), but also to the

wider issue that disruption affects the viability of both individual enterprises and the economic and socio-cultural networks of which they form part. Rather than displacing these entrepreneurs, the spatial analysis has indicated that upgrading the area with new roadways and providing basic improvements such as electricity and water would potentially assist in economic development and growth in low-income areas. Therefore, a better understanding of the needs and existing economic activities within these informal settlements would provide a better indication of how to best redevelop these areas to promote economic development and growth.

6.5.2. The Potential of EAHs Within Settlements

The analysis of the interviews highlighted several key issues for entrepreneurs in both Keko and Manzese in relation to policies and other challenges, particularly lack of services or infrastructure that affect their enterprises and livelihoods. These key issues consisted of: access to basic services, regulation concerns, regulation barriers in obtaining a license, and lack of access to credit. The spatial analysis found that these issues may affect the spatial patterns within EAHs, and the qualitative analysis found that they affect their development and operations. Therefore, these issues are important to reflect for future policy and upgrading approaches as a way to improve the economic development of the settlements.

Upgrading Standards and Access to Basic Services

Lack of basic services and inadequate infrastructure are considered common characteristics of unplanned, or informal, settlements according to UN Habitat (2003), as discussed in Section 2.4.1. The same characteristics were found to be true of both Keko and Manzese during the research and act as challenges to the micro-enterprises operating within them. The main issues that were brought up during the interview process with entrepreneurs regarding services and infrastructure included: waste collection, or not collecting waste in a timely manner if at all; lack of electricity or irregular supplies due to load shedding, which makes timely delivery of goods difficult – e.g. for tailors or carpenters; roadway condition, e.g. potholes, too small or poor to drive on; crime and theft; regular flooding; drainage – insufficient drains to

collect water during flooding; and access to clean water, though this was only mentioned in Manzese. These challenges have been listed in Table 6.7 below. The percentages are based on the number of times each concern was raised by a respondent as interviewees often mentioned more than one issue that affected their business. As the table indicates, challenges such as crime, flooding, and drainage were relatively similar in terms of percentage of respondents who discussed them in both Keko and Manzese. Waste collection was more commonly mentioned in Manzese, at 23%, but this could be because the settlement is larger and produces more waste in general. Lack of electricity was a particular concern in Keko at 33%, which is likely due to the nature of the businesses operating within it as industries like carpentry require electric tools to be completed efficiently. The responses regarding roadways could be higher in Keko (11%) for a similar reason as furniture is heavier than clothing products and access to transport is useful for moving products. Lack of water was only mentioned in Manzese, which is surprising as the researcher would have expected this to be one of the first objectives of the CIUP upgrading project, as discussed in Section 4.4.1. These issues are discussed in greater detail below.

Table 6.7: Business Challenges in Keko and Manzese

KEY ISSUES	KEKO	MANZESE
Waste Collection	15%	23%
Lack of Electricity	33%	16%
Roadways	11%	1%
Crime	16%	11%
Flooding	6%	6%
Drainage	19%	18%
Water	0%	25%

Both Keko and Manzese experienced some upgrading as a result of the CIUP, as discussed in Section 4.4.1. According to a DSM CC official interviewed, the upgrading consisted of road improvement, the installation of drains – though not all could be covered, as it is expensive – streetlights, bridges, public toilets, solid waste containers – e.g. waste collection sites – and in the case of Manzese the awarding of residential licenses (MG3 2015). In some cases, demolishing of buildings and resulting relocation was necessary but it was kept to a minimum because relocation

is a very expensive process (MG3 2015). According to CIUP coordinator, the CIUP did provide access to services, e.g. water and electricity, as part of the upgrading programme but after the projects are over various city offices are responsible for further services and maintenance of infrastructure (MG3 2015). “Following the CIUP upgrading the settlements changed – there was a reduction in crime, the area was cleaner, people wanted to be there, and the value of land and houses went up” (MG3 2015). The upgrading does not include the MKURABITA agenda of business formalisation, although according to the MKURABITA official, the CIUP upgrading of infrastructure does give way to business formalisation, as it is necessary for an informal settlement to be regularised in order to obtain a land title, which is in turn necessary for a business license (MG2 2015).

Improvement of access to basic services was a key issue brought up by almost every entrepreneur interviewed. Common complaints for both settlements included: roadways, which were too narrow for cars to use for easy transportation of goods and far below common standards, e.g. with potholes, with semi-permanent surfaces rather than asphalt, etc.; drainage ditches, which were too shallow and full of waste, resulting in flooding were built right in front of shops or houses, often without any way to get across so residents and entrepreneurs use plywood boards or other materials to get across; and waste collection, which did not occur regularly.

The problem of waste collection was of particular note as it was discovered that waste collectors would often miss collection times, allowing the trash to pile up for weeks or even longer. In Keko, there was a waste pile the size of a small house near the road that people had to walk through in order to reach the covered market. In addition, the entrepreneurs were charged various prices for municipal waste collection services, despite having similar enterprises, and therefore, likely to have similar amounts of waste production. The inconsistency in pricing exposes a probable exploitation within the waste disposal service. Therefore, potential corruption within the waste collection system is something that needs to be examined by the government of Dar es Salaam.

The questionnaire also asked about flooding and crime, but surprisingly these were not mentioned often as a problem for enterprises. Some like Interviewee C (a carpenter in Keko) did mention that crimes, mostly theft, do occur occasionally, such as 'stealing furniture or equipment' (Interviewee C 2015). However, when asked about the level of crime within the settlement, the majority of respondents claimed that the ties within the community often help prevent crime. Similarly, when asked about flooding, respondents would explain that, while flooding does occur and often spills onto the roads as a result of the poor drainage system, it is not considered a problem. This is probably due to the experience of having dealt with flooding every year during the rainy season. As long as it does not significantly affect the enterprise or income earning potential, it is not a serious problem.

Lack of electricity was one of the most frequently mentioned problems in Keko, though it was also mentioned in Manzese to a lesser degree. According to the entrepreneurs, electricity is not available all the time as suppliers in Dar es Salaam practice load shedding, where certain areas have electricity at certain times in rotation. For carpenters and welders who use electricity in their trade, this greatly affects the amount of time they can work and the amount of work they can accomplish in one day. Some have access to generators but as these are expensive, many cannot afford them. In Manzese this can also be a concern for tailors who need the electricity to run sewing machines, but for the majority of enterprises, e.g. fabric stores and cobblers, this was not a primary concern as it does not affect their business.

The most common concern raised in Manzese was access to water. This was an unexpected response as access to water should have been a key part of any upgrading programme and the CIUP has initiated upgrading projects in both Keko and Manzese. According to the entrepreneurs, they have to purchase water from vendors who drive through the settlement once or twice a week. Water purchased in small quantities is often more expensive than piped water, and so large portions of business earnings go towards a basic service. Access to water is a concern that should

be immediately addressed by the City Government and considered in any future upgrading programme or policy.

The separation of business activities from other land use was not an intention of the CIUP programme, but started to become evident after the upgrading project was complete. According to the DSM CC, businesses began to appear following the roads because the number and quality of the roadways increased (MG3 2015). This also increased the value of land, drawing in more formal enterprises and causing property owners to rent out their property (MG3 2015). Many residents within the settlements began to upgrade their houses themselves in order to increase the value and rent them out. The DSM CC believes that these areas will continue to change gradually and increasingly become commercial and industrial. This change and development suggests that upgrading can actually stimulate the formation of an EAH as it increases the clustering of businesses, but it has also resulted in the emergence of redevelopment policies for Keko and Manzese which are likely to adversely affect the EAHs in these two settlements, and a level of gentrification as rents may increase and lower-income businesses are squeezed out.

Financial and Regulatory Barriers to Formalisation

The literature review examined various explanations as to why informal enterprises do not formalise, such as: regulatory barriers (de Soto 1989, 1991), ease of entry and flexibility (Roberts in Portes et al. 1989), and avoidance of taxation and regulation (Chen 2012). The qualitative analysis has indicated that it is a combination of different factors that prevent formalisation, with financial and regulatory barriers being a key component. Interviews with local entrepreneurs have provided evidence that taxation is not a crucial issue, especially since many of entrepreneurs are taxed anyway, as discussed in more detail in Section 6.5.3. However, despite these findings, formalisation is seen as the primary goal of the DSM CC. This section will examine the financial and regulatory barriers micro-enterprises face in the formalisation process.

i. Licensing for entrepreneurs

The large number of informal businesses operating within the EAHs made it possible to examine the relevance of the theories behind informality explored in Sections 2.2.1 in a real-world context. During the interview process, entrepreneurs were asked if they had a license, and if not, why not. According to the findings, 63.6% of respondents in Keko claimed to have a license, though this could have been inaccurate, as people may have been very hesitant to respond openly. In Manzese, only 29.5% of the respondents claimed to have a valid business license. It may be that those operating in Manzese are more open about not having an official business license because they are more accustomed to this type of research and questioning. As discussed in Chapter 3, it became clear during the interviews that many had been interviewed before about informality within the area. Therefore, they may have been less concerned about potential repercussions for answering honestly, while those operating in Keko had not been involved in academic research, making them more wary when answering interview questions. When asked why the entrepreneurs did not have a license, there were a variety of reasons. These were open-ended questions, which were relatively straightforward to group together, as illustrated in Table 6.8

Table 6.8: Reasons for not having a business license

REASONING	KEKO	MANZESE
Time	30%	8.1%
Cost	25%	16.2%
Regulation Barriers	20%	13.5%
Land Use	20%	29.7%
Not Necessary	0%	5.4%
Taxes	0%	5.4%
Other	5%	21.6%

Common reasons given for not having a business license included: the time involved to obtain a license; the cost; difficulties involved with municipal regulations; lack of cooperation from the municipal offices, and the inability to obtain a license due to land use classification – the land use zoning defined by the city of Dar es Salaam being defined as residential. Land use was a particular problem in Manzese, where a large number of *wachinga* operate in public spaces. ‘Other’ refers to responses such

as 'in the process of getting a license' or 'my license has expired'; however, none of these people were able to produce a license, expired or not, suggesting again that they were not willing to respond openly.

An unexpected response to this question in Manzese was that a license was simply not necessary. It was discovered upon further investigation that the local authority taxes many informal businesses that do not have a license. When asked about this, an official at the MKURABITA government formalisation program (Section 4.4.2) explained, "informal businesses can be taxed at the *mtaa* level, but because they are not formal, they do not know their daily income so it is difficult to know the amount they should be taxed. Therefore, it is not really proper to tax them even though they are taxed" (MG2 2015).

