Survival Strategies Among Informal Economy Businesses:

The Case of Small Maize Millers in Zambia

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Plagiarism declaration

I declare that this is my original work. The ideas drawn from the work(s) of others have been acknowledged or cited fully. I understand that copying the works of others and presenting them as mine is wrong. This thesis has not been submitted in the past, nor is it being submitted to any other institution.

Mutale Mwango

Abstract

This study explores whether the informal sector survives in a competitive environment. It focuses on informal maize millers in an industry dominated by large-scale milling firms. The study was guided by a mixed methodology for data collection and analysis. This entailed the use of a case study design which facilitated the use of detailed, multi-faceted investigations of intricate issues in their real-life settings. Specifically, a customer survey and interviews with policy experts, informal millers, activists, and participant observations were used to collect data on the practices of informal maize millers' survival in a competitive environment. Primary data were complemented by use of secondary sources, which included various documents from the public sector, civil society and international organisations in the quest to have a deeper understanding of the informal sector. Present studies about informal maize millers in Zambia provide limited attention to understanding practices of informal sector establishments. This study used the structuralist theory to explain how informal maize millers operate in a competitive environment. Structural theory focuses on the patterns of relationships among social actors. The structuralist theory is used to understand the connection that occurs between formal and informal sector activities because it takes the informal sector as being connected to the formal sector. The study applied the structuralist theories to the informal milling sector in Zambia by demonstrating interlinkages between large formal firms and market needs through servicing the needs of impoverished consumers in townships who depend on such firms and by supplying niche products to state institutions and supermarkets that were not supplied by large firms. The study identified and discussed different factors which enable informal millers to survive the competition from big commercial milling companies. The study also found that informal maize millers cater for different categories of customers including low, middle- and high-income customers. This study contributes to the body of knowledge by making an empirical contribution to understanding the survival of informal maize millers in an industry dominated by large-scale milling firms. Furthermore, from the insights, the study also develops a framework for survival and competitiveness showing pathways for informal maize millers. The study makes the argument that informal maize millers survive competition by adopting various survival strategies, such as choosing to remain informal, diversifying the maize products, and offering lower prices for maize meal.

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List of acronyms

AZIEA	Alliance for Zambia Informal Economy Associations
BSAC	British South African Company
CEEC	Citizens Economic Empowerment Commission
CSO	Central Statistics Office
ECZ	Electoral Commission of Zambia
FRA	Food Reserve Agency
GDP	Gross Domestic Product
GEM	Global Entrepreneurship Monitoring
GRZ	Government of the Republic of Zambia
IAPRI	Indaba Agricultural Policy and Research Institute
IGC	International Growth Center
ILO	International Labour Organization
JCTR	Jesuit Center for Theological Reflections
LFS	Labour Force Survey
MMD	Movement for Multiparty Democracy
NAMBOARD	National Agricultural and Marketing Board
NAP	National Agricultural Policy
NDP	National Development Plan
PACRA	Patents and Companies Registration Authority
PF	Patriotic Front
SADC	Southern African Development Community
SAP	Structural Adjustment Programmes
SNAP	Second National Agricultural Policy
ZRA	Zambia Revenue Authority
UN	United Nations
UNIP	United National Independence Party
ZSA	Zambia Statistics Agency

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Chapter 1: The informal maize milling sector in Zambia: an introduction

1.1 Introduction

The involvement of the informal sector in fostering economic development has been a topic of discussion of many scholarly debates (Du Toit et al., 2006; Ranyane, 2015; Damodaran, 2010; Deborah, 2008). Globally, the informal sector is viewed differently by a variety of scholars and policy makers. Locally, several studies have highlighted the key role regarding the informal sector's contribution to employment generation and reducing poverty in Zambia (Mwango et al., 2019; Shah, 2012; CSO, 2018; Kalusopa et al., 2020). Different schools of thought have emerged to explain what is meant by the informal sector and how it operates. These schools of thought which include, the structuralist, the legalist, the dualists, and voluntarists shape the debates about the informal sector. Literature has established that many informal business ventures, in general, do not survive beyond the fifth year (Skinner, 2006). This study sought to contribute to establishing how informal maize millers fare in this regard. With this context in mind, this study aimed to investigate whether the sector survives competition in an industry dominated by large-scale milling firms.

In this study, I sought to establish the practices of the informal sector to survive competition from large-scale millers through various strategies described in Chapters 6, 7 and 8 of this thesis. The study seeks to show how the informal sector is key in offering cheap, available and a variety of foods for the urban underprivileged, while, at the same time, promoting the incomes of a diversity of small-scale participants in the agrarian sector – farmers, buyers, and traders – through a provision of a ready market for farm products (Mwango et al., 2019). The informal food business that bridges countryside and town markets is lively, flexible, and commercial. It has been effective in taking food to masses of customers without the involvement of big vertically integrated corporate organizations (Mwango et al., 2019). However, with COVID-19 affecting the global economy since the end of 2019, the pandemic's impact on the informal sector has been mostly adverse (World Bank, 2020a). Informal traders were expected to drop out of employment or suffer severe revenue losses for the period of lockdowns much more than they did (Balde et al., 2020; Schotte et al., 2021). Furthermore, the informal sector is also linked with poorer access to public health and hygiene services, making it more difficult to hold back the spread of the epidemic (World Bank, 2020a). The other issue the study grapples with is that informal personnel are mostly omitted from formal social security nets and have low earnings and restricted safeguards, such as savings or access to government funded programmes. These challenges are attributed to inadequate attention to the informal economy as a breeding ground for future enterprises and employment. Consequently, this study sought to delve into these vexed issues of inadequate attention to the informal economy by focusing on the informal milling sector in Zambia.

1.2 Background to the study

The term, informal sector, has been defined differently by different scholars. Porta and Shleifer (2008) view informal economy as one where unregistered firms conduct economic activity or, if they are registered, they evade tax. Castells and Portes (1989 in OECD, 2009) define informal economy as one which does not adhere to the organisations of society in the same lawful and communal environment where related undertakings adhere to regulation. For the Government of the Republic of Zambia (GRZ), "informal sector refers to production units that are not registered with any tax or a licensing authority" (GRZ, 2020:6). This last definition of informal sector is adopted for this study.

Prior to 1991, the Zambian government, through its parastatals, oversaw the milling and distribution of maize, which they tightly controlled, and determined prices. In each phase of the distribution route, the manufacturer price, vending price to millers and retail rate of maize meal were set by the government (Scott, 1995). These prices were to be applied countrywide and were not amended for most of the year (GRZ, 2004). The National Agricultural Marketing Board (NAMBOARD) and the Provincial Cooperative Unions monopolised the purchase of maize. Following the full implementation of the Structural Adjustment Programmes (SAP) in 1992, these parastatals were privatised. Maize meal prices increased, while several people lost their formal employment. It was at this stage that the informal sector maize millers emerged to cushion the impact of the withdrawal of government parastatals and to provide cheap mealie meal to a growing number of the urban poor (Jayne et al., 2002, Burke et al., 2011).

The informal sector's significance in developing nations has long been acknowledged, particularly evident in Zambia's transition to liberalization in the 1990s when a surge of small-scale millers emerged (Chapoto, 2013). This transformation was a pivotal moment for food processors within Zambia's informal economy, marked by modest-scale maize purchasers and retailers, as well as small-scale maize millers. Some of these millers also engaged in maize purchasing and stocking, offering consumers lower-priced maize alongside grinding services. This shift toward small-scale milling played a vital role in reducing the differences in pricing between wholesale grain rates and the cost of maize meal at the retail level (Chisanga et al., 2015).

Urban dwellers found it more economical to purchase raw maize from informal retail markets and have it ground by small-scale millers than buying refined maize meal from large-scale processors. This practice not only provided cost-effective maize meals for the urban poor but also supplied a healthier alternative known as "mugaiwa" to the affluent, as it involved less processing than products from large millers (Nkonde et al., 2011).

Despite their contribution, informal maize millers faced various challenges, including supply restrictions that limited their operations. The seasonal nature of the maize market further complicated matters, with maize being abundant during the harvest season, benefiting informal markets but not large milling firms that maintained stable prices throughout the year (Chisanga et al., 2015; Chapoto, 2013 and Chapoto, 2012).

Large-scale milling firms predominantly captured maize during the marketing season, reintroducing it to retail urban markets as expensive, refined mealie meal. Moreover, during periods of maize deficits, imports were biased toward large-scale milling firms, disadvantaging informal retail and small-scale milling sectors relied upon by urban consumers. This policy bias favoured formal markets, benefiting large-scale milling firms, and undermining the vital role played by the informal sector in maize meal access for urban dwellers (Nkonde et al., 2011).

This concentration of power within a few large-scale milling firms allowed them to eliminate competition and impose unfavorable terms on consumers, exacerbating poverty and hunger. In essence, the policy bias against the informal sector has allowed large-scale milling firms to dominate the maize market, leading to unfavorable consequences for consumers and competition in the industry (Chisanga et al., 2015; Chapoto, 2012).

Informal maize milling is mainly done by individuals who operate in compounds or markets as a service to the local people. They usually employ one to three people, while, in some cases, the owners do the milling themselves. Their main service is milling the maize brought to them by customers. However, some buy and supply maize grain so that customers come and purchase maize from them, as well as having it milled. However, it is not known whether these businesses survive for a long time considering the environment in which they operate. It is against this background therefore, that this study seeks to assess whether the informal sector maize millers survive the competition from large-scale maize milling firms.

1.3 Statement of the problem

The study examines whether the informal sector maize millers survive in an industry dominated by large-scale maize milling firms. The study is situated in the context of urban Zambia's broader political economy. Development in the Zambian informal sector is closely linked to other political and economic happenings in the country, such as the widespread liberalisation and privatisation in the 1990s. For example, an examination of the structure of the Zambian economy in the last fifty years shows that some obvious structural changes in the economy have happened. One of the most obvious changes was the decreasing share of formal employment, especially starting from 1990 (Chitonge, 2016). This situation has led to the growth of the informal sector and informal employment. However, in academic literature, there has been a global debate on whether the informal sector survives competition.