Traditional theorists argued that entrepreneurs operated informally as a way of avoiding taxation but that is clearly not the case in Dar es Salaam. This knowledge creates an entirely new perspective regarding the operations of EAHs as an alternative economy that is not driven by avoidance of regulations or as a result of regulation barriers, as suggested by Cross's postmodernist theory of the IE (Cross and Morales 2007). Municipal governments tax these businesses, despite their lack of a business license, yet businesses still cannot get loans and are often shut down by tax collectors if they have not paid, as discussed in more detail in Section 6.5.3. As businesses are already being taxed, it would seem that a new pluralist perspective, promoting an understanding and acceptance of informality, or staged approaches to formality, would be the logical way of gradually integrating unlicensed businesses and promoting overall economic growth for informal settlements, as they provide an important source of livelihoods that the formal sector cannot match.

The reasons given for not having a license suggest that, despite the advantages of self-employment and a positive choice of livelihood, one of the main reasons for operating informally is the difficulty in obtaining a license. These responses do support de Soto's legalist theory of excessive government regulations and costs (de Soto 1989) as a potential reason why people work in the informal economy, but the

reality proves to be much more complex, as lack of employment and education are often the rationale behind employment choice in these environments. Thus it appears that the drivers of informality within EAHs cannot be simplified into a single theoretical perspective. Analysis of the findings indicates that flexibility and self-employment are also drivers within these EAHs as promoted by the structuralist and postmodernist theories. Therefore, a new conceptualisation of informality is needed to properly understand the drivers and operations of informality in informal settlements, particularly where businesses are linked to EAHs, as discussed further in Chapter 7. By better understanding the informal economy, new solutions and ideas can be examined in an effort to increase profitability and development within informal settlements.

ii. The response of municipal government

The interviews with municipal government officials and *mtaa* offices found that these officials had an unsympathetic attitude towards unlicensed micro-enterprises operating within the settlements. Of the eight LGA staff who were interviewed, all of them agreed that the entrepreneurs should formalise. The reasons behind this varied, but most argued that it was for their own benefit. “When businesses are formalised, they have more opportunities to expand and increase their income as well as provide security” (MMC 2015). A few were less sympathetic, particularly in Manzese where the *wachinga* are more prevalent. One *mtaa* Executive Officer simply stated that the enterprises “should be formalised and these businesses are not ok” (MMEO1 2015). According to this executive officer, these enterprises do not pay taxes and draw too many people to the area, creating waste in residential areas (MMEO1 2015). The other three LGA staff interviewed in Manzese were more concerned with taxing these enterprises in order to improve the economic conditions of the entire settlement.

Given the attitudes of the municipal government and DSM CC towards the importance of formalising these enterprises, it is reasonable to assume that the formalisation process could be relatively simple and straightforward. According to

the MKURABITA representative, the formalisation process used to be too long and difficult, and there was a lot of corruption, which is why people did not want to formalise; however there are efforts to try and improve the process to get a license (MG2 2015). “BRELA, the office that registers businesses, has tried to greatly improve the ease and access of getting a license” (MG2 2015). The LGA gave similar responses, arguing that the process is not difficult or time consuming. One *mtaa* executive officer in Manzese stated, “it is not a long process – they just don’t want to pay taxes” (MMEO1 2015). Various lengths of time were given for the registration process – anywhere from 3 days (MWEO 2015) to a couple of weeks (KMC1 2015). Yet, a few LGA staff did mention a difficulty for many entrepreneurs is the stipulation that they must already have a store location and have worked in the said location for 6 months (KWEO 2015; MMC 2015; MMEO1 2015). Given this stipulation, as well as the income levels of many entrepreneurs within the settlements, this seems an unreasonable request for obtaining a business license in the overall effort to formalise enterprise in Dar es Salaam.

There is also the stipulation that a land title is necessary to obtain a business license, as mentioned previously. Given the number of entrepreneurs who rent their property in the case studies, it is probable that the market demand for space to run a business would lead to a desire for land titles by local residents as well as upgrading to increase property value as a way to supplement their own income by renting out space within their property to the micro-enterprises. Further research would be needed to confirm this but existing literature suggests that titling programmes have actually decreased tenure security in countries such as Afghanistan, Cambodia, Egypt, India and Rwanda because the titling is more likely to benefit the ‘slumlords’ while slum renters often suffer from evictions or increased rents (Marx et al. 2013).

The analysis of the interviews with local entrepreneurs (see Section 6.2.1) illustrated that obtaining a business license is very costly and time consuming. For example, Interviewee C (2015) argued that the officers do not do their jobs and waste their time. Most said it was too expensive to obtain a license. According to the MLHSD, there are several financial institutions the people can go to for funding, including: Dar

es Salaam (DSM) Community Bank, which formed an association with the LGA to provide funding for associations of women and children; Pride Tanzania and other microfinance organisations, and NMB, which provides funding for micro-enterprises (MG1 2015). These financial institutions sponsor some micro-enterprises, and programmes like MKURABITA aim to assist entrepreneurs in the process by offering training to help them improve their business in order to formalise later (MG2 2015). The problem is the lack of collateral (MG1 2015). “In order to get a loan they need to form an association to prevent default...and many people are afraid to take a loan as it is not in the local culture to trust the loan process or funding from the government” (MG1 2015).

According to the municipal government and DSM CC officials, formalisation is the primary goal of economic development of Dar es Salaam. A municipal government interviewee’s answer was typical of the officials interviewed: “People would rather be formal – the informal sector does not pay very much and the demand for land titles is very high, indicating things are changing and people want to formalise” (MG2 2015). However, the analysis of the questionnaires with entrepreneurs does not confirm this comment and indicates a significant misunderstanding of informality. Many of the entrepreneurs would prefer to have a business license, simply to avoid issues with policy enforcement agents, e.g. bribery from government officials, and closure by tax collectors. There is no evidence from the research that the current formalisation approach has in any way assisted the entrepreneurs within the settlements, indicating that the existing literature arguing that existing formalisation policies exclude the working poor and work against their interests ((Brown et al 2010; Lyons and Msoka 2010) may be correct.

6.5.3. Regulation and Corruption

The analysis of responses from LGA interviewees about the policies and procedures regarding informal settlements and their operation is concerning. Analysis of the eight LGA respondents indicates an unsympathetic attitude towards those working and residing within Keko and Manzese. In addition, the officials interviewed

acknowledged corruption within the municipal government and various DSM CC offices, though the extent of corruption would require further research. It was noted by one key informant that it is difficult to discuss corruption within the government (MG1 2015). “It does happen but it is not recognised by the municipality” (MG1 2015). The policy responses and regulatory structure does not affect the spatial distribution of EAHs; however, it would affect their operations, as well as their views on policy responses such as formalisation, and may result in a strong mistrust of the government.

In an effort to determine the level of corruption that entrepreneurs must contend with (if any) and how it affects their enterprise, the 77 people interviewed were asked about any policies or regulations that affect their business, e.g. tax collection, relocation, removal, etc. The majority of entrepreneurs did not have many complaints other than with tax collectors. Several responded that the tax collectors would often shut down the business until they could pay the taxes. For example, Interviewee C (2015) stated, “paying taxes is a problem when we don’t make enough income...the tax collectors will shut down the business until we pay.” These responses were unexpected and led to the question of how an unlicensed enterprise can pay taxes if the reason for their not having a license is that ‘they do not want to pay taxes,’ as argued by one of the *mtaa* Executive Officers interviewed (MMEO1 2015).

While interviewees were not specifically asked if they pay taxes, they were asked if they have any regulation-related issues, including taxes. Analysis of interviews indicates that over 45% of the 33 interviewees in Keko do not have a license but have problems with tax collectors or taxes in general suggesting that they are paying taxes, while 32% of the 44 interviewees in Manzese do not have a license and have issues with tax collectors or taxes, illustrated in Table 6.9 below. Some enterprises who said they were licensed and still had concerns with tax collectors or high tax levels, and have also been included in the Table.

Table 6.9: Percentage of Enterprises Licensed/Unlicensed and Percentages of each with Taxation Issues

	KEKO	MANZESE
Percentage Enterprises Licensed	67%	30%
Licensed with Taxation Issues	23%	8%
Percentage Enterprises Unlicensed	33%	70%
Unlicensed with Taxation Issues	45%	32%

It was unclear from the interviews as to what these taxes pertained, as some respondents claimed it was the Tanzanian Revenue Authority (TRA) and others claimed it was a municipality tax. This raised concerns as to who was actually receiving the taxes collected, given the discrepancy in the LGA responses regarding avoidance of taxation and regulation. To find an answer, key informants from the MLHSD and MKURABITA were asked to clarify the findings. As discussed in section 6.5.2, the informant from MKURABITA explained that informal businesses can be taxed at the *mtaa* level, but because their income is not fixed, it is not really appropriate for them to be taxed as there is no way to know the amount they should be taxed (MG2 2015). The MLHSD ministry official responded that those without licenses can pay taxes but it would depend on the size of the business (MG1 2015). “The *wachinga* pay a minimum fee that would cover security, waste collection, street taxes, etc.” (MG1 2015). Given the acceptance of taxing those without a license by the City and Ministry offices, the LGA’s response regarding lack of taxation is disconcerting and requires further research.

The questionable nature of taxing unlicensed enterprises was not the only concern that emerged from the analysis. A few respondents claimed that bribery was considered a normal part of doing business. One wood supplier in Keko explained, “We have to pay bribes to TRA collectors here, and pay government officials or police along the roads when we transport the wood here. We pay anywhere up to 500,000 TZS in bribes each time” (2015). On top of which, the wood supplier has a business license, indicating it is not only the informal enterprises that suffer as a result of this corruption. Out of the 77 people interviewed, slightly less than 10% claimed that they had to pay bribes in order to operate their enterprise. This corruption has probably created a deep sense of distrust among the community towards the government, resulting in their desire to operate outside of the formal system.

Removal and Relocation

Policy responses towards the *wachinga* were more severe than towards the established enterprises. While the established enterprises have difficulties with tax collectors, bribery, and occasionally being relocated for upgrading projects, the *wachinga* are often removed forcibly and even violently on some occasions. Of the eleven *wachinga* interviewed, eight, including Interviewee B (2015), claimed they had been forcibly removed on more than one occasion. It was difficult to get the *wachinga* to discuss problems they have had with the government, probably out of fear of repercussions. Those who eventually did open up gave accounts of government employees and police coming multiple times a year to destroy their stalls and take their products. In Section 6.3.2, Interviewee B (2015) was quoted in his description of the events.