These broader debates are discussed in detail in Chapter 3 of the study under the section which discusses the different schools of thought on informality. Briefly, however, some scholars, such as Shah (2012), who have written on the performance of the informal sector, have argued that the informal sector does not survive competition, while others, such as OECD (2009), contend that they do survive. Shah (2012) made an effort to close the knowledge gap related to the extent of the informal sector and the attributes of the businesses operating within it.

Additionally, some scholars have questioned whether informal employment is an indicator and, at the same time, a generative and continuing factor of instability and disparity, as well as of communal and individual deficiency. Or whether it is a vehicle for singular and communal deeds that reveals economic creativity and business possibility, which, when correctly channelled and nurtured, could greatly add to social and economic change and, consequently, to the decrease of disparity and poverty (Temkin, 2009). My study agrees with the latter view and argues that informal employment is a vehicle for singular and communal action that mirrors economic creativity and business possibility.

In summation, my study situates itself within these broader debates (Shah, 2012; OECD, 2009; Temkin, 2009). This study is very important in the context of Africa because it deals with access to maize meal, a key component of food security, and a challenge with which most African countries are grappling. This is seen in the way informal sector maize millers provide an alternative source of maize meal to the urban dwellers. To the poor, informal millers provide a cheaper source of maize meal while, to the relatively well-to-do, they provide a healthier alternative to the maize meal sold in the formal markets.

The informal sector in Zambia, like in many other developing nations, provides the necessities of much of the populace. Its human resource capabilities, though, are highly underutilised. Furthermore, little output and subsequently low-earning levels are mostly due to an inadequate access of informal sector operatives to support amenities, like elementary education, professional training, or business finance. "Qualitative transformation" of the informal segment to escalating growth, output and revenue levels marks the rationale of the support systems (Mwango et al., 2019). Specifically, the informal sector does not enjoy privileges, like business capacity building (e.g., delivery of business and practical skills), networking (to improve entrepreneurship co-operation and to upsurge socio-political presence), invention strategies (which should be customer- and government-driven, i.e., not only by the prevailing producers), access to funding (which has to be made easier for the businessperson in the informal segment). While the public and private formal sector operators enjoy these privileges and some form of support from the government, it is not known how the informal sector survives under these circumstances in Zambia. Therefore, this study endeavours to examine whether the informal maize millers survive in an industry dominated by large-scale milling firms.

1.4 Overall research objective

Broadly, the study will examine the survival of informal maize millers in a competitive environment. To achieve this, the study has the following objectives:

1. To assess whether informal maize millers survive competition
2. To assess how informal maize millers' internal characteristics affect their survival
3. To examine how external factors affect survival of informal maize millers in an industry dominated by large-scale milling firms

1.5 Research Questions

1. What is the long-term survival rate of informal maize millers in the presence of competition from large-scale milling firms, and what are the key factors contributing to their survival or exit from the industry?

2. How do the internal characteristics, such as operational efficiency, management practices, and access to resources, influence the survival and sustainability of informal maize millers in a competitive industry?

3. What are the external factors, including market conditions, regulatory environment, and customer preferences, that significantly impact the survival prospects of informal maize millers in an industry where large-scale milling firms hold a dominant position, and how do informal millers adapt to or mitigate these external pressures to ensure their continued presence?

1.6 Study rationale

This is an extremely important topic given its role in employment creation (Mwango et al., 2019) and the sharp growth of the food processing subsector in Zambia, especially maize milling, in the last two decades. It is estimated that 66.6 per cent of those in gainful employment work in the informal sector (GRZ, 2020). Maize milling is an important subsector in Zambia and many parts of Africa because maize meal (which is the main product of the maize milling subsector) is the primary staple food for most of the people in the country and the continent. Therefore, understanding whether the informal maize millers survive in a sector dominated by large-scale milling firms is critical in ensuring access to maize meal among urban dwellers and informing the government food security policy. Furthermore, this study contributes to the debates surrounding the survivability of the traders operating in the informal economy.

In terms of empirical contributions, the study provides evidence on the survival of informal maize millers in an industry dominated by large-scale milling firms. Though the subject of the informal sector has received much attention in recent years from both academics and non-academics (Chapoto, 2012), much of the academic literature has concentrated on traders, street vendors and other retailers (Chisanga, 2015). Scholars, who have attempted to do some work on the informal maize sector, have done so mainly on maize traders, particularly in linkages between small-scale producers and large millers (Mason et al., 2011). As such, there are a dearth of knowledge and insights relating to informal maize millers. It is against this background that this study entered the broader informal sector debates by focusing on the question of whether informal maize millers survive in an industry dominated by large millers.

1.7 Methodology

1.7.1 Epistemological foundation, research methodology and design

This section lays out the methodological foundation for the research in this thesis as to research approach selected for this work, and philosophical perspectives underlying this method. Research philosophy deals with the foundation, nature, and growth of knowledge. In short, research philosophy is faith in the ways in which data about a phenomenon should be compiled, examined, and applied (Saunders et al., 2012). Practical implications are key in determining the type of research philosophy to adopt for one’s research. This is because fundamental differences exist among studies that emphasise statistics, such as big surveys, and qualitative work, such as an analysis of management approach on teacher motivation in primary schools (ibid).

This research design employs a mixed methods approach. It utilises a case study research design that uses both quantitative and qualitative methods to collect and analyse data. The quantitative approach is a minor part of this research as it is only employed to provide descriptive statistics which are used to provide more context to the study. The larger part of the study uses qualitative research methodology.

1.7.1.1 Quantitative data collection techniques

A structured form was used to gather quantitative data to be used for descriptive statistics. A structured survey questionnaire is used to gather information from respondents and the questionnaire is composed of standardised closed questions, that are worded in a particular way, asked in a set sequence, and need respondents to pick from a set of predefined responses (Bryman, 2007). The questionnaire collected data on household demographics, social economic overview, and maize meal preferences.

1.7.1.2 Quantitative data analysis

Quantitative data analysis employed descriptive statistics as the main method of analysis. Specifically, frequency tables and graphs, descriptive and cross-tabulations were used to weight the responses. Analysis was done in SPSS software Version 20 and MS Excel. Prior to data analysis, data processing activities included coding and cleaning, entering data onto the data sheet in MS-Excel and then exporting these into SPSS database. Syntax files were built to automatically add variables and value labels to the imported data. All analysis and interpretation of data was done in accordance with the objectives of the study.

The sampling technique used for the survey was purposive sampling. Purposive sampling is a type of non-probability sampling in which units of a study or respondents are selected because they are a key part of the study (Bryman, 2008). In this case, I was interested in interviewing customers of the informal maize millers. I interviewed the customers as they came to the hammer mills in the selected markets. A total of 200 customers of informal maize millers were interviewed.

1.7.1.3 Qualitative methods

As already explained in section 1.7.1, although a mixed method was used, the major component of the study was qualitative. Qualitative research is a method of investigation used in several diverse academic disciplines, customarily in the social sciences, with the view to exploring problems, appreciating phenomena, and responding to questions by analysing and making sense of unstructured data (Bryman, 2007). It answers the 'how' and 'why' research questions and allows for a profound appreciation of experiences, occurrences, and environment (ibid). Furthermore, the qualitative method permits one to practice and ask questions that cannot be effortlessly represented in numbers to understand human experience. Furthermore, qualitative research is mainly designed to bring out a target group's varying behaviour, as well as the insights that move it, with mention of exact themes or problems. It utilises in-depth studies of small clusters of individuals to lead and sustain the understanding of occurrences. It follows, therefore, that the outcomes of qualitative investigations are descriptive rather than predictive (ibid). The study used a case study method, as it permits in-depth, multi-faceted investigations of compound problems in their real-life locations (ibid).

The study made use of secondary and primary sources of information. To this effect, the investigator reviewed published and unpublished literature, as well as reports obtained from the government of Zambia, as secondary sources. In addition, semi-structured interviews, informal discussions, and archives were used as primary sources of data.

1.7.1.4. Why qualitative methods for this study?

Qualitative methods were ideal for this study because it was seeking an in-depth understanding of whether informal maize millers survive in an industry dominated by large-scale milling firms. To achieve this objective, the study needed to have an in-depth understanding of the internal and external factors that may affect the survivability of maize millers. In Table 1.1, I provide more details about how the study was done. The table includes information about the selection of participants (who, where, how, and why) and how much interaction there was with each respondent.

1.7.1.5 Semi-structured interviews

The study used semi-structured interviews to collect data from the owners and employees of the hammer mills and from other key informants from the government. The participants were selected using purposive sampling and depending on their willingness to participate in the study. Desai and Porter (2006:144) state that "semi-structured interviews follow a form of interview schedule with suggested themes, but there is scope for the interviewees to develop their responses." Therefore, I prepared an interview schedule, which covered themes outlined in the objectives of this study but was flexible enough to allow the interviewees to develop their responses. The discussions were recorded using a smart phone and I personally did the interviewing as a researcher. I am conversant with the local language (Nyanja) that is used in Lusaka and had no language challenges communicating with interviewees.

1.7.1.6 Groups interviewed and the questions asked

Five categories of participants were identified for interviews. Issues and questions discussed with various participants included, but were not be limited, to: Who are the millers? How did they establish their businesses? Who are the customers and why do they use hammer mills? How are prices negotiated? Do they have any association? If yes, what role does it play; if not, why not? What are the business trajectories? What are the rules of engagement? What led to your business closure? Any recommendations? How would you describe your relationship with the government? How do you describe your relationship with competitors, especially large-scale milling firms? Below is a table showing the profile of participants and the rationale for choosing them.