In order to assess the government's views on such removal, the interviews asked them their opinions of forced removal and destruction of property. The Ministry and City officials had little to say on the matter – just that those who are forcibly removed are moved to another area (MG1 2015). The LGA all explained that the demolition of stalls was a good method of removing them; however, several stated that they “need to compensate them and find a place for them to move” (MMC 2015). This response was surprising given their opinions on the importance of formalisation and that none of the *wachinga* interviewed who had been relocated were given new places to operate or compensated for the earnings they lost.

There has been one significant attempt at relocation of *wachinga*. The DSM City Council developed the Machinga (hawker) Complex, a building created by DSM CC to act as a *wachinga* market, in an effort to reduce on-street trading. Built in 2010 to accommodate around 5,000 street traders and hawkers, the aim was to create a place where street traders could sell their goods in a safe environment where they could be regulated and taxed. However, with no passing pedestrian trade the Machinga Complex failed as the *wachinga* soon began selling their goods on the streets again, and leaving the 6-storey building largely unoccupied since it was

completed. “The problem is that businesses want to be located in areas with high traffic and areas that are well known” (MG2 2015). According to a few *wachinga* who operate within the complex, the customers do not go into the complex, and if they do, they only stay on the lower floors. The area chosen for the complex is not an area easily accessed by customers as busy roadways surround it, nor is it in an area with a large amount of commercial activity. In addition, the area needs to be upgraded, as it currently looks more like a parking garage than a shopping centre. Therefore, it was surprising when a number of entrepreneurs, particularly the *wachinga* in Manzese like Interviewee B (2015), said that they would like the government to build them a market near Manzese to sell their goods. According to the City Council, Manzese is one of the places the government has considered for building a market like the Machinga Complex due to the large number of businesses, but other factors, e.g. cost and ease of access, must also be considered (MG3 2015).

6.6. Concluding Remarks

Certain low-income and informally developed areas develop extensive specialist economies, referred to here as EAHs. The combination of spatial and qualitative analysis makes this research unique and has resulted in several findings regarding these specialist economies that had not been examined in existing literature. The findings have determined the characteristics that comprise an EAH.

EAHs can be characterised as a large cluster of micro- and small-scale enterprises with a wide range of specialisms operating within a particular sector. Characteristics of the EAHs studied in Dar es Salaam included a significant proportion of entrepreneurs in a sector renting as this suggests that their profits are sufficient to cover both the rent and operating costs. The research has found that, in addition to conventional economic linkages of EAHs, there are complex social patterns that enable the agglomeration to both create market share and provide more security for their workers. These networks form an economy in which solidarity is crucial for its operation and success. This section will examine these characteristics of EAHs that

have been distinguished within the research and provide conclusions based on the qualitative analysis.

Low-income settlements like Keko and Manzese draw in micro-enterprises as a result of the successful agglomeration processes occurring within them. The range of businesses that operate within this sector is complex – e.g. the furniture industry in Keko consists of carpenters, painters, formal and informal furniture stores, upholsterers etc. – and these businesses all work together to create a sustainable economic network. The agglomeration processes are driven as a result of supply and demand, meeting a need wherever an opportunity is perceived.

With respect to entrepreneurs' choice of location, three patterns emerged from the findings: a) people who commute to an area to join an established EAH; b) people who lived in the area and started a business because of proximity to the EAH and worked from home; and c) people who started at home but whose business had grown so moved out to rent property nearby. The hub is sufficiently large to attract new specialist enterprises supplying different aspects of the manufacturing process to the area. It also attracts a commuter workforce which travels in from other areas. While the research was not able to establish the size of this commuter workforce, this is a phenomenon that has rarely been discussed in relation to low-income settlements. In addition, in the two hubs examined, the success of the hubs has attracted those living nearby to start up a business within the specialist sectors. Their success can be seen through their renting of nearby locations when their business becomes too large to be run from their homes, indicating that the EAH is successful as well.

Based on the qualitative analysis, it seems that the clusters seen in the spatial analysis were formed as a result of social and economic connections and networks within the EAH. Close proximity to other individuals with shared business interests results in the formation of new connections. The relationships formed between entrepreneurs encourage a certain internal coherence to EAHs as part of a process of stabilisation rather than formation. By locating in close proximity to one another,

entrepreneurs save on operating and transport costs and have access to important resources. The movement of goods, for example from the hardware store to the carpenter, to the finishing business and furniture showroom, reduces costs to all parties when they can avoid the need for transportation. Costs are then further reduced through social connections. All of these connections result in a sort of 'solidarity economy' in which elements such as trust, cooperation, and reciprocity are crucial for the operation and success of the EAH.

The research suggests that it is these connections that have created the shared economy that make up an EAH. EAHs provide a platform for people to work together and find ways to ensure that everyone earns a minimum income. The creation of social connections, such as sharing of workspace, tools and equipment, as well as customers, reduces individual costs and increases overall capital by working through commission for others. The clustering and linkages formed between businesses, while still creating a competitive atmosphere, ensures that local businesses can buy from others at a fair price, and the economic opportunities provide employment for apprenticeships and job training to those who did not receive an education. It also provides livelihood security by helping people if they are sick or unable to work, providing informal loans, goods on credit, and protection from external threats such as government intervention. The shared economy created through EAHs allows individual entrepreneurs to set up an enterprise, become established and accumulate while the agglomeration provides a regular flow of customers, all while providing a securer livelihood for thousands.

In terms of the informal nature of the businesses, it has become evident that the businesses developed for a variety of reasons. In many cases, the political and regulatory barriers mean that many businesses operate without a license; however, this does not appear to be a significant driver of EAHs, as there are both formal and informal enterprises operating within the agglomeration, with links to each other. Some businesses straddle the formal-informal divide, and some business owners may go from informal to formal or *vice-versa* within the same EAH. These EAHs are not simply the agglomeration of local businesses, but within the context of mixed-use

development have evolved specialist sectors exhibiting complex relationships between formal and informal business activities and the wider urban economy. For example, several of the formal furniture enterprises in Keko purchase goods from unlicensed carpenters or furniture showrooms. A similar pattern emerged in Manzese, where the *wachinga* and formal or informal clothing stores would purchase new fabric and *kanga* from the Urafiki textile factory, clothing made by the unlicensed tailors within the EAH, formal and informal stores in Kariakoo, and even some importers from China and India, while second-hand clothing was bought in Kariakoo and mended or altered by the tailors. These links can even be witnessed on a global scale in cases where buyers travel to China or India to purchase and import goods – some through formal means and others informally – and sell to unlicensed businesses in the EAHs. In this context, the nature of informality is difficult to conceptualise but based on the analysis it appears that degrees of informality encourage certain types of economic and social interactions to occur.

The analysis of interviews with key informants in the municipal government as well as entrepreneurs operating within Keko and Manzese provided insight as to current policy regulations and challenges faced by micro-enterprises and the implications these policies and challenges have for the EAH. Current challenges facing entrepreneurs include: access to basic services, regulation concerns, regulation barriers in obtaining a license, and lack of financial support or means. These challenges may affect the spatial patterns and formation of EAHs as upgrading could increase the clustering of businesses. In addition, they have a large impact on EAH development and operations, as lack of services and policy regulations can hinder daily operations, reducing income and having a negative impact on livelihoods. The current policies regarding formalisation do not take into account the context of many businesses operating within EAHs, or the importance of these agglomerations in providing livelihoods to thousands of people in Dar es Salaam. In fact if many formalisation policies were implemented they would possibly operate against the success of the EAH. There is a positive and negative quality of government/policy intervention. On the one hand, some infrastructure improvements that come with formalisation may enhance EAH function, even for informal enterprises. However, at

the same time, some aspects of formalisation, such as regulation and perhaps forced removal, may disrupt the functioning of an EAH by breaking up the complex linkages between businesses and individuals in the agglomeration.

The literature review found that policy responses towards street traders are largely negative, as illustrated in Bromley and Mackie's (2009) study of street traders in Peru. Similar responses and attitudes have been found in Dar es Salaam's EAHs. Regulatory barriers as well as infrastructure and legal challenges have created impediments for entrepreneurs, resulting in the growth of EAHs. Policy makers at times ignore the activities within EAHs, particularly their informal elements, providing a sort of enabling environment in which EAHs have expanded and thrived. Given the impediments in resource and capacity for the regulation and monitoring of the informal settlements, the DSM CC relies heavily on the LGA. However, the LGA staff has no training in regulation or development policies. In addition, the government lacks the resources to provide them with any technology to assist in the process. As a result, EAHs are largely unrecognised in municipal government practice and current policies regarding the settlements do not consider the implications their development policies have on the economic organisms operating within the settlements.

Despite research and the status of the IE in Dar es Salaam, it is still often overlooked in policies and upgrading. There is no current theory of informality that completely encapsulates the informal economy, as it is difficult to conceptualise due to its complex, dynamic and multifaceted nature. It is not a simple matter of political and regulatory barriers creating a need for informality, as both formal and informal entrepreneurs had to contend with these impediments. Existing conceptualisations of tax avoidance are also inaccurate as it was discovered that the majority of the informants actually pay some sort of tax. The IE provides a way for the working poor to gain control of livelihood choices in a context of widespread support systems, rather than just providing a means of survival. EAHs and the informal economy are intimately entangled, as both the EAHs examined in the research would find it difficult to exist without degrees of informality. The functioning of EAHs and informal

economy and the factors that sustain their workers are such that formalising EAHs misses the point that, in their current form, informality is inherent in, and critical to their survival. There is no specific line separating formal and informal, as it is a complex relationship in which both sides nurture one another. It is a shared economy in which small-scale operators are provided security through income-smoothing strategies and the usual economic advantages. In addition the informal economy is providing secure livelihoods to thousands of people who cannot be supported by the traditional idea of the 'formal' sector. Therefore, it is a crucial part of the economy that needs to be better understood, and the concept of EAHs provide an important window into how much potential the IE can offer.