Table 1.1: Profile of participants

Participants	Number of Participants	Method of Data Collection	Rationale and Information Collected
Hammer Mill Owners	22	Semi-structured interviews	To collect information on internal business characteristics affecting survivability, information on external characteristics that affect survivability, to find out if they do innovate and how they do it, get information on business trajectories, find out period of existence of the business and get information on whether they make any sacrifices for the survival of their business
Employees	27	Semi-structured interviews	To collect information on internal business characteristics affecting survivability, period of existence of the business, external characteristics that affect survivability, and find out if they do innovate and how they do it and get information on business trajectories
Informal economy association representative	1	Semi-structured interview	To find out any rules and regulations that govern informality
Customers survey	200	Structured interviews. Although this is mainly used in quantitative designs, they can also be used in qualitative approaches. When used in a qualitative research methodology, investigators design an interview plan which lists the wording and sequencing of questions.	To find out who the customers are and understand why they use the hammer mills
Government policy makers in the Ministry of Commerce, Trade and Industry, Ministry of Agriculture, Zambia Revenue Authority and Lusaka City Council.	4	Semi-structured interviews	To obtain information on the environment in which the informal millers operate, and find out the rules and regulations governing the informal sector

Source: Author’s own compilation

1.7.1.7 Participant observation

I also used participant observation to gather information. Participatory observation is a process where a researcher submerges him or herself in a cluster for a lengthy period, perceiving behaviour, paying attention to what is said in discussions both between others and with the investigator, and asking questions (Bryman, 2008). This generates some rich data that would not otherwise have been picked up in the interviews. General field observations, as well as informal discussions, were analysed. During the period of data collection, I spent most of the time interacting with the informal millers. I spent one full year in the field collecting data and observing the dynamics in the maize sector. During field work, I took notes on everything I observed. The notes generated from the observations in the field were used to shed more light on the analysis process.

1.7.1.8 Documentary evidence

Documents provide useful sources of information for study purposes. I examined and analysed documents related to the milling sector in general, and informal maize milling, specifically. This was done by downloading and analysing various reports and publications from the public sector, civil society, and international organisations websites. The purpose of this was to obtain information on how the informal milling sector has been transforming over time.

1.7.1.9 Qualitative data processing

A substantial volume of textual data was gathered from different participants. This data required vigorous but efficient data evaluation skills. The process of data evaluation commenced with the creation of contact summaries, as outlined by Miles and Huberman (1994). These contact summaries were generated by transcribing all interview data. Regarding documents, contact summaries involved the condensation of information from reports, memos, plans, and other written materials. As for the field diary, notes were restructured to form chronological and well-coordinated accounts. These contact summaries then served as the foundational material for further analysis and reduction through a method known as narrative analysis.

Narrative analysis encompasses a set of techniques focused on scrutinizing spoken, written, or visually presented information, as described by Riessman (2008). These techniques include thematic, structural, and content analysis. I employed these techniques to explore the data from a reflective and iterative perspective. Below, I will detail my approach to conducting narrative analysis.

Thematic analysis

Thematic analysis, as defined by Riessman (2008), focuses on the content of what was expressed rather than the manner in which it was conveyed. This approach constituted the subsequent stage of data examination, following the compilation of contact summaries. It involved an ongoing comparative analysis process, as outlined by Brummans et al. (2008), which required continuous coding. To facilitate this process, each interview text was inputted into QSR NVivo, a tool designed to manage and organise extensive text data. I utilised NVivo iteratively, coding data sets and categorising them into thematic areas. These themes emerged in two ways: they were either derived from observations made in document sources or were generated from the data itself. However, relying solely on thematic analysis did not provide a comprehensive analysis beyond revealing broad trends in the data. Consequently, the inquiry expanded to include structural analysis.

Structural analysis

Structural analysis involves the manner in which stories are reported and organised. Structural analysis was especially crucial in assessing narratives given by different people about connected occurrences, as numerous participants arranged their narratives in a distinct way. This analysis included examining how narratives were arranged, the pitch of voice and facial communications. It also included examining how symbols were utilised to describe experiences, feelings and values about the informal sector and survival (Riessman, 2008). I also considered how the larger and local political economy, explained in Chapters 3 and 4, formed storylines. As a result, structural analysis offered an enlarged insight of themes evolving from thematic analysis.

Content analysis

This is a blend of thematic, discourse and framing analysis and was employed to examine literature, like reports, memorandums and letters, proposals, speeches, legal, policy documents, and field notes. Most official records could not be taken away from record keeping. Information from the files was inserted physically into patterns, put in consecutive order and important themes generated. Structuring the patterns in consecutive order made it feasible to follow the development of topics/discourses prior to creating related interpretive narratives.

Tape recordings transcribed

As a researcher, I was personally transcribing the recordings from the interviews so as not to lose the meaning of what was being said, and I summarised the interview extracts.

Determining prominent themes

I used both Excel and NVivo to analyse the qualitative data. In NVivo, coding is the method of constructing associated material into a vessel named a node. Immediately you open a node, you can find all the sources in the project coded to the node. There are numerous kinds of codes in NVivo. Theme nodes are codes that indicate the themes or topics that you get in your data. Whether an issue was common and warranted being pursued was established by making use of hierarchy diagrams formed in NVivo (Bazeley & Jackson, 2013).

The process

After gathering data, I commenced a staged analysis. First and foremost, an organised inspection of the notes produced throughout the course of the discussions to tease out relationships and to understand key patterns was done. This undertaking implied discovering familiar ideas in answers by examining research notes and producing a catalogue of codes and subcodes employed to classify respondents' statements. Making use of these classifications, I then inserted data from respondents' replies into sheets created for each individual research question, with all responses attached to a code and possible subcode. After coding all interview answers, I utilised the dataset to separate patterns in reply content and to underline associations involving stakeholder groups and subsequent responses; all regarding the study's leading questions. Consequently, I was able to sketch out the perceptions that had been created into the study's key findings. All names cited in this study are fictitious names used to protect respondent confidentiality.

If an issue was prevalent and warranted being followed, this was recognized by making use of hierarchy diagrams formed in NVivo (Bazeley & Jackson, 2013). The study applied hierarchy diagrams of sources to evaluate the quantity of coding per source. These charts discovered sources heavily coded at nodes. Subsequently, designs of topics were investigated according to sources. Hierarchy diagrams for nodes were exploited to contrast the quantity of coding at specific nodes and to envision prevalent nodes for all coded text. NVivo contains dual categories of hierarchy diagrams: treemap and sunburst diagrams. For this work, I selected the treemap over sunburst hierarchy chart, as it was easier to compare the dimensions of diverse features of data via rectangles rather than curved segments. Rectangles were sized by coding frequency, thus, the larger the rectangle, the more important the occurrence of nodes coded under the theme.

1.7.2 Data presentation

The preceding sections have explained how data were acquired and examined. This section now deals with how results are presented in this thesis. Context Chapters 3, 4 and 5 present historical data, whereas all field data is presented in empirical Chapters 6, 7 and 8. Data demonstration takes a storyline method supported by citations from interviews, documents, and field photos. Most excerpts are reported in their English version, but, in some cases, Nyanja expressions are utilised to keep the authenticity of whatever was said and then translated into English. All identities for extracts utilised remain unidentified. Anonymity was provided by using pseudonyms, merely referring to respondents as unknown, or, in cases that involve representatives from state institutions or other organizations, simply as ZRA official or Ministry of Agriculture official. In cases where participants of the same classification were referred to twice, they were provided with numbers: for example, ZRA official 1, NAPSA official 2, participant 1 and participant 2.

1.7.3 Case study area

The focus of this study was Lusaka urban in the Lusaka Province of Zambia. Lusaka was selected to be a study area because it is where most informal maize millers are located (Saasa, 2006). Further, the study restricted itself within Lusaka city due to financial constraints. Specifically, Garden, Chilenje, Bauleni and Soweto Markets are the sites where the study was conducted in Lusaka city. These markets were chosen as study sites because they service some of the biggest settlements in Lusaka and host huge numbers of informal maize millers, who are close to each other, thereby making accessibility easy. People in these compounds work and buy most of their food requirements within the local markets and makeshift shops located within the houses of shop owners. Furthermore, these compounds are home to some of the poorest segments of the urban population. It is in these compounds where you find repackaged small packets of mealie meal (1kg or 2kg) sold in the local markets in a quest to provide affordable mealie meal to most of the poor who cannot afford a conventional 25kg bag. As is the case with all compounds, Garden, Chilenje, Bauleni and Chibolya are settlements inhabited by people in the low-income brackets. People in these areas access their food and other essential commodities through the local informal markets. It is in these markets where most of these informal maize millers are located, while some operate within their homes. As will be seen in Chapter 6 and Chapter 7 of this study, some of these millers tailor their products according to the needs of the customers. They process *mugaiwa*[1], breakfast or roller meal depending on the preference of the customers unlike the large-scale millers who produce only either roller or breakfast meal. I also observed from my field visit that the owners of these

[1] Mugaiwa is a type of mealie meal which is coarse.

hammer mills are mostly well-to-do. This could be evidenced from the fact that they are able to purchase these hammer mills, which are expensive and normally beyond the reach of the ordinary poor people. For example, a hammer mill costs in the range of $3000 to $6000, an amount which is far beyond what most micro finance institutions would give as a loan to marketeers and other small-scale traders. Chapter 6 gives a detailed description of the study site, including the socio-economic features, the geographical location, and the composition of the compounds.