Chapter 7: Conclusions and Reflections

7.1. Introduction

This research set out to provide a better understanding of the informal economy (IE) within informal settlements, particularly the importance of agglomeration economies, or EAHs, within informal settlements and their role within the wider urban economy. The research found that EAHs do exist and operate with a high degree of specialisation and complex agglomeration processes that are also linked to the formal economy. The spatial analysis has shown evidence that these agglomeration economies exist and the qualitative analysis has found agglomeration processes occurring within them, creating highly specialised economies with connections within the EAH as well as the wider urban and global economy. However, the EAHs in Dar es Salaam appear to exhibit a distinct characteristic – that its core operations are based not only the principle of profit, but also on solidarity and collective support amongst entrepreneurs. EAHs are economies that the regulatory environment simply does not accommodate.

An understanding of the IE and the potential that EAHs could provide to urban economic development in developing country cities of sub-Saharan Africa because the region experiences rapid urbanisation and weak economic institutions. This has traditionally been considered the reason behind the propagation of informal settlements and the concentration of poverty in urban areas. This research has examined whether that is actually the case, or if there are more complex reasons behind the proliferation of the IE.

In the following chapter, the major findings of the research are highlighted as the research objectives are addressed. These findings can be used to enact policy changes that will assist in the economic development of large, rapidly growing cities such as Dar es Salaam. A re-conceptualisation of the IE and further recommendations are provided for organisational and institutional issues related to the IE and the importance of EAHs. In addition, a the usefulness of GIS technologies in this research and future research will be reviewed as well as other areas of research that have been identified for potential future research.

7.2. Reflections on the Research Objectives

- 1. To examine and develop the concept of an Economic Activity Hub (EAH) – as a basis for understanding the concentration of informal economic activities found in informal settlements of low-income cities – by examining both debates on the economic rationale of the informal economy, and discussions on the spatial characteristics of local economies.***

Chapter 2 provided a literature review, which attempted to examine and develop the concept of an EAH as a basis for understanding agglomeration economies within informal settlements and developing cities. The examination of existing debates regarding the economic rationale of the IE and spatial characteristics of local economies provided a definition and conceptualisation of EAHs for the research. For the purposes of the research, the term EAH was chosen to delineate an agglomeration of small-scale or micro-enterprises within an informal settlement. The agglomeration could be made up of a variety of enterprises at various levels of formality or legality with some evidence of sector specialisation. However, given the scale of the IE within Dar es Salaam, it was assumed many of the enterprises would be informal, or operating in connection with the informal sector. Therefore an understanding of the economic rationale of the IE provided a basis for understanding the concentration of IE activities found in informal settlements in Dar es Salaam.

The literature review examined various explanations as to why informal enterprises do not formalise, such as: regulatory barriers (de Soto 1989, 1991), ease of entry and flexibility (Roberts in Portes et al. 1989), and avoidance of taxation and regulation (Chen 2012). De Soto's argument that strict regulatory barriers may prevent enterprises from formalising was found to be part of the problem but also rather simplistic, as the reasons were more complex. These EAHs are sustained and expanded by a complex support system that create a sharing' economy. Social capital was found to play an important role in the agglomeration processes and economic networks and value chains that make up the daily operations of these economies.

This shared economy provides opportunity and secure livelihoods to a large portion of the population for which the formal sector cannot meet the demands. The ideal of self-employment and the flexibility offered from working outside the formal sector provide a way for an enterprise to progress and expand. However, many concepts of the IE argue that the lack of government regulation associated with the IE and lack of taxation allowed for greater earnings, which was found to be inaccurate in this research, as many of the entrepreneurs – both informal and formal – did in fact pay some sort of tax. This knowledge creates an entirely new perspective regarding EAHs as an alternative economy that is not driven by avoidance of regulations or as a result of regulatory barriers, but rather exists because regulations are inappropriate and because of the need to earn an income in an urban setting.

Existing literature often refers to informal settlements as ‘erratic and unorganised’ with little being known about their development process (Barros and Sobreira 2002). However, the analysis found this to be a simplification as there are clear and complex processes occurring within the informal settlements. Centrality and accessibility not only influence the initial locations of informal settlements (Roy et al 2014), but also the economic activities within them. The literature review examined multiple theories regarding locational drivers within the IE but a number of references agreed that centrality and accessibility are crucial in reducing costs and increasing income (Bromley 2000; Bromley and Mackie 2009; Brown et al 2010; Walsh and Maneepong 2012). Areas with high levels of access such as commuter hubs and transport interchanges were found to be important spatial drivers of EAHs on a city-wide scale, as they provide access to goods and services as well as market demand to small-scale and micro-enterprises (Bromley and Mackie 2009; Iyenda 2005).

The research found that, like other agglomeration economies, there are patterns associated with the growth and sustainability. There is almost a circular pattern to the processes of EAHs, as people living nearby, see the success of existing businesses and then start their own, often out of their homes. Many debates have already argued that households are often used for income generation (Gough and Kellett

2001; Lall et al 2006; Mahmud 2003; Sinai 1998). As the enterprises become more successful they then move out of their homes and rent more space or a street frontage property nearby within the EAH. These expansion and growth patterns found through the qualitative research are supported by Bromley's (2000) findings, which state that agglomerations often occur as a result of large concentrations of vendors become well known, attracting other vendors and customers. The agglomeration is sustained and grows as a result of these processes, with the pattern occurring over and over again. However, the agglomeration in EAHs may well in part occur through a trial-and-error process, because some entrepreneurs have limited experience and knowledge of other options, rather than through a more conventional economic promotion and market appraisal.

EAHs are an agglomeration economy, and therefore, consist of complex economic process as any other agglomeration economy. The difference is the added aspect of solidarity. The literature found that in Tanzania as a whole, religion is a predominantly personal matter and people are very tolerant of others' religious beliefs (Kironde 2015; Msoka 2015). Religious choice and ethnicity appear to have little to no role in the establishment of businesses, formation of business networks, the operation EAHs, or connections within them in Dar es Salaam, concurring with finding by Vullers and Korner (2013), which suggests that Tanzania has historically little inter-religious violence, and that the strong principles of state secularism embedded in Tanzania politics, are generally not seen as discriminatory by Christian communities, although are viewed more guardedly by Muslim communities (Singh 2011: pp43-44). Tanzania may be unusual in this respect, for example Brown et al (2010) found very different patterns of street trading in West Africa between Muslim and Christian communities, indicating that this may not be the case in other EAHs. However, the connections found within EAHs substantiate the argument by Hays-Mitchell (1993) – that social connections provide access to information and knowledge, as well as financial support and resources, and compensate for the weakness of the internal resources of micro-enterprises, providing support in times of crisis. While the primary driver of connections within the EAHs is economic based

on competition between entrepreneurs, the underpinning social connections created through proximity result in important social constructs. The formation of social connections following the creation of businesses may be a distinguishing pattern of agglomeration economies, though many sources (Hays-Mitchell 1993; Portes 1998) cite social capital as a crucial part of informal economic networks, as well as EAHs. However, this means that the complex networks within EAHs are highly sensitive to disruption due to relocation, as proposed for the furniture industry in Keko.

Informal-formal connections have proven to be a common and necessary part of the operations of EAHs. This theme was often raised in the existing literature on the economic context of the IE (Chen 2004; Cross 1998; Davies et al 2010; Hays-Mitchell 1993; Tokman 1978). In the case of Dar es Salaam, this may be a result of the nature of informality and its linkage into every facet of the economy, as well as the varying degrees of informality. The research found no separation between informal and formal enterprises, as many enterprises exhibit some degree of formality – e.g. paying taxes – and they often work together and are located in close proximity to one another, e.g. the linkages between informal enterprise in Manzese and the Urafiki Textile Mill or those found between formal furniture stores in Keko and local carpenters. In addition, the findings have indicated broader linkages both within the city and globally, as discussed by Lyons et al (2013) in their examination of value chains between Chinese manufacturers and African micro-enterprises. The research found links throughout the city, such as those to Kariakoo or Ugungo, which then form value chains with connections as far as China, India or Europe. These linkages can be formal-informal, drawing on ideas put forth by Hays-Michell (1993) Chen et al (2006) and Charmes (2012), who argue that there are more linkages between the formal and informal sectors than traditional theories of the IE recognise.

The research found that EAHs are largely affected by the same external factors that affect the IE and street traders, resulting in features such as flexibility and adaptability. The flexibility and adaptability of the IE is one of its' greatest assets (Bromley and Mackie 2009) as it is constantly being affected by external factors such

as policy and legislation. Common reasons for operating informally include political and regulatory barriers as suggested by de Soto's theory, which argues the IE is a response to excessive government costs and regulations (1989). Bromley (2000) examined the ties between street vendors and the lack of unanimity between vendors and established stores, or even other 'groups' of street vendors. Bromley (2000) correlates these connections as a response to police brutality or policy regulations against street trade. A common finding from the literature was the response of displacement from central locations, negatively affecting the economic success of informal and micro-enterprises currently operating within the informal settlements (Bromley 1998; Bromley and Mackie 2009; Donovan 2008; Mackie et al 2014), but also to the wider issue that disruption affects the viability of both individual enterprises and the economic and socio-cultural networks cluster of which they form part. As with other studies, the research found that harassment generally reduced in the run-up to elections when entrepreneurs were courted for their voting potential. The research found a largely unaccepting legislative environment with regards to unlicensed enterprise (Msoka and Ackson 2017), and a lack of understanding with regards to the importance of economic activity and EAHs within informal settlements. Displacement, removal, and forced closure were all found to occur within the EAHs, with significantly damaging effects for the individuals affected and their business networks, increasing the need to adapt easily and find creative ways to operate around policy and legislative interference.

2. *Through a case study of EAHs in two informal settlements in Dar es Salaam, Keko and Manzese, to:*

- a. through a spatial analysis to provide a visual representation of the spatial and economic networks of EAHs, both to determine potential drivers and operations of these economies, and to examine the potential of GIS and spatial analysis as a tool in researching the spatial patterns of informal economic activity in developing cities;***

In order to build a more complete understanding of EAHs, it was important to combine spatial analysis with qualitative analysis in the research methods. Chapter 5 provided a spatial analysis in which the processes and spatial patterns of economic activity within EAHs were examined using GIS technology. This involved obtaining existing data and creating new datasets in order to provide a visual representation of the activity and determine potential drivers and operations. The investigation revealed a lack of existing data for the informal settlements. As a result, a large amount of the data, e.g. road networks within the settlements with levels of upgrading and public transportation data as well as updated parcel data with the relevant business type and sub-class, had to be created by the researcher in order to properly analyse the case studies and research their spatial patterns and economic networks. However, the results found significant spatial patterns and clustering within the EAHs that could not have been the result of random chance. The agglomeration processes that sustain these economies, as well as their economic networks and value chains have created cluster patterns that could not have been easily recognised without the visual representations that GIS and spatial analysis provided.