1.7.4 Limitations of the study

1.7.4.1 Markets as places of partisan politics

I was conducting my data collection from the markets at a time when partisan politics were rife in the markets across the country. Even though the markets were, by law, supposed to be under the authority of the local municipal and city councils, almost all markets I visited were under the leadership of the ruling party at the time, the Patriotic Front cadres, popularly known as “commanders”. The ruling party officials in the markets ensured that they controlled public opinion and anyone who was seen giving information that would be interpreted as working against the ruling party would be punished and removed from the market. As a result, some study participants were not very open when discussing challenges they faced in the market, as they were afraid of being misunderstood. Furthermore, the ruling party officials were suspicious of individuals conducting any research activities in the markets, and would, therefore, be nearby when interviews were happening thereby causing discomfort among the interviewees who thought they were being monitored. They were suspicious even when I presented them with a letter from UCT explaining the purpose of my research and my university identity card.

1.7.5 Ethical considerations

The study used the University of Cape Town Research Ethics Code for Research concerning human participants. Ethics are the moral codes that regulate human behaviour (Bryman, 2008). Research ethics may be described as executing what is morally and lawfully right in research. They are values for conduct that distinguish between moral and immoral, and acceptable and unacceptable behaviour (ibid). Some of the ethical issues considered are highlighted below:

1.7.5.1 Permission/access

Authorization to undertake research from the Research Ethical Committee in Zambia was guaranteed once I got the proposal approval from the UCT. Further, I undertook a preliminary visit to Lusaka in June 2015 to familiarise myself with the study area and I established rapport with most of the potential participants. The hammer mill owners with whom I talked expressed willingness not only to participate in the study through interviews but also allowed me to sit at their workplaces and observe how they go about conducting business. They also agreed to give me permission to talk to some of their customers when the study commenced.

1.7.5.2 Informed consent

Research participants were requested to provide informed, voluntary consent to involvement in the research. As an investigator, I provided material that clarified the aims and meaning of the research project, the type of involvement and any other reflections that might sensibly be likely to influence their readiness to be involved. This information was delivered in a language that is comprehensible to the potential participants. Furthermore, as a researcher, I respected the right of potential participants to decline to be involved or, having agreed to be involved, to withdraw their consent at any point without bias.

1.7.5.3 Anonymity and confidentiality

Participants' identities were kept anonymous so that information was not traced back to them. I used pseudonyms in place of their real names in the thesis itself. Information that is regarded by participants as secret was treated as such to maintain confidentiality. This means that such information was not used in the thesis without prior consent of the participants. Where such information was key for the completion of writing of the thesis, I engaged them to see if there were any other ways in which the data could be used.

1.7.5.4 Research trustworthiness

Credibility is trust in the accuracy of the research results. It ascertains whether the research outcomes epitomise credible evidence obtained from the participants' original data and is a factual explanation of the participants' original observations (Korstjens & Moser, 2018). In this study, I used multiple sources to guarantee the reliability and the verification of the study. I am of the view that the interviews, the time I spent in the field, the tape recordings and pictures, and the notes from observations were enough to provide validity of the research findings.

Transferability is described as the extent to which findings of a qualitative study can be applied to other settings or situations with different participants. The investigator enables the transferability decision by a prospective user via heavy explanation (ibid). As an investigator, I furnished a 'heavy explanation' of the participants and the research procedure, so that the reader can assess if my results are moveable to their own situation; this is what is termed transferability judgement. This implies that the individual who reads, not the investigator, determines the transferability judgment as the investigator is not aware of their specific settings. In this study, I offered a rich explanation of descriptive data, such as the background in which the study was done (Chapter 6 gives a detailed description), its location, sample, sample proportions, sample plan, demographic, socio-economic circumstances, addition and elimination criteria, interview technique and themes, adjustments in interview questions centred on the iterative study procedure, and extracts from the interview guide.

Dependability is the steadiness of results across time. It includes participants' assessment of the findings, examination, and suggestions of the study to the degree that all are verified by the data as collected from participants of the investigation (ibid). Dependability involves the attribute of stability. In this study, I had to check that the analysis procedure I was applying was within the accepted standards for a specific design. Moreover, I was accountable for preparing a full set of notes on choices reached during the study process, research gatherings, insightful thinking, sampling, study resources adopted, development of the results and information about the data organisation. This allows anybody engaged in auditing the study to examine the openness of the research path.

Confirmability is the degree to which the findings of the study might be established by diverse researchers. Confirmability deals with establishing that data and elucidations of the results are not inventions of the investigator's imagination, but evidently coming from the data (ibid). Confirmability relates the perspective of impartiality. As an investigator, I had to safeguard the inter-subjectivity of the data. I ensured that the explanation was not centred on my own partialities and views but was based on data. The spotlight here is on the description process embedded in the procedure of analysis.

Reflexivity is the path of important self-reflection concerning oneself as a researcher (own prejudices, partialities, presumptions), and the study links (links to the participants, and how the links influences participant's responses to questions) (ibid). As an investigator applying a mixed method design, I recognised the importance of being self-aware and instinctive about my own standing in the route of collecting, examining, and describing the data, and in the pre-conceived anticipations I bring to the study. Thus, my interviews, scrutiny, and all investigative data were augmented with my reflexive notes. My reflexive notes for the interviews explained the background and parts of the interview that were noted during the interview itself and while converting the audio tape and examining the transcripts. Reflexive notes also incorporated my individual reactions to the setting and the association with the participants.

1.8 Outline of thesis chapters

Chapter 1: The informal milling sector in Zambia: an introduction

This chapter has introduced the study and the overall problem. It gave detailed background on the motivations behind the study and went on to provide a discussion on methodology and research questions, and the debates that have informed these and how they will subsequently be transformed by findings in the field.

This introductory chapter outlined the study focus, objectives, questions, methodology, significance of the study and chapter summaries. The study examines how the informal sector maize millers survive in an industry dominated by large-scale maize milling firms. My study explores the reasons that lead to survival or lack of survival for the informal maize millers by interviewing business owners, employees, informal milling associations, government officials, and customers of informal maize millers. This was mixed methods research that employed both quantitative and qualitative methods to collect and analyse data.

Chapter 2: The informal economy: a conceptual framework

This chapter discusses the concepts around the notion of the informal sector and survival and then engages larger debates at global, regional, and national levels. The chapter has three sections, namely, informal sector in a global perspective, informal sector in Africa, and informal sector in Zambia. The section on the informal sector literature on Zambia will show the linkage between informality and the survivalist concept. The chapter then discusses four schools of thought on the informal sector. A bigger part of this discussion is devoted to the structural theory that informs analysis and discussion of the study. Furthermore, the chapter also analyses general literature on the informal sector and survival, as the two concepts complement each other. The chapter then shows that the informal economy is mostly survivalist and highlights the implications this has for the study.

Chapter 3: An overview of the informal sector in Zambia

This chapter provides an overview of the informal sector in Zambia by focusing on the informal sector in terms of various activities, employment levels, trends over time, factors responsible for a large informal sector, challenges for people in the sector and how the informal sector relates to the formal sector. The chapter is divided into four sections. The first section discusses the growth of the informal sector in Zambia. It provides a historical perspective of Zambia’s economy starting from 1964 when Zambia got its independence. The section shows that the economic system in the UNIP government was mostly formalised, and that informality grew in the early 1990s after the full implementation of the SAP by the new government, the Movement for Multi-Party Democracy (MMD). The section then shows that the factors that led to its growth are the ones sustaining or contributing to the survival of the informal sector.

The second section presents the characteristics of the informal sector in Zambia. It shows that, generally, the informal sector in Zambia has low productivity and low incomes. The informal workers are usually less skilled and lower paid than their formal counterparts. The third section presents the role of the informal sector in Zambia and factors that account for its size. The section shows that the informal economy is a major source of employment and livelihoods for most Zambians. The fourth section presents the linkages that exist between the informal and formal sectors in Zambia. Specifically, the section delves into the forward and backward linkages that exist within the two sectors in Zambia.

Chapter 4: The political, economic, and social context of the informal economy in Zambia: A review of literature

In this chapter I present Zambia's social and economic situation with the view of providing a general context in which the informal sector operates. To achieve this, the chapter will give a country background focusing on population and the economic policy environment. After providing the general population of the country, I will zero in on Lusaka urban and show that the biggest population in Lusaka resides in the low-income areas, popularly known as compounds, hence their important role of hosting the informal sector and the reason that they were chosen as study areas. The next section will discuss the policy environment in which the informal sector operates. The section will show that the policy frameworks available have not been supportive of the informal sector. This section will be followed by one looking at the country's economic outlook generally and will then delve into the poverty and employment situation. Lastly, the chapter will discuss why there has been no corresponding growth in formal employment despite massive economic growth between 2000 and 2015 in Zambia. The conclusion of the chapter will then show that the informal economy has remained resilient to the negative environment in which it operates and that it continues to be a means of livelihood and survival for those outside the formal employment and trapped in poverty.

Chapter 5: The maize subsector in Zambia

In this chapter, I present the general profile of the maize grain sub-sector by discussing the history of maize production, informal maize milling and its use, the politics of maize meal prices regulation, and the role of the informal milling sector in Zambia. The maize subsector in Zambia is one of the most important and political subsectors of the country's economy. This is because maize is Zambia's staple food and historically has been at the centre of politics due to its ability to make the general populace rise against the government if they feel the government is not doing enough to secure the crop for them (Chapoto, 2019). Availability of maize in Zambia, as is the case in many eastern and southern African nations, is synonymous with food security, hence, any price spikes or shortages in maize and maize meal result in food insecurity which, in turn, threatens to affect the country's internal security. Owing to the importance of this sector as explained in the foregoing discussion, this chapter interrogates in detail the politics about pricing, regulatory FRA, and the component of the Zambian population accessing maize meal from the informal economy. Furthermore, the chapter discusses farmers who grow it, who they are and why they grow maize. The chapter then introduces and discusses traders, as they are the main players. Lastly, the chapter argues how the maize value chain, which is divided into farmers, traders and millers, who are also divided into informal and formal, contributes to sustaining a viable informal maize milling sector.