Existing literature argues that informal settlements are difficult to understand within a spatial context, as they appear erratic and unorganised with little known about their development process (Barros and Sobreira 2002). The literature asserts that their development is influenced by land availability, employment opportunity, and proximity of “high-intensity mixed land use” and they often fill in the spatial gaps that result from insufficient planning in developing cities (Augustijn-Beckers 2011; Barros and Sobreira 2002). However, the research found these arguments to be inaccurate and overly simplistic.

Historical factors as far back as the German colonial administration have resulted in the development of informal settlements in Dar es Salaam. Separation of European and African settlements followed by rapid urbanisation and uncoordinated decentralised planning with independence resulted in self-generated urban development. Topography also played a part, as many informal settlements were

built on marshy land, less favoured by settler communities, and are therefore still subject to frequent flooding. Therefore, land availability, employment opportunity, insufficient planning, and exclusion from safe building land, did play a role in the development of informal settlements; however, the analysis has provided evidence that there are very clear urban development processes being driven by economic and spatial drivers.

EAHs like Keko and Manzese act as centres where specialised sectoral economic activities occur. Centrality and accessibility are spatial drivers as they provide access to consumers and resources. Interestingly, both settlements were found in close proximity to commuter hubs. The commuter hubs act as a constant source of internal and external consumers. It was determined that the road network also plays an important role in their creation. Both Keko and Manzese are located within a reasonable distance of the city centre and Kariakoo (the central Dar es Salaam wholesale and import market) on or very close to main roadways that lead directly to the city centre. This provides easy access to resources, which are often obtained in Kariakoo or from formal enterprises such as the Urafiki Textile Mill. Access to wider urban economic networks is clearly important in the formation and operation of EAHs. Therefore, the research has provided evidence that EAHs have internal and external locational and economic drivers that affect their formation, rather than simply 'filling in the spatial gaps'.

GIS analysis has illustrated that the spatial clustering within these EAHs is not random, though in Keko it is not as clearly spatially defined as in Manzese where sub-clusters have been created. In current policy, informal settlements are considered unorganised and random, however, the research indicates that this is generally not the case in the areas studied, as there are clear connections and value chains, and proximity plays an important role in sustaining these connections, both economic and social. The spatial models created from this research could contribute to resolving planning difficulties and assist in creating a more co-ordinated urban environment, as cross-sectoral and co-ordinating planning is largely missing in Dar es Salaam (Hill and Lindner 2010). By mapping out the enterprises within EAHs, urban

planners would have a greater understanding of the economic activity occurring within informal settlements, and work with settlement residents and businesses to improve policy and legislation. This may assist in future upgrading and hopefully provide evidence of the importance of EAHs to local economies, thus helping prevent displacement that negatively affects many residents within the city.

Government authorities to some extent have been able to create GIS databases with owners and land use data; however the government does not have adequate funding or resources to properly map the informal settlements (MG1; MG2; MG3). The city council, upgrading programmes, and ministries such as the MLHSD all utilise GIS technology and the city is in the process of creating an integrated land-use system (MG1; MG3); however with limited resources this process will take years, if it can be completed at all, and fast-paced urbanisation mean that areas change rapidly. The municipal government council trains employees to map the areas and gather information about the area they are in charge of; however, the research found that often members of the government knew little about the areas they were in charge of. As a result, the city council and ministry officials interviewed were asked about the use of training the *mtaa* to utilise GIS and gather information about the community. The respondents all indicated that it would help to have specialists, e.g. GIS, land use, etc., at the *mtaa* and ward levels but there are too many constraints (MG1; MG2; MG3). The government does not have adequate funding to provide the necessary training or technology to the *mtaa* offices.

Based on the lack of existing data and research regarding the spatial patterning of economic activity within informal settlements, this research and the use of GIS analysis in future development research could be useful to policy-makers and planners. Without the visual representations created with the use of GIS technology, it would not have been possible to see the spatial patterns within the settlement and how this affects the processes and operations of the EAH. A better understanding of the spatial patterning and processes of informal settlements would better help policy-makers understand the areas and the challenges faced with planning, to influence future upgrading, or prevent displacement of current enterprise.

b. to deepen the understanding of EAHs through examining EAH agglomeration processes, the socio-cultural dimensions of EAHs, the wider economic linkages and value chains of the EAHs, and policy drivers influencing their formation;

Chapter 6 examined the qualitative analysis of the research, which deepened the understanding of EAHs and added to the spatial analysis in providing an understanding of the drivers and operations of EAH, as well as their contributions to the wider urban economy. This section examined the agglomeration processes, socio-cultural dimensions of the EAH, the wider linkages and value chains, and policy drivers of their formation. The qualitative analysis involved interviews with entrepreneurs operating within the EAHs to meet this research objective. The investigation revealed many insights into the formation and operations of economic activity within informal settlements and the significance of clustering to individual enterprise. The analysis also revealed the importance and contribution of EAHs, not only to local, individual livelihoods and in the wider urban economy, but also as an influential participant of economic networks and value chains on a city-wide and global scale. However, there are many nuanced attributes that also affect the EAH formation and operations, such as the importance of solidarity and the effect of external factors such as policy and legislation.

Globalisation has been identified by the existing literature as a key driver of urbanisation. This urbanisation has in turn has been identified as the cause of the growth of the IE as many rural-urban migrants have come to Dar es Salaam in search of work as suggested by the literature (Mingione 1999), though it may not be as simple as some of the literature suggests in that the informal sector 'absorbs victims' of globalisation (Yuzon 2005), but the informal sector does alleviate the strain put on the formal sector in providing employment.

The industrial specialisation and economic activity occurring within EAHs make these agglomeration economies a draw in their own right. The research found that EAHs are large enough to attract new specialist enterprises that supply different aspects of

the manufacturing process as well as an external commuter workforce. This is a new finding, as much of the previous research on economic activity in informal settlements has assumed that it was based on home-based enterprise. The success of the hub also attracts those living in close proximity to join the sector specialism, creating a circular process in the agglomeration and ensuring its sustainability. Home-based businesses may be an important starting point in the agglomeration process and the success of individual businesses eventually leads to their renting of nearby locations when their business becomes too large to be run out of their home. Conversely, renting part of the home for business use – e.g. the front room – is also an important livelihood enterprise. This finding indicates that a characteristic of EAHs is when it moves beyond a cluster of home-based enterprise to draw new enterprise or foster expanding indigenous enterprise and the agglomeration processes continue in a circular pattern of renting and drawing in new business.

The results of the spatial analysis suggest that accessibility and centrality are important as locational drivers on a city-wide scale and seem to play a role in the formation and continuing operations of EAHs; however, the qualitative findings indicate that for individual entrepreneurs these are not necessarily the key drivers in location, and other factors must be taken into consideration to understand how EAHs form and continue to operate. The EAHs have been found to provide entrepreneurs with access to customers, access to resources (both in close proximity and from the city centre), access to transport, and a sense of community where they can help each other and work together. Although people are in competition, there is a form of sharing and support network that the connections have sustained and expanded. The high level of competition might necessitate these cooperative processes and the connections created might encourage internal coherence as part of a stabilisation process, creating a successful agglomeration. However, the research found that the economic connections expand beyond the local area and even the city of Dar es Salaam. These EAHs are part of value chains that have relations with China, India, and even the UK. Although not studied in this research, these may also extend rural-urban relations, e.g. through remittances or circular migration. While the research did find clear links to the global economy, insufficient resources and time constraints

prevented a more detailed understanding of these value chains. Therefore more research on the role these EAHs play in global networks should be undertaken in the future.

The solidarity aspect of the EAHs provides a distinct survival mechanism that shares their benefits to many people. These EAHs, and the economic and social connections that form them, create a kind of sharing and support network that: enables people to work together and share space; ensures minimum income for everyone; helps people in need; spreads the cost of expensive tools; ensures fair prices; allows work via commission; provides informal loans when needed; provides job training and apprenticeships; and provides protection and insurance from external threats. These characteristics enable small-scale operators to survive shocks and stresses as a sort of income-smoothing strategy that helps individual entrepreneurs to establish and accumulate. The agglomeration also ensures a regular flow of customers, providing another form of security. These aspects of EAHs are not characteristic of a conventional formal economy, but are identifiable in a sharing economy and have allowed the EAHs to be successful and expand.

The research found that ethnic and social dimensions do not play a role in the creation of EAHs or their economic networks, and the relationships formed between vendors and other operators encourage a certain internal coherence to EAHs as part of a process of stabilisation rather than formation, and result in the sub-clustering of specific industries within Manzese in an effort to reduce operating and transport costs while increasing access to resources. However, Tanzania is unusual in this respect as it is well known that religion and ethnicity is considered to be a private matter and intrudes little into public or commercial life. Therefore, this characteristic may not be indicative or applicable to EAHs of other developing cities.

At the settlement level, the research primarily aimed to determine the potential drivers and operations of EAHs, as well as the policy drivers influencing their formation. The analysis found that disastrous nationalisation policies in the 1970s to 1990s, coupled with structural adjustment, led to a dramatic shrinking of civil service

jobs and cooperative agriculture, coupled with rapid urbanisation and more recent regulatory barriers in obtaining a business license, contributed to the growth of the IE and subsequently, to the formation of EAHs.

In the context of Dar es Salaam, the nature of informality is not easily defined or theorised, but based on the analysis it appears that degrees of informality encourage certain types of economic and social interactions to occur. In terms of the informal nature of the businesses, it has become evident that the businesses developed for a variety of reasons, both as a choice and in the face of regulatory, policing and planning constraints. In many cases, the political and regulatory barriers mean that many businesses operate without a license; however, this does not appear to be a significant driver in the formation of EAHs, as there are both formal and informal enterprises operating within the agglomeration, with links to each other. Some businesses straddle the formal-informal divide, and some business owners may go from informal to formal or even vice-versa within the same EAH. Therefore, formality is not a critical factor to EAH formation or sustainability, at least not in the businesses and locations studied.