Chapter 6: Informal maize millers, informal markets, and customers

In this chapter, I turn to the case study areas (Garden, Chilenje and Soweto Markets and the compounds that host them) providing the empirical materials for the informal maize millers and what they do to survive. An overview of linkages between the general characteristics of informal maize millers, informal markets, customer profiles, sources of maize grain and survival is provided. The customer profiles are presented in this chapter as they are directly linked to the survival of informal maize millers. The chapter shows that, through access to different categories of customers, informal maize millers have a ready market for their products. All in all, the chapter examines the key features of the informal sector and how they link to survival. The chapter is divided into four sections. Firstly, the chapter begins by providing a detailed description of the areas in which the study was conducted. The second section provides a detailed general description of informal maize millers. In the third section, the chapter interrogates informal millers' motivations for getting involved in milling. The chapter presents views from different stakeholders, as well as my observations while in the field. It highlights the informal millers' motivations to remain in business. What drives their continued stay in informal milling business? Having a clear understanding of the motivations is key to understanding the survival of these millers. This is followed by a section that provides an overview of the customers that buy from the informal maize millers and how this is important to the survival of the millers.

Chapter 7: Informal maize millers' survival strategies

This chapter builds on Chapter 6, which examined the lived experiences of informal maize millers across different markets in Lusaka. The chapter provides a detailed assessment of the strategies that informal maize millers use to survive and ends with a section on the challenges that informal maize millers face. At the core of the chapter are the concepts of informality and survival. As stated in the theoretical chapter, the concepts of informality and survival have been defined differently by different scholars. However, for this study, informality implies those businesses not registered by the Patents and Companies Registration Authority (PACRA) and unable to meet all the required statutory obligations. For the concept of survival, in this context it means the ability to continue operating despite the many challenges they face. Specifically, survival refers to informal maize millers that have continued to exist for a period of not less than five years, despite competition and other adverse conditions they face.

Following this is a section that deals with competition. The section examines competitors of informal millers and examines how such competition affects the miller business under discussion. This chapter ends by discussing how the different strategies presented link to the survival of informal maize millers in an industry dominated by large-scale milling firms.

Chapter 8: Factors influencing the survival of informal maize millers

This chapter builds on the previous one, which presents strategies for survival among informal maize millers. This chapter delves into the question of whether informal maize millers survive in an industry dominated by large-scale milling firms. As stated in Chapter 2 of the study, I use the structuralist school of thought and the concept of survival to explore the question of whether informal maize millers survive competition. The chapter is divided into seven main sections. The first section presents data and discuss the linkages that exist between the formal and informal and shows how this affects the survival of informal maize millers. The second section presents data and discusses the cash inflow and outflow as a factor for survival. The section shows that informal maize millers make more money than they invest into their businesses, hence, their ability to survive competition. The third section discusses remaining informal as a survival strategy. It shows that, with all the costs associated with formalisation, informal maize millers choose to remain informal to avoid the costs of formalisation and survive competition from big millers. The fourth section discusses competitive maize meal prices and the survival of informal maize millers. The section shows that the pricing of informal maize millers is highly competitive and because of this, they can retain many customers, a factor that contributes to their survival. The fifth section discusses the role of institutions and associations in the survival of informal maize millers. The section shows that associations and institutions play a very important role in addressing the welfare of their members, hence their importance in survival. Having discussed the above factors affecting survival of informal maize millers, the sixth section then begins to discuss the challenges faced by informal maize millers in their milling business. The seventh section discusses attrition and the factors behind this.

Chapter 9: Informal maize millers in Zambia: Key findings, discussion, and conclusion

This chapter shifts from empirical materials of the study to engaging these with scholarly debates (ILO, 1972; Senthuraman, 1976; Tokman, 1978; Tamukamoyo, 2009), discussed in Chapter 2. It briefly returns to the focus of the study, particularly its objectives and location within scholarly debates on the informal sector and survival. The chapter then draws out the main findings of the study which are, firstly that informal maize millers survive competition from the big millers, secondly, that informal maize millers have adopted various strategies to survive in the business, third, that informal maize millers have unique advantages over big millers, fourth that informal maize millers cater for different categories of customers (low, middle- and high-income customers), fifth that informal maize millers choose to remain informal as a survival strategy in the business environment, sixth that unsupportive regulatory and policy environment pose a risk that would lead to attrition in the informal sector if not addressed, and lastly that informal maize millers are diverse. The last part of the chapter then locates these findings in broader debates raised in Chapter 2, draws out the contribution of the study and then provides the overall conclusion to the study.

Chapter 2. The informal economy: a conceptual framework

2.1 Introduction

This chapter introduces and discusses the concepts and scholarly debates that guide the study, focusing on informal economy and survival broadly and tracing these at global and regional level. The first section of the chapter provides a detailed historical perspective of the informal economy. This is followed by a discussion on the conceptualisation of the informal sector and the four schools of thought that explain informality. The schools of thought discussed are the structuralists, dualists, legalists, and voluntarists. This section concludes by discussing the informal sector as a safety net or supplementary employment opportunity. Immediately succeeding this section is a discussion of the informal sector at the global and sub-Saharan Africa level. Drivers of informality in sub-Saharan Africa are also discussed within this section. After this, I discuss the concept of survival and contestations of informality in literature. Specifically, the section discusses the bone of contention concerning informality. This has serious implications for the study of the informal sector and how it is viewed and relates to the formulation and execution of public policy.

Furthermore, the sections that follow highlight the linkages between informality and the survivalist concept and then link informal maize millers with the concept of the informal sector. This shows that the informal economy is mostly survivalist and highlight the implications this has on the study. In the conclusion, I make an argument that given the structure of the informal sector, using the structuralist perspective which I adapt for this study, it is poised to survive competition.

2.2 Informal economy: A historical perspective

From the time it was “discovered” in the 1970s, the role that the informal economy plays in economic development has been under serious debate. Some scholars and spectators see informal economy as a “pool” of innovative talent or a “cushion” in economic emergencies, while others look at it more challengingly, stating that informal businesspersons intentionally evade regulation and the revenue system. In addition, some see it as a basis of means of support for the working poor. Each of these viewpoints, however, is correct concerning exact components or parts of the informal economy.

Different to early forecasts though, the informal economy has sustained growth and has come in new forms. Currently, it is representative of 61 per cent of the global labour force and a substantial share of the global economy (ILO, 2018). In the 1950s and 1960s, it was extensively expected that, with the correct ingredients of economic strategies and possessions, low-income traditional economies could be transformed into self-motivated, contemporary economies and petty merchants, small manufacturers and numerous casual jobs would be immersed into the formal economy. This conviction was strengthened by the ensuing effective rebuilding of Europe and Japan, and the industrial growth in Europe and North America following World War II (Chen, 2012).

However, in the mid-1960s, hopefulness about economic development in developing countries started giving way to anxieties about extensive joblessness and tenacious traditional economy. Emanating from this anxiety, the International Labour Organization (ILO) started a chain of investigative assignments to different countries to explore the nature of the employment problem in each nation and what could be done in response (ibid).

The term "informal sector" was primarily invented by British anthropologist Keith Hart through his 1971 study of economic undertakings amongst rural migrants in Accra, Ghana (Hart, 1973). His conclusions were that, notwithstanding outside limitations and capitalist power, many migrants were involved in informal doings that had "autonomous capacity for generating income" (ibid). The first World Employment Mission by ILO happened in Kenya in 1972. It was discovered by the mission team that the traditional sector had not just persevered but had extended to comprise lucrative and well-organised enterprises, as well as negligible activities (Chen, 2012).

Consequently, both the Kenyan mission and Hart highlighted the adeptness, ingenuity, and elasticity of the sector, yet the concept received a diversified reaction in economic development spheres. Many observers were of the view that the informal economy in developing countries was minor and not connected to the formal economy or to contemporary capitalist development and would vanish with economic development or contemporary industrial development (ibid). Others, however, contended that industrial advancement might take an altered design in emerging countries compared to advanced countries, including the enlargement of informal economic undertakings (ILO, 2018).

In the years between 1980 and 1990, the informal sector debate stretched to embrace variations happening in developed capitalist economies, where manufacturing was being reorganised into lesser, decentralised and more bendable economic elements (Castells and Portes, 1989). These changes were being linked to the informalisation of employment. During this period, normal jobs evolved into non-standard or unusual jobs, with hourly earnings and few remunerations – or manufacturing was sub-contracted on piece charges with no profit to minor, informal units and industrial outworkers (ibid). Consequently, the informal economy developed into a perpetual, though inferior and reliant, feature of capitalist expansion (ibid).

The economic disasters, such as those witnessed in Latin America in the 1980s and in Asia in the 1990s, as alluded to by Castells and Portes (1989) showed that individuals who leave formal employment go to the informal economy to make their living. Moreover, high price rises of commodities frequently require households to complement formal-sector incomes with informal incomes (ibid). In addition to this, (Standing, 1999) is of the view that, in the 1990s, globalisation also added to the informalisation of the labour force in several businesses and countries.

Most recently, new attention has been paid to the informal economy globally. Partly, this is because of the informal economy not only having expanded, but likewise emerging in different appearances and in unanticipated locations (ILO, 2018). In the great recession of 2007/2008, informal employment expanded significantly (Horn, 2009). This informal labour force embodies a major, but mainly over-looked, segment of the worldwide economy and personnel. Consequently, it accounts for 61 per cent of total jobs worldwide, 67 per cent of all work in emerging nations, and 90 per cent complete employment in developing nations (ibid).

In addition, there has also been an augmented acknowledgement that the informal sector is interconnected with the formal sector and subsidises the general economy, and that assisting the working poor in the informal economy is vital for lowering poverty and inequality, just as assisting working poor women in the informal economy is central for bringing down gender inequality (ibid).

In summation, the concept of informal economy remains valuable to several policymakers, activists, and researchers due to the importance of the reality that it strives to arrest: the huge segment of the universal labour force and production that is still outside the world of permanent, steady, and secure employment.

Having presented the history of the informal economy, the next section will address the conceptualisation of the term "informal sector".

2.3 Conceptualising the informal sector

Conceptualising the informal sector poses several challenges. On the theoretical level, this is due to the lack of a single definition of what it means to be informal. Various terms, such as "survival","underground economy", "hidden economy", "black economy", "parallel economy", and "gray", "unofficial", "unobserved" and "shadow economy", have all been used to describe informality (Else et al., 2002). Practically, what mainly causes difficulty is the unwillingness of most players in the sector to provide dFata, as most of them are reluctant to disclose what they earn.

2.3.1 What is the informal sector?

There have been significant differences among scholars concerning the conceptual definition of the informal sector. Mainly, the differences are fuelled by different academic disciplines (ibid). Economists and tax professionals aimed at estimating the entire scope of the informal sector, and their approach was more inclined towards unregulated but cash exchanges (Losby, 2002). Anthropologists and sociologists frequently were mostly worried with the informal economy's role as an economic tactic for households or as a source of unity in the community (Levitan and Feldman, 1991). Against this background, it is difficult to have a precise definition of the informal sector as this sector usually adjusts to changes in tax and the changing business environment (Schneider and Enste, 2000). Nevertheless, the way the informal sector is defined will depend on the focus of each specific study. Consequently, over time, there have been several definitions used to describe the informal sector. Else et al. (2002) state that "the term 'informal economy' first came into widespread use as a means of describing a dualistic economic structure found in developing countries. Such an economy involves both the mainstream formal economy and an unofficial economy within which economic transactions occur outside traditional channels and deliver explicit economic and social benefits."

2.3.2 The four schools of thought on the informal sector

At the core of this study is the issue of survival of informal sector players, specifically informal maize millers. Academic debates on the importance and survival of the informal sector have, over the years, been influenced by differing schools of thought concerning what it means to be informal. These schools of thought are dualists, structuralist, legalists, and voluntarists. Therefore, debates concerning the survival of informal sector can be viewed in the light of these schools of thought.

The Dualist School states that the informal and formal sectors have parallel existence but are very different by nature. According to this school, formal businesses add to economic development while informal businesses act as a place of refuge for the poor (Hart, 1973). Within this school of thought, it is anticipated that informal businesses vanish with economic growth and that the extra labour is taken up by the more industrious formal segment in the long term (Lewis, 1954). There are others within the same school that allege a more determined and perilous double market because of the disparities of the markets and of the general economy (Ali and Najman, 2015). It can, therefore, be deduced from the aforegoing that proponents of this school of thought see the informal sector as temporary, as it is eventually swallowed by the formal economy, hence, they conclude that it does not survive competition.

The conceptualisation of informality that detached the informal sector from the formal sector and viewed the former as a different and separate entity was done in the 1970s (Tamukamoyo, 2009). The core of the dualist dispute is that informal economic undertakings are made up of minor family businesses, which depend on family labour, are labour-intensive, have low levels of investment input, use less sophisticated equipment and have very low levels of output (ibid). These informal economic actions make up part of what is called the second economy. In contradiction to this, the formal part of manufacturing is capital-intensive, uses refined equipment, is made up of huge commercial businesses, and has high levels of output (ibid). In spite of recognising that the informal economy is a shelter for the jobless and the ejected from the formal sector (ibid), the key condemnation of this school has been the constant usage of a dual, informal versus formal, conceptualisation (ibid).

Benya et al*.,* (2008:7) state that “the concept of a second economy is a metaphor that should not be taken literally to mean that there are two geographically separate economies. Instead, the notion of a second economy is best seen as a form of shorthand to describe the deeply segmented nature of an extremely unequal economy.” Most significantly, there has been an acknowledgement that a big part of movement of not only merchandise but also of personnel themselves happens among the formal and the informal jurisdictions of the economy, an occurrence known as “churning” (Tamukamoyo, 2009).

The Structuralist School of thought views the informal sector as being connected by nature to the formal sector since informal businesses are inferior to formal and bigger businesses and permit them to reduce expenses and escalate competitiveness (Godfrey, 2011). This implies that the informal economy is an inferior economic component of micro businesses and workers with the goal of decreasing the input and labour expenses and thereby increasing competition of big capitalists’ businesses. Under this model, the means and methods of production in the formal and informal sectors are thought to co-exist and are reliant on each other. The nature of commercial development, rather than a lack of growing, is what results in the development of informal production relationships (Porta and Shleifer, 2014). Scholars aligned with this school of thought are usually of the view that the informal sector survives competition, and is an important player in the economic activities of developing countries. My study utilises the structuralist school of thought as stated in Chapter One. Specifically, the study uses the Structuralist School of thought because it aids in understanding the relationship that exists between the formal and informal, as it views the informal sector as being connected naturally to the formal sector. This is so since informal businesses are subordinated to formal and larger businesses, which the latter permit to decrease expenses and escalate competitiveness (Godfrey, 2011).

Most importantly, the *structuralist school* in the 1970s and 1980s “corrected” the detachment, challenging within dualist theorisation. Structuralist researchers and academics conceptualised the informal sector as being composed of economic components inferior to bigger businesses, which are continuously looking at means of decreasing input and labour expenses and, consequently, increasing the competitiveness of bigger capitalist businesses (Tamukamoyo, 2009). The structuralists, being different from the dualists, admit not only that the informal and formal exist together, but that the association is one of interconnection of the diverse methods of production (ibid). For example, huge capitalist businesses, which are capital and knowledge demanding, contract out some of their activities to much smaller labour-demanding businesses (ibid). Engaging informal labour is viewed by formal businesses as a means to reduce labour and other related expenses, and it is contended that it leads to the reduction of business wage standards (Portes and Walton, 1981 in ibid). Data does demonstrate that there has been an upsurge in the size of the domestic labour force, who are subcontracted by big firms in Australia, Britain, India, and South Africa, among others (ibid).

For the Legalist School of thought, "informal firms choose to be informal to avoid the burden of taxes and regulations" (Ali and Najman, 2015). Since they are prepared to formalise if the government offers them property rights and eases registration processes, they are not seen as a danger to formal businesses. This school of thought views the informal sector as not being able to survive if they are provided with the necessary property rights, and registration procedures are alleviated.

In the 1980s and 1990s the *legalist school* contended that the burdensome and costly nature of working and registering formally is the key motivation why businesspersons get into the informal sector (Tamukamoyo, 2009). De Soto (1989) is among the key advocates of this argument, following the studies on Peru by the Institute of Liberty and Democracy, which detail the tortuous procedure of registering formally in jobs like street trading and public transport. The advocates of this school have gone on to stress that, within the informal traders, is the hope of competitive capitalist growth if the removal of the administrative confusion and expenses linked with legalising business procedures takes place (Tamukamoyo, 2009). De Soto's method has been condemned for not identifying the difficulty of informal property systems and how formalising them could disadvantage the poor (ibid). Maybe, those in the informal segment may have much to lose if they elevate themselves to working formally.

There has, likewise, been the *illegalist school* of thought, which was made popular by neo-classical and neo-liberal economists over the past years (WIEGO, 2006). This school of thought claims that there is an awareness and deliberate purpose among informal businesspersons to evade taxation and rules and, in some cases, to involve themselves in illegal activities. The key dispute is that informal operatives want to avoid the expenses of operating formally (Maloney, 2004). This discussion summons images of a lively, unlawful, secretive economy.

Another method which agrees with De Soto is the *microenterprise development approach* which perceives "microenterprises as identical with informality, insufficiency and entrepreneurship" (ibid). Supporters of microenterprises are NGOs, international donor and development agencies, and private entrepreneurship groups operating in poverty mitigation who, like De Soto, see processes to register formally as burdensome (1989). Their method has been to equal the playing field, and to increase jobs, revenue, and efficiency among entrepreneurs through the introduction of credit services and providing training in administration and bookkeeping for the poor. Disparagements of the microenterprise method comprise its neo-liberal predispositions, such as the elevation of deregulation, tax reform, the general emphasis on economic competence and the “menu approach”, which just lists recommendations to endorse microenterprises while missing rigorous analysis in some cases (ibid).

The essential and most significant *change in the debate* between 1983 and 2016 was the change from seeing an escalating informal sector as a pointer of the failure of development paradigms to a stress on the informal sector as a strength or answer to economic undertakings and poverty (Rakowski, 1994; Mwango, 2019). Fundamentally connected to this development is the awareness that informal economic activity is “here to stay” and that it is growing with contemporary, industrial growth (Chen et al., 2004). With this debate, the informal sector is viewed as a significant tool for poverty alleviation. For this reason, how the informal sector survives in a competitive environment is very important.

The Voluntarist School of Thought sees informal businesses as a danger because they deliberately choose to be informal and are not keen to formalise, unlike the Legalist School (Ali and Najman, 2015). It is for this reason that McKinsey Global Institute argues that these informal businesses cause imbalanced competition and can take unproductive market shares from more industrious formal businesses (ibid). Scholars who fall into this school of thought view the informal sector as a destructive component of the economy that does not need to survive as its existence has negative implications for the formal economy.

In this study, I have used the Structuralist School of Thought, since I view the informal sector as complementing the formal. I argue that the nature of capitalist development makes informal relationships inevitable. For example, as Chapter 8 of this study will show, during my field work in Zambia, I observed that some of the big multinational supermarkets were taking maize grain to the informal millers for grinding into maize samp which they repackaged and branded for sale in their chain stores. From this scenario, there is a complementary connection that exists between the formal and the informal sector, thereby making it likely for the informal sector to survive competition from the big millers.