Chapter 4 provided context of the policy and regulatory environment of Dar es Salaam. Chapter 6 then sought to examine these policies and other challenges that affect EAHs. By interviewing micro-entrepreneurs operating within the EAHs as well as Ministry officials, city government officials, local government officials, and *mtaa* offices, the research determined that a new conceptualisation of informality is necessary in developing cities. A long-standing national policy, the MKURABITA business and property formalisation agenda, has led to a general consensus found amongst the municipal government authorities interviewed – that the IE needs to be formalised in order to improve the overall urban economy. By changing the perception and providing a greater understanding of economic activity occurring within informal settlements, it may be possible to provide intermediate steps in order to alleviate the incidence of working poverty in developing cities like Dar es Salaam.

The emergence of new survival economics in the face of ill-advised government policies has not been fully recognised, and emerging self-help economies receive little support. Analysis of the interviews highlighted several key issues for entrepreneurs within both settlements, including: limited access to basic services; regulation concerns; regulatory barriers in obtaining a license, and lack of financial or social support. While these issues do not appear to affect the spatial patterns within EAHs, they do affect their development and operations. These issues are important for future policy and upgrading approaches, so that upgrading includes economic support as a core strategy as well as the more conventional focus on roads, drainage and basic services. By improving the environment and changing current policies, e.g. simplifying the process for obtaining a license, or simply increasing leniency regarding unlicensed businesses, the enterprises further expand, providing more employment and improving the overall economic situation within the settlement, providing opportunities for income that the formal sector cannot offer.

It is difficult to find solutions to the lack of economic growth in sub-Saharan African cities. The literature and research have found that the standard response is to follow the Western standard of formalisation, characterised by displacement and negative perceptions of informal economic actors. However, the current state of Dar es Salaam's development and the literature review have indicated this is not the most effective method of promoting economic development. The analysis has shown that common concerns for the entrepreneurs include: lack of services and infrastructure, obtaining a license, and lack of funding. Rather than mimicking Western policies, creating new a specialised approach is necessary in sub-Saharan African cities.

Redevelopment policies for Keko and Manzese have already begun, as discussed in Section 6.5.1. However, given the information supplied by the City Council, these policies do not appear to favour the informal entrepreneurs or residents within the settlements. Perhaps EAHs like Keko and Manzese could provide a partial solution to the problem of economic development without forced formalisation or regularisation. By allowing the EAHs to grow without the current legislative

interference determined in the research, they may continue to expand and eventually formalise on their own, since an increase in size of operation led to incremental formalisation – as seen with the carpentry collective in Keko. These EAHs provide employment opportunities that the formal economy cannot, and by improving the legislative environment for these enterprises, they may be able to expand and offer even more employment opportunities. At the moment these enterprises are very unstable because many are unlicensed, and are therefore unprotected from current policies, which could force closure or removal. The city could consider offering an intermediate license to an enterprise or even street traders (as with residential tenure in informal settlements), allowing entrepreneurs to work in their current location for a specified time based on a small flat-fee, to afford them the opportunity to grow to a point where they could afford a license and to pay income-related taxes. By doing so, they could potentially expand and offer employment to others, eventually creating economic growth within the settlement.

The analysis found that EAHs provide important economic support, and apprenticeship training to those operating both formally and informally within the informal settlements. These findings are significant both for policy and upgrading approaches. Centrality is key for a vibrant economic environment to emerge, and upgrading of low-income settlements creates new commercial potential. However, what is largely unrecognised in urban policy is that the widespread clearance and redevelopment of informal settlements may well disrupt the complex livelihood networks and economic agglomerations such as those found in Dar es Salaam. Current policies promoting displacement to peri-urban areas or trader complexes like the Machinga Complex (discussed in Section 6.5.3) do not prioritise the economic advancement of the city's micro-entrepreneurs, both formal and informal, over large commercial interests. It would be more advantageous for upgrading policies and regulation to support the growth of EAHs and the enterprises operating within them, rather than create redevelopment policies that will see the removal of these enterprises and residents.

3. Through the analysis to refine the concept of EAHs, and contribute to the concept of informality to provide policy-makers with a greater understanding of the phenomena.

This thesis has furthered understanding of the IE and determined that a new conceptualisation is necessary to improve practice in policy and planning related issues. There is a wealth of research on the IE with various definitions, drivers, and characteristics, as discussed in Section 2.1. The IE can generally be understood as unregulated economic activity operating at least in part outside formal or government regulation. However, the research has shown that this is not always the case. The research uncovered evidence that the IE is regulated in many ways, such as through taxation by lower levels of government in Dar es Salaam. In addition, the IE is intertwined with the formal economy to the point that it plays a major role in shaping global economic value chains in developing cities. The various theories of the IE tend to revolve around the idea that the IE is a problem to be fixed and that people operate informally as a way to survive, avoid taxes, or as a result of exclusion from the formal sector (Chen et al. 2006; de Soto 1989; Portes and Castells 1989). Cross' (1998; 2000) more nuanced approach to the IE advocates the recognition of the coexistence of the informal and formal economies. The research has therefore developed a new conceptualisation of the IE based on the findings from EAHs.

Based on this research, there is not just one driver of informal activity. De Soto's theory regarding government regulations and legislation is a valid argument as a driver behind informality, though it is rather limited in its understanding of informality, as the research found that there are other factors that influence the growth of the IE, such as the flexibility and opportunities it provides. While government regulations are probably a common constraint in many developing cities around the world, de Soto's theory is oversimplified as the research has demonstrated the IE is much more complex. It is not a simple matter of not being able to formalise, but also the importance of the support structure the informal community offers. Formalisation does not offer the same level of support, as it is

expected that the formal sector will provide the needed support through programmes such as insurance. However, in developing cities where the formal sector lacks resources and cannot meet the demands of a rapidly growing population, an informal community may provide a solution by providing the security and livelihood opportunities that the formal sector cannot.

Another common misconception regarding the IE is the idea that it 'eludes registration, tax and social security operations, and health and safety rules' as a way to reduce costs and increase competitiveness (Roberts in Portes et al 1989). The research found that of the 77 business owners interviewed, only one stated that he did not want to pay taxes. In addition, a large number of the interviewees actually were paying some sort of tax. Of the 77 interviewed, 42 entrepreneurs admitted to having no business license, and while it was unclear if all of them paid taxes, at least 36% of those had some sort of issue with tax collectors. The issue of taxation is clearly not a valid concern in the case of Dar es Salaam, and this idea may be rooted in broader issues of government corruption and inappropriate activities by government employees. This confirms the argument in the literature review by Yuzon (2005), which stated that small-scale and informal enterprises are often ignored in terms of policies and services and often have to pay bribes to government officials in order to continue their business.

Although the early dualist theory of two separate (formal and informal) economies has largely been dismissed, particularly in terms of outcomes of growth for either the informal or formal economies, narratives of self-employment as potential attractors to the informal economy have been identified as an important finding in the study, which itself might be one of the factors of EAH growth and integration. However, unlike the dualist or structuralist schools of thought, which apply a more negative view of informal work associated with the desire to avoid taxes and regulations, a new conceptualisation of informality should associate the desire for self-employment with the idea of being in control of livelihood choices in the context of widespread support systems, a concept that is hard to understand from a formal economic standpoint.

The most important attribute that needs to be better understood in a new conceptualisation of informality is the importance of community. By creating agglomeration economies, small-scale and informal enterprises have been able to earn a living and compete with the global economy as suggested by Carr et al (2000) and Yuzon (2005). The informal sector is hit the hardest by economic shocks and the competition created as a result of globalisation, but it is flexible enough to survive and even thrive. This flexibility is crucial in the formation of network economies and agglomerations, which in informal settlements may be manifest as EAHs. These EAHs, and the economic and social connections that form them create a kind of sharing and support network and the associated attributes allow small-scale operators, both formal and informal, to survive shocks and stresses – a kind of income-smoothing strategy that helps individual entrepreneurs to set up, become established and accumulate. This is a true market economy, dependent on social ties for functioning effectively.

The Westernised conceptualisation of informality cannot be applied in developing countries and it needs to be understood that no single concept can be applied in every region. What may have been the case in South America will not be the same in sub-Saharan Africa. The IE is a complex concept that is difficult to characterise and understand, but the research has attempted to do so based on the context of Dar es Salaam. The IE is not unregulated; it simply operates under different types of regulation that cannot be easily understood or recorded by the formal sector. It is in fact intertwined with the formal sector to the point that it shapes economic networks and value chains. As Cross (2000; Cross and Morales 2007) suggested, the IE is integral to the structure of urban economies as it alleviates excess unemployment, meets market demands of income groups that cannot be met by the formal sector, offers a way to meet the ideal of self-employment or loss of control associated with formal sector employment, and offers more flexibility within the wider urban economy and an opportunity for specialisation within employment sectors.

The characteristics of the IE in the context of Dar es Salaam have been provided, but the question remains as to how to define the IE. Based on the research, it does not appear that the IE in this context is separate from the formal sector at all and does not in fact require a 'solution' as it is a solution in itself for a developing city that does not have the resources to meet the demands of the population. In this case, the IE could simply be defined as economic activity performed without a business license. This is often because the entrepreneur does not earn enough income or is not operating in a location that allows for the procurement of a business license based on strict government regulation, though the research has shown that there are other reasons driving informal activity as well, e.g. self-employment, informal apprenticeship or wage employment, or that it is simply not necessary as the businesses are already taxed.

The pluralist approach arguing for a more accepting attitude in response to the IE would act as a huge advantage in the establishment and accumulation of micro-enterprises and informal activity. Policy could proactively encourage the IE around EAHs. A pro-IE policy may provide advantages in allowing enterprises to grow, and provide more employment opportunities to others. For example, for Interviewee C, the carpenter operating in Keko, being allowed to operate without interference could allow his business to grow, in which case he might eventually be able to hire others and provide them with training. He could even eventually formalise, though it is unknown how formalisation may affect EAHs, as it may eventually result in the dissolution of the support network currently sustaining them. It is impossible to know all of the advantages and disadvantages a pro-IE policy would have on EAHs; however, current policies appear to put the enterprises operating within EAHs at a disadvantage, indicating that new conceptualisations and changes are needed.

7.3. Recommendations and Future Research

Based on the findings of the study, recommendations for improved management of informal economic activity, and directions for future research are presented. Despite the limitations of the research, it has provided important information for policy and planning practice relating to the IE and EAHs especially relating to the sub-Saharan African context.