2.3.3 The informal sector as a safety net or supplementary employment opportunity

The informal sector serves different purposes in developing countries. There are some scholars who believe that it offers a shelter for those excluded from the formal economy, while there are those who believe it offers additional employment for those in the formal segment. Some theorists are of the view that the informal sector can be known by considering fringes of the conventional economy (Losby et al., 2002). By implication, this means that the informal sector is occupied by people of low socioeconomic rank and serves as a shelter for the poor (ILO, 2019). The informal sector offers the underprivileged and most marginalised people, who do not have admission to the formal sector, with prospects to make some money and make a decent income. Supporters of this understanding contend that, given obstacles to involvement of women in the formal sector, supporting their participation in informal sector undertakings is important to both their survival and that of their families (ibid). Other scholars such as (Duncan, 1992; ILO, 2019) claim that formal and informal work are alternates for one another, meaning that, when people lose employment in the formal sector, they then turn to informal employment to provide for themselves and their families.

However, there are other scholars who query the relationship between socioeconomic status and informal work (ILO, 2019). Their argument is that numerous informal undertakings need physical and human capital–land, resources, tools, and technologies– that poor people commonly do not have. For example, Losby et al., (2002:11) state that “to sell fruits or vegetables a person needs access to land and harvesting equipment; to do wood working a person needs a wood shop; and to be a tailor sewing pieces of clothing at home for extra pay a person needs a sewing machine”.

Furthermore, some of the scholars (Losby et al 2002) are of the view that the families that have means, capacity, and drive to participate in the formal economy will also be more probable to join the informal economy. Their main argument is that this eventually leads to economic polarisation, meaning that productive and well-to-do families participate in both formal and informal work, whereas economically marginalised families have little access to either of the two (ILO, 2019). This view of the informal sector takes a decidedly negative approach, as it sees the informal sector further marginalising the underprivileged and most susceptible people in the society. Supporters of this perspective argue that efforts should be made to increase jobs in the formal segment and that the informal sector should be permitted to die (Losby, 2002). The above perspectives are very important in understanding the informal sector in Zambia. Specifically, my study agrees with the perspectives which argue that the informal sector is a safety net for poor people and that it also acts as a supplementary employment opportunity for those already in employment.

All in all, not only has the concept of the informal sector proved to be ambiguous, but there have also been disagreements among various players on the importance of the informal sector in national economies. Some researchers have argued that the sector is of little value to the economy, as it does not add to economic growth but acts as a parasite to the formal sector. This can be seen from La Porter and Shleifer (2014:110) who state that “a report from the McKinsey Global Institute describes informal firms as parasites competing unfairly with law-abiding formal firms.” According to this view, informality should be discouraged, not encouraged. On the contrary, there are some researchers who argue that the sector is very important, especially for developing countries, as it acts as a safety net for the poor and contributes about 50% of GDP of most of the developing countries. They give as an example the fact that the sector continues to exist despite earlier predictions that it would vanish with the development of the formal sector (Blunch et al., 2001). It is against this background that (Blunch et al., 2001) conclude that "in developing countries, informal firms account for up to half of economic activity. They provide livelihood for billions of people yet their role in economic development remains controversial." I argue that, given the role that the informal sector plays in absorbing labour and cushioning the effects of poverty resulting from most people being left out of the formal economy, it is very important, and its survival needs to be studied and understood.

2.4 The informal sector globally

According to a recent compilation of global statistics, "the scope and influence of the informal economy globally and explicitly informal employment in developing countries accounts for between 45 percent (in the Middle East and North Africa) and 82 per cent (in South Asia) of non-agricultural employment" (State of Cape Town Report, 2014:125). Figures at City-level are difficult to come by, but available data proposes that internationally, as much as 60% of those who work, work in the informal economy (ILO, 2017). Even though individual revenues of the informal labour force are habitually low and frequently unaccounted for, cumulatively, informal undertakings add meaningfully to gross domestic product (GDP). Moreover, the informal economy offers low-cost inputs, possessions, and amenities to both formal and informal businesses, as well as to the public, particularly the most vulnerable sections. At the family level, informal undertakings are often what help families living in poorer parts of cities and towns across the world. This highlights the point that urban informal work is important to easing poverty and to building local economies in these parts of the world. Additionally, some analysts have claimed that informal employees often use less space and fewer materials and leave less of a carbon trail than their formal colleagues (State of Cape Town Report, 2014). In addition, some researchers have claimed that some worker groups, like waste pickers, are playing a vital role in climate change mitigation, and the informal sector should be seen as part of the green economy program (ibid).

2.5 The informal sector in sub-Saharan Africa

Sub-Saharan Africa is a region experiencing a substantial urban change. World Bank (2020) approximates that, by 2050, 58 per cent of the African population will be living in urban areas, signifying an escalation from 400 million individuals to over 1.26 billion (Fraser et al., 2014). This will be accompanied by a flourishing informal economy, one which has developed quickly since the 1960s across the continent of Africa, providing revenue, jobs, and means of support for millions of underprivileged urban families. Sub-Saharan Africa (SSA) is undergoing high rates of urbanisation and reducing food security. The informal food sector arrests food insecurity by offering access to affordable food and substantial employment opportunities to the urban underprivileged in SSA (ILO, 2017; World Bank, 2020).

The informal sector is still the most important source of employment all over Africa, accounting for 70 percent of jobs in SSA and 62 percent in North Africa (ECOSOC, 2015). The vitality of the informal sector in generating jobs and adding value is mostly strong, representing about 80 percent of the entire workforce, and adding about 55 percent of SSA's GDP. Interestingly, some reports show the feminine and age nature of this sector by stating that 9 in 10 informal labourers are women and youth. The absence of social security, abilities' promotion, and fruitful income frequently trap these groups into poverty and elimination from economic increase and development, with only about 10 percent of workers benefiting from social protection schemes (ibid).

In SSA, the informal sector is not new. Several of the kinds of undertakings carried out in this sector have happened even before colonialism. In the later years, liberation brought in the difference between informal and formal undertakings as nations around the region sought to formalise or "modernise" their economies in a mission to keep up with the advanced world. During this time, the concentration was and, indeed to some extent even today, is on swift industrialisation. Besides, empirical data currently indicate that, for much of the region, it is the informal sector – not the formal sector – that is the engine of growth. As demonstrated above, around the world, nearly two-thirds of all employment is in the informal sector (World Bank, 2009). Thus, how governments treat the informal sector has deep impact on jobs, development, fairness, and sustainability in SSA.

It is projected that, by the year 2050, the population of SSA will double (ibid). What this entails is the increase in demand for food and employment among the people of SSA. Some scholars argue that the success of meeting growing food demand in Africa's towns and cities is largely a result of the informal economy (Mwango et al., 2019). Informal markets play a vital role in providing reasonable, available, and assorted food for the urban underprivileged, while at the same time assisting the livelihoods of millions of small-scale farmers, dealers, and sellers (ibid). The informal food trade that brings together rural and urban economies in SSA is vibrant, flexible, and entrepreneurial. It has been effective in providing food to millions of customers without big vertically assimilated commercial structures (Wegerif and Hebinck, 2016).

Lastly, the informal sector in SSA is an important economic provider and employs huge masses of people in countries within the SSA region. For this reason, some scholars have argued that policymakers ought to be mindful of the numerous livelihoods resulting from the informal sector when crafting procedures that encourage all-encompassing growth (Cassim et al., 2016). Interestingly, attempts by governments to impose formalisation through regulation have frequently had non-optimal results as shown by empirical evidence in most of these countries. What happens is that the informal sector players are moved out of the market or remain operating informally, and organisations that are supposed to control are usually too weak to impose compliance. Additionally, it seems there may be very little inducement for the informal sector to formalise if the advances from working in the formal sector do not compensate the expenses of formalisation. Empirical evidence shows that businesses undergoing external limitations that can be responded to in the short term through actions such as giving access to credit, energy sources and space, are much more expected to grow and flourish than survivalist businesses. ECOSOC (2015) is of the view that survivalist businesses would gain value from management training and other expertise. Upon managing and overcoming external limitations, non-survivalist businesses might grow gradually and want to participate in the formal sector. However, in the context of SSA, policymakers must, therefore, identify the diversity of informal sector enterprises, and work on the various issues they face rather than using blanket regulation.

2.5.1 Drivers of informality in sub-Saharan Africa

In terms of drivers of informality in SSA, there are some country particularities that occur in informal work. However, some shared characteristics exist. For example, on the source side, the inferior quality of numerical competence and literacy achieved in educational systems, and insufficient skills development, account for some of the factors leading to informality on the continent (ibid). In addition, the absence of practical and occupational training, restricted investments in infrastructure, equipment and invention, as well as poor orientation of educational syllabuses to labour market demand, account for other key obstacles for those seeking employment to enter the formal market (ibid). As if not enough, huge towns with few or no manufacturing centres promote informal employment as a survival strategy, mostly by young people and women (ibid).

On the side of demand, a job creation-motivated development route that moves production practices to labour concentrated areas through backward and frontward connections to the local economy is a vital component (ibid). The migration from informal to formal jobs is extremely stress-free when on-the-job training, through practical and occupational training, internships, and other non-formal training, is combined with formal education. Thus, some researchers have revealed that personnel in main urban centres in West Africa, for example, have realised greater marginal returns through these programmes than from overall secondary education alone (ibid).

Furthermore, the dominance of the informal sector is linked to flaws in two recognized areas: that is, taxation and regulation. Though the introduction of indirect taxes and value added tax enables informal sector workers to pay government financial incomes, the possible gains from direct tax of informal workers and businesses might be as high as 55 percent and 74 percent of GDP in Burkina Faso and Benin, respectively (Benjamin et al., 2012). Conversely, current monitoring procedures on eligibility for formal registration need a certain threshold of income, which frequently acts as a deterrent, sending businesses into informality (ECOSOC, 2015). Chapter Three will provide an overview of the informal sector in Zambia.