It is imperative that urban policy makers and planners understand the importance in terms of the positive impacts of the IE on the urban economy as well as global value chains as the first step towards some more formal recognition in policy. Current urban planning in Dar es Salaam appears to be based primarily on foreign practice, largely influenced by Chinese engineers and planners operating in the city. City authorities need to review their position on informal economic activity as well as informal settlements and adopt a more accepting attitude towards informal activity because of the positive contribution the IE makes to the urban economy and livelihoods. The use value of urban space by city inhabitants and entrepreneurs should take precedence over land value and global commercial interests. The interests of micro-entrepreneurs, both formal and informal, should be considered in the formalisation and urban planning process to meet their needs and provide support in order to facilitate economic growth. Inclusiveness in urban management, rather than exclusionary practices, would greatly improve the economic development of the city as a whole.

Rethinking of modern market policies is necessary in order to provide stability and growth to micro-enterprises within EAHs. However, entrepreneurs operating within these EAHs also have a responsibility to participate and have their opinions heard in order to facilitate progress. This would go a long way in balancing the practices of urban management and the definition of urban citizenship. The creation of collective associations within the EAHs might help in making their demands and needs heard, as well as provide a more recognised or 'formal' form of protection in legal practice.

It is recommended that the understanding of the IE and the importance of economic activity within informal settlements be reconsidered. The formalisation process needs to be restructured based on a new conceptualisation of the IE, and planning practices within informal settlements needs to be reoriented to recognise both the needs of residents and incorporate as a better understanding of internal economic activity. A spatial analysis of the settlements through the use of GIS technology as part of the research has provided a better understanding of this activity, and would also be fundamental to urban governance. However, it is understood that the city lacks resources to map out every settlement within the city. Therefore, alternative forms of spatial analysis, such as community mapping are recommended, as they would provide the government with information for better planning practices, and help people get directly involved in their own development and that of the whole community. Although such mapping may be qualitative in nature, this may well be effective, and is helpful in developing cities that do not have the resources to provide GIS mapping of every community. Community mapping is a growing phenomenon that allows for inclusion, transparency and empowerment, as evidenced by existing participatory mapping research (Koti 2010), and could provide an excellent solution for the understanding and governance of informal settlements in developing cities.

The combining of spatial analysis with in-depth qualitative data and analysis has been crucial to the success of the project. The research has highlighted the usefulness of spatial analysis and GIS as a tool in development research. In addition, this study has advanced the limited understanding of economic activity within informal settlements and the importance of this activity for the wider urban economy. It is clear that current planning and formalisation practices in Dar es Salaam do not take these EAHs into account, thus necessitating a more accommodating approach towards this activity by government authorities and the general urban society. As EAHs and informal activity within informal settlements are a largely unstudied phenomenon, it is impossible to compare the contextual differences between different regions. Therefore, further research in other contexts in Africa, Asia and Latin America, would enhance efforts towards the establishment of a global re-conceptualisation of the IE and related planning and policy practices.

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APPENDIX

APPENDIX 1: List of Business Classes and Sub-Classes

BUSINESS CLASS	BUSINESS SUB-CLASSES
CLOTHING STORE	WOMEN'S WOMEN'S AND MEN'S CHILDREN'S KANGAS (TRADITIONAL TANZANIAN DRESS) MEN'S USED CLOTHES SHOES BAGS ISLAMIC DRESS UNIFORMS
ELECTRONICS	APPLIANCE STORE PHONE TOP-UP
FOOD/DRINK	MAMA LISHE BAR RESTAURANT BUTCHER DRINK SHOP KIOSK FISH MARKET GROVERY MAIZE MILL
HOMEWARE	HOMEWARE
FURNITURE	FURNITURE STORE (FORMAL) SHOWROOM (INFORMAL)
GARAGE	GARAGE
GUESTHOUSE	GUESTHOUSE
OTHER	BETTING CENTER CHARCOAL MUSIC STORE PRINTING STORE FREEZER STORAGE PHOTOGRAPHY SHOP
PERSONAL	BARBER BEAUTY SUPPLY HAIR SALON PHARMACY PHARMACY (NATURAL)
CLOTHING	COBBLER TAILOR TAILOR (USED CLOTHES)
MATERIALS	HARDWARE PAINT GLASS METAL WOOD FABRIC COBBLER SUPPLY
CONSTRUCTION RELATED	CARPENTRY WELDING PAINTING APPLIANCE REPAIR

APPENDIX 2: Coded List of Interviewees

INTERVIEWEE	POSITION
ACADEMIC/URBAN PROFESSIONALS	
AUP1	Architect/Designer and Senior Lecturer at ARDHI University
AUP2	Director of the Institute of Human Settlements Studies and Dean of the School of Urban and Regional Planning at ARDHI University
AUP3	Associate Professor at ARDHI University
AUP4	Professor at ARDHI University and Director of Housing at MLHSSD
AUP5	Professor at ARDHI University and Director of the Institute for Human Settlement Studies (IHSS)
AUP6	Professor at the University of Dar es Salaam (UDSM) and expert in development studies
MUNICIPAL GOVERNMENT	
MG1	MLHSD
MG2	MKURABITA
MG3	City Council/CIUP
LGA	
KMC1	Keko Mtaa Chairman
KMC2	Keko Mtaa Chairman
KMEO	Keko Mtaa Executive Officer
KWEO	Keko Ward Executive Officer
MMC	Manzese Mtaa Chairman
MME01	Manzese Mtaa Executive Officer
MME02	Manzese Mtaa Executive Officer (Interviewed with another Mtaa Chairman)
MWEO	Manzese Ward Executive Officer
ENTREPRENEURS	
INTERVIEWEE A	Wood supplier in Keko
INTERVIEWEE B	Machinga in Manzese
INTERVIEWEE C	Carpenter in Keko
INTERVIEWEE D & E	Cobblers in Manzese
INTERVIEWEE F	Owner of furniture store in Keko
INTERVIEWEE G	Kanga shop assistant in Manzese

APPENDIX 3: Interview Protocol for Academic and Urban Professionals

Time of interview:

Date:

Place:

Interviewee:

Translator:

Position of interviewee:

Recording Number:

Introduction:

My name is Regan Doyle, a PhD research student. I am studying economic activity in the unplanned settlements (this area) to see how business happens. My research uses GIS technology to look at spatial patterns of the IE in unplanned settlements (the area). The overall aim is to better understand how cluster economies form/operate in unplanned settlements and their overall contribution in the city.

1. What topics are you currently researching in relation to the informal economy?
2. Can you tell me a general overview of the policies regarding informal settlements/ informal economy?
 - a. What are the responses to the IE/settlements
 - b. What is the current procedure regarding the settlements?
 - c. What are the responses of those living and working within the settlements to these policies?
 - d. Do you think these policies work or improve the city overall? If not, what areas do you think need to be addressed?
3. Do you think the local government/mtaa leaders are best placed to monitor and regulate the informal settlements (Do you agree with the current system of government hierarchy)?
4. Do you think the local government officers and mtaa leaders have the ability/skills to monitor and regulate informal settlements?

- a. Do you think they have adequate tools/technology to do so?
5. Does the city use Geographic Information Technology in its monitoring/regulating of the settlements? If not do you think it would help?
6. Is there any sort of system in place to select and prioritize settlement upgrading or surveying?
 - a. If so, what are the criteria?
7. Do the people living within the settlement play any role in the planning process or any upgrading, e.g. community planning processes?
8. Do you know if there are any policies regarding informal businesses within the settlements?
9. How does the city measure the size of the informal sector?
10. What do you think are the main reasons people operate within the informal sector in Dar es Salaam?
11. Do you think people should be allowed to work in the informal economy?
 - a. If not, what do you think should be done about it, e.g. formalization, etc.?
12. What do you think the city should do regarding the informal economy/settlements?
13. Do you agree with the formalization of informal businesses?
14. Is it difficult for those operating informally to join the formal sector?
15. Do you think people would want to/ or willingly choose to join the formal sector?
16. Do you agree with the relocation policy (movement from one area to a government operated market area) regarding informal businesses? Why or why not?
17. I understand the settlements have a strong sense of community/community ties?
 - a. Do you think this sense of community affects the crime rate in the settlement?

- b. Do you think the community ties might affect the spatial aspects, e.g. location of businesses, formation of agglomerations, location of housing, location of religious buildings or public space, etc.?
18. Do you think there are any characteristics, e.g. ethnicity, religion, etc., that play a role in the spatial attributes of the informal settlements?
 19. Do you know of any spatial patterning within the settlements, such as where markets or businesses are located, or are they randomly placed based on available space?
 20. What are the largest businesses within the informal settlements, e.g. clothing, food, recycling, furniture making, etc.?
 21. Do you think people from outside the informal settlements interact with businesses within the settlement or is it primarily those within the settlement?
 22. Do you think these businesses might assist in their expansion, possibly drawing people in from rural areas looking for income opportunities?
 23. Are people living in 'slum' areas considered as contributors to the formal sector of the economy?
 24. Are you aware of any connections between the formal and informal sectors?
 - a. If so how large do you estimate the network connections to be?
 25. Do you think the informal economy adds to the overall urban economy, despite not being taxed?
 26. Do you have any ideas of locations that would be ideal to study business agglomerations within informal settlements?
 27. Do you have any other advice or recommendations?

APPENDIX 4: Interview Protocol for *Mtaa*/Local Govt. Officials

Time of interview:

Date:

Place:

Interviewee:

Translator:

Position of interviewee:

Area or Region in charge of:

Recording Number:

Introduction:

My name is Regan Doyle, a PhD research student. I am studying economic activity in the unplanned settlements (this area) to see how business happens. My research uses GIS technology to look at spatial patterns of the IE in unplanned settlements (the area). The overall aim is to better understand how cluster economies form/operate in unplanned settlements and their overall contribution in the city.

1. Can you tell me about **your job**, e.g. what you do on a daily basis?
2. Can you tell me about **this settlement**?
 - a. History
 - b. Population
 - c. What draws people here
 - d. Characteristics – eg: ethnicity, religion etc.
 - e. Average income
3. Can you tell me about the **businesses** operating in this settlement?
 - a. Estimate of number of businesses
 - b. Most common businesses?, e.g. furniture making, clothing/textiles, carpentry/crafts, food, etc?
 - c. Any spatial patterns of businesses within this settlement, eg: markets or businesses are located, or are they randomly placed based on available space?
 - d. Do you know of any ties to the formal economy, and if so, can you give me some examples?
4. Does the settlement have a **strong sense of community/community ties**?
 - a. Describe – what type of community
 - b. Do the community ties help prevent crime?

- c. Do community ties affect the spatial aspects within the settlement, e.g. location of businesses, formation of agglomerations, location of housing, location of religious buildings or public space, etc.?
- 5. Can you tell me about the **municipal government** monitoring/regulation and policies?
 - a. Do they affect economic activity in the settlements?
 - b. Do you agree with formalization/regularization of settlements and businesses?
 - c. How difficult is it for settlements and businesses to formalize?
 - d. Do you agree with the relocation of businesses to government-operated markets?
 - e. Do you think demolition of stalls/areas of work is OK in order to accomplish this relocation?
- 6. Has this settlement gone through any **upgrading** processes?
 - a. Do you think it did or would improve the community?
 - b. What do you think in particular is required?
 - c. Do you think those living in the settlement should participate in the planning/upgrading? Or if it has been upgraded, did they participate?
- 7. Can you tell me about **rules and regulations** within the community regarding:
 - a. Development/Spatial attributes:
 - i. Housing regulations (e.g. height, rooms, building materials, location, etc.)
 - ii. Infrastructure regulations (e.g. road width, drainage/sewage, public space, waste materials, etc.)
 - b. Businesses:
 - i. How would one start a business
 - ii. Any locational requirements
 - iii. Infrastructure regulations
 - iv. Quality regulations of goods and services
 - c. Conflicts e.g. between businesses, landowners, locational issues, illegal activities, etc.
- 8. What **tools/techniques** do you use to monitor/regulate the settlement, e.g. it's businesses and housing?
 - a. Do you have adequate tools/technology? If not what would help?
 - b. Do you know about Geographic Information Systems (GIS) and do you use it?
 - c. Do you think GIS or other technology and training would be useful in monitoring/regulating the settlements?

APPENDIX 5: Interview Protocol for EAH Entrepreneurs

Time of interview:

Date:

Introduction:

My name is Regan Doyle, a PhD research student. I am studying economic activity in the unplanned settlements (this area) to see how business happens. My research uses GIS technology to look at spatial patterns of the IE in unplanned settlements (the area). The overall aim is to better understand how cluster economies form/operate in unplanned settlements and their overall contribution in the city.

Place:

GPS track:

Recording Number:

Interviewee:

Translator:

Position of interviewee:

Location of business:

Income:

Tribe:

Religion:

Place of Origin:

Current Residence:

Age Group (circle one):

10-18 19-25 25-35 35-45 45-55 55 and up

1. What is your business/What do you do?
2. How did you start/join?
3. Who works for you/who do you work for?
4. Why this business?
5. Why this location?
6. How long has the business/you been here?

7. Where and which companies do you get your goods/supplies from?
8. Who do you sell the final products to/Who are your main customers?
9. Do you rent or own this property?
10. Do you have connections with any of the other businesses in the area?
 - a. If so which ones?
 - b. Can you tell me about the connections, e.g. what your businesses do for each other, how you work together, etc?
 - c. Why did you form these connections?
11. Are there any particular support services that you use in the area, for example waste collectors, truck operators etc.?
12. Do you have/Have you had any problems with the following:
 - a. Natural or non-natural hazards, e.g. flooding, waste disposal, drainage, problems, electricity, access to services, crime, etc.
 - b. Other businesses in the area, e.g. competition
13. Is being located here particularly important to you?
 - a. If so why?
14. Can you tell me about finance institutions:
 - a. Have you tried to get funding?
 - b. If so from where? Friend/family; business suppliers; money lenders; micro-finance institutions; banks etc.
15. Do policies or regulations affect your business, e.g. tax collectors, the government enforcing formalization, relocation, etc.?
 - a. If so how?
16. Do you have any sort of title or license for your business?
 - a. If not, why not?
17. Do you know if the government has done any upgrading in the area?
 - a. If so how has it affected your business, e.g. for better or worse?
 - b. If not, do you think your business would be helped by it and what would you see changed?

APPENDIX 6: Interview Protocol for Ministry and City Govt. Officials

Time of interview:

Date:

Place:

Interviewee:

Translator:

Position of interviewee:

Recording Number:

Introduction:

My name is Regan Doyle, a PhD research student. I am studying economic activity in the unplanned settlements (this area) to see how business happens. My research uses GIS technology to look at spatial patterns of the IE in unplanned settlements (the area). The overall aim is to better understand how cluster economies form/operate in unplanned settlements and their overall contribution in the city.

1. What are the functions of your organization? (if not in charge of the following who is?)
 - a. Policies – formalization, regularization, upgrading
 - b. Upgrading
 - c. Policies regarding businesses
 - d. Finance institutions
 - e. Access to services – education, electricity, water, waste, drainage
 - f. Tax collection
2. Has your organization done any work in Keko or Manzese? If so can you tell me what that involved?
3. Does your organization use GIS? Or has there been any effort by the city to map these areas? (Open-mapping project?) Do you think it would help in making policy/planning decisions?
4. How do you see the future of the informal sector – how will it change and develop (especially the informal settlements)?
5. How useful do you think this type of research would be for city planners or policy makers?
6. Do you think there are other similar areas that need to be researched or examined further? If so, what?

Topics depending on functions of office:

Policies

- Formalization, regularization, upgrading
 - Can you tell me about these processes, e.g. their differences, what is involved?
 - What is the involvement/responses of those living in the settlements?
- Upgrading
 - Are there specific areas that have priority in upgrading?
 - Is there any criteria to prioritize upgrading?
 - How do the mtaa and community play a role?
 - Have you considered training the mtaa in development policies?
 - What about GIS or other technologies?
 - Many of the mtaa I spoke to said they thought GIS would help in monitoring the areas
- Policies for businesses
 - What are the policies on taxing businesses that do not have a license?
 - Multiple businesses have told me they do not need a license and pay taxes even without it
 - Do you think the informal economy adds to the overall urban economy, despite not being taxed?
 - Is it difficult for those operating informally to join the formal sector?
 - Do you think people would want to/ or willingly choose to join the formal sector?
 - What types of incentives are there for them to formalize their businesses?
 - What is the process for a business to obtain a license?
 - Are there specific requirements:
 - Certain size, amount of capital?
 - Do they have to rent a space and pay rent for that space for a certain amount of time?
 - If so, how are they suppose to earn enough capital without a license to pay the rent for that amount of time?
 - Are there any sort of permits or licenses the government can give to formalize street vendors?
- Length of process?
 - Most of the businesses I spoke to told me they do not get a license because;
 1. It takes too long,
 2. Their business is too small so they are not eligible,
 3. They go to the offices to get a license and the people working there take them for a ride and repeatedly tell them to come back,
 4. They cannot earn enough capital to afford it,
 5. They are not in a proper location, and

- 6. They have not been in their location for long enough.
- Relocation
 - Do you agree with the relocation policy?
 - Why is separation of residential and commercial so important?
 - In many Western countries, planners are now trying to promote that because it increases walkability in a city and reduces the need for cars
 - What is the normal amount of time for the government to reimburse those who are relocated?
 - I've been told it can take up to a year to get relocation money from the government?
 - Is the government considering building any more markets like the machinga complex?
 - If so, in which areas?
 - Several machingas have said they would like it if the government built them a market near Manzese where they could go
- Forced removal
 - What is the policy on forced removal?
 - Some of the business owners have told me the government has tried to forcibly remove them without offering a location to move to?
 - In Manzese the machingas have told me the government has come in and destroyed their stalls, taken their products and removed them forcibly with weapons.

Finance Institutions

- What are the ways in which people within these settlements can receive financial support, e.g. various government schemes?
- What would be the process to take a loan?
- What are the specific requirements for these loans, e.g. time given to return loans, existing capital to put against it?
- What are the typical interest rates for these loans?
 - Many people in the settlements have told me they do not take loans because:
 1. They cannot pay back the loans on time
 2. They cannot afford to take a loan
 3. They do not have the backing to put up against a loan, e.g. house, car, etc.
 4. They do not know how to take a loan – some have said they would appreciate being educated on this
 - Is there any kind of loan the government could give to those without much capital or backing, or increase the time to return the loan?

Access to services

- Education
 - Is there a reason education is not free?
 - Many business owners have said they work informally because they had no education – they quit after primary school because their parents could no longer afford to send them
 - Are there any job training programs for those without an education that are free?
 - Some of the business owners mentioned they would like to get training from the government because they are uneducated and need it to get jobs or at least help getting a license
- Electricity
 - Do people pay taxes for electricity?
 - What is the reason it does not work?
 - Multiple businesses have told me the inconsistency in electricity has negatively impacted their business because it only works a few hours a day so they can't use their tools and equipment
- Water
 - What are the policies regarding access to water?
 - Everyone I spoke to in Manzese told me they do not have access to water as the system does not work so they have to pay for water?
- Waste collection
 - Are there set prices for municipal waste collectors?
 - Why do they charge different prices? – I've been told 5,000/month, 2,000/month, 1,000/day, they pay upon collection and is based on the amount, or even nothing because it is paid by taxes?
 - How often is the waste suppose to be collected?
 - I've been told in Keko the dump is suppose to be collected every 2 days but they might come once a month?
 - I heard similar in Manzese, that waste collectors might come once a month?
 - What is the government policy on hiring informal waste collectors, who later dump the waste illegally?
- Drainage
 - What is the process for implementing a drainage system – flooding, disease?
 - What is the policy on upgrading the drainage systems?
 - In Manzese people have told me the sewage systems cannot handle the capacity and often fail – then the sewage flows into the drains and makes the area unsafe and it smells
 - How often are the drains supposed to be cleaned?
 - Is the government responsible for cleaning all of the drains or just those along main roads?
 - I've been told in both Keko and Manzese, that the drains that are not located along major roads are not cleaned regularly

and fill with waste because the waste collectors do not come on time. As a result they overflow?

Corruption

- Time of government to reimburse
 - What is the government policy on reimbursing residents for upgrading – such as covering the drainage ditches implemented?
 - I've been told the government has promised to reimburse locals for covering drainage ditches and never did
 - Does the government often buy furniture from the Keko businesses?
 - Many businesses here have told me they sell furniture to government offices, but they have a difficult time getting the money for this furniture and then have difficulty paying their taxes?
- Tax collectors
 - What is the municipal government's policy on bribery?
 - Are you aware of any bribery or other corruption involving informal businesses, e.g. bribing tax collectors, bribing officials to get permits, etc.?
 - Multiple people in the settlements have told me the tax collectors ask for bribes from both formal and informal businesses