2.6 Is it survival? Is it entrepreneurial?

The bone of contention regarding informality, that has serious consequences for the study of the informal sector and how it is viewed, and which also relates to the plan and execution of public policy, has more to do with the type of informal work. Public policy should be designed taking into consideration the informal sector, especially that this employs most citizens. The disconnect that is there between policy and implementation as it concerns the informal sector is something that needs correction as well. For example, the Seventh National Development Plan's (SNDNP) cross-cutting theme is "leaving no one behind" and yet this is not actualised in government policies (Mwango et al., 2019).

Some scholars have wondered whether informal employment is an indication of and, at the same time, a generative and preserving factor of instability, disparity and of communal and personal poverty or whether it is a vehicle for personal and communal action that echoes economic creativity and business potential, which, when correctly channelled and nurtured, could add exceedingly to social and economic change and consequently, to the decrease of disparity and insufficiency. On the one hand, some scholars perceive economic informality as a remaining wonder, that is, a diverse and increasing set of uneven and negligible labour activities ensuing from the absence of capacity of the formal economy to integrate unemployed workers (Temkin, 2009). On the other hand, what also emphasises the delicate nature of informal work, is that some scholars view economic informality from the perspective of developments happening in the formal segment of the economy, particularly, from formal businesses' efforts—under national and international force—to bring down their labour expenses and upturn their competitiveness level (ibid).

In the first argument, the informal segment is mainly composed of individuals, who have been provisionally or completely removed from the formal sector, whereas, in the second one, it is progressively made up of informal workers who are engaged openly or indirectly by formal businesses as part of a sequence of uneven but useful interactions (ibid). All the same, according to both opinions of informality as a survivalist reaction viewpoint, a growing number of individuals are forced, because of their low status in the socioeconomic structure and low levels of human resources, to choose low-rewarding informal work. On a different note, some scholars, uphold that informality—at least in the situation of the self-employed or independent informal—needs to be interpreted as a form of innovation and entrepreneurship on the part of persons with low levels of revenue and education. These would rather choose the freedom and creative opportunities that are purportedly linked with informal occupation and production than being engaged at low salaries and subordinated to supervisors in formal sector businesses. This point views the informal labour market as a free-for-all sector in unindustrialised countries, which is like the voluntary entrepreneurship of small companies in the industrialised world (ibid).

The picture projected is one of people who select to situate themselves in the informal sector due to the comparative benefits it offers, including high returns (De Soto, 1987, 2001; Maloney, 2004; Temkin, 2009). One of the issues picked from the debates and explored in this study concerns those who are in informal self-employment, or own-account workers, who are seen and conceptualised by several scholars as the key heroes and heroines of this alleged voluntary entrepreneurship. In this study, I use the informal maize millers as a case to explore which of the two divergent viewpoints offers a more precise judgement of the nature of informal employment in general and of informal self-employment. In a quest to achieve this, the research undertook to ascertain several fundamental standards and attitudes held by informal employees and own-account workers in the informal maize milling sector, draw contrasts with their formal colleagues, and assess the degree to which those ethics and attitudes are more consistent with a description of informality that emphasises entrepreneurship or uncertainness. A further pursuance of the debates just explained has significant consequences for our understanding of the informal sector in general but mainly in developing nations because it is in these nations where most of the people work in the informal sector. By using informal maize millers as a case study, this study brings in a different dimension to our exploration of these debates that has not been used before. Besides being a contribution to scholarly debates, the research brings out some policy implications that can be further explored. Should the authorities in developing countries and Zambia devote limited financial and human resources in the encouragement and provision of the emerging entrepreneurship that allegedly characterises informal self-employment? Should public funds be used to award loans to informal small businesses? Should the guidelines and rules that are purportedly suffocating the important advancement and innovation prospective of informal businesspersons and of their micro and small initiatives be removed?

Should the government not focus its energies on planning and effecting public policies and agendas that bring about development in the formal sector, consequently reassuring the cohort of bigger numbers of safe, steady, and well-paid jobs with social profits, while, at the same time, refining long-term human resources handiness through investment in education? This study is, therefore, a contribution to the scholarly debates that try to enhance our understanding of strategies that should be pursued. The following section looks at survival strategies in general and relates them to the informal milling sector.

2.7 Survival stratagems in general

Stratagems of survival are defined as reactions to anxiety which incorporate adaptive and maladaptive, biological, mental, and collective constituents (Jawando et al., 2012). This also denotes ways used by different individuals to fight and live through an affliction. Stratagems of survival or, simply put, survival tactics are said to bring about the appreciation, identification and making sense of the diverse series of distressing events (ibid). Jawando et al. generally recognise fight and flight as the two survival stratagems. They recognise these dual stratagems as evolutionary qualities which stimulated survival. Nonetheless, when looking at these issues closely, traumatic stress responses stretch more than fight and flight responses (Ibid, GEM,2013, 2018). Furthermore, Valent (1998), in one of his works entitled *From survival to fulfilment: a framework for the life-trauma dialectic*, provided a framework that highlights meaningful and good varieties of stress responses and goes on to suggest eight tactics of endurance or survival that make up this framework.

These eight tactics of endurance/survival offer the path of stressful anxiety and its series (Jawando et al., 2012). These include:

- Rescue: This is a survival stratagem that is educed by the assessment “must rescue/save others”, and it comprises shelter and providing (ibid).
- Attachment: This one is about bonding with a caregiver, for the purpose of safeguarding and the instruction of survival abilities.
- Assertion: This is a stratagem of survival that involves functioning and making everything conceivable to realise a goal.
- Adaptation: This is a stratagem of survival that means surrendering to overwhelming conditions.
- Fight and flight: Fight is brought about by the necessity to eliminate threat while flight is brought about by the necessity to evade threat; that is, fight the threat and run away from the threat respectively (Canon, 1963). Canon (1963) further adds that fight and flight are mutual, contingent on how events are seen.

- Competition and Cooperation: Competition is brought about by the necessity to obtain rare necessities while cooperation is brought about by the necessity to generate rare resources.

In summation, these eight stratagems of survival might work independently or in a wide-ranging combination, and they might be used very adaptably in numerous combinations (Jawando et al., 2012). The above concepts have been used in this study to examine how informal maize millers survive in an industry dominated by large-scale milling firms.

2.7.1 Survival concept in the context of businesses

The concept of survival has been covered mostly by literature looking at entry-level firms. Bryant et al., (2013) define survival of businesses as a situation where a business continues to operate from one year to the following year. Whereas (Du Toit et al., 2006:126) define survival as “the ability to live and exist in spite of difficulties”. In this study, survival will refer to informal maize millers that have continued to exist for a period of not less than five years, despite the competition and other adverse conditions they have faced. Scholars who have written on survival of firms argue that the first five years of the firm from entry are critical for its survival; hence a firm that goes beyond this period is usually seen to have survived. From my initial visit to the field in Zambia, this perception seemed to be the case for informal maize millers, hence the decision to adopt it for this study.

2.7.2 What explains survival?

Literature on the informal sector highlights three important areas affecting the survival of informal sector businesses, (1) firm characteristics; (2) owner characteristics; and (3) contextual or external factors, which may mean the environment in which the owners and businesses operate (Raj and Sasidharan, 2014). Among these, firm and owner characteristics have been dealt with in depth by most studies. Regarding external factors, such as environmental constraints, infrastructural bottlenecks, financial and other markets, the presence of a legal framework and the enforcement and the regulation of this framework, there are few studies to compare with the former that of Raj and Sasidharan (2014). On the contrary, there is another body of literature which emphasises the significance of business size, segment export action, and invention intensity as key components for survival (Soriano et al., 2015).

Various scholars have studied how small business owner characteristics, such as risk taking and openness to change, impact on survival of informal sector players. For example, in their study, Kozan et al. (2012) concluded that the proprietor’s readiness to sacrifice valuables, if they have them, was an important determining factor of survival. For Bryant et al. (2013), outsider assistance of these businesses, in addition to internal characteristics, leads to their survival and financial gain. In other words, they predicate the survival of these businesses on the help they receive from the outside, in addition to internal characteristics. To further elucidate their argument, (Bryant et al., 2013:293) state that "the intellectual skill necessary to start a business may not be sufficient to increase the probability of the firm's survivability and growth. Thus, a founder's success requires new intellectual capital, be it through the acquisition of partners, mentors, or consultants." So, by implication, this new intellectual capital can only be sought from outside.

This study intends to utilise this conceptualisation by Bryant et al. to explore whether internal and external business factors impact on the survival of informal maize millers. The reason for adopting Bryant et al. is that their conceptualisation of survival fits in very well with informal maize millers who serve local markets and do not engage in exports. The study focuses on both internal and external factors in its quest to understand what explains the survival or lack of survival of informal maize millers in Zambia. The implication of this to methodology is that I had to interview the hammer mill owners and their employees to be able to collect data concerning internal factors, while external players, such as the informal economy associations, government officials, customers and other players, who were identified while in the field, were interviewed to explore how external factors influence survival or lack of survival.

2.7.3 Linking informality and survival

Informal economy and survival (especially as they refer to survivalist entrepreneurs) are concepts that are sometimes used interchangeably by some scholars (Iwu et al., 2015). For example, these authors are of the view that survivalist retail business received some attention with its addition in the business language of the informal segment in the 1970s after a release of the International Labour Office/United Nations Development Programme (ILO/UNDP) report, which was commissioned in Kenya. For Charman et al. (2012:49), the informal economy is described as "the existence and activities of informal business (including their employees) outside legal and institutional regulatory framework". Additionally, Woodward et al. *(*2010:5) briefly define the informal trade segment as "the business environment in which informal businesses that are non-taxed and unregulated carry out economic activities". Most importantly, informal survivalist retail businesspersons have been recognized as the pillar of socio-economic growth of a country (Hutchinson and de Beer, 2013).

The above paragraph shows that the terms "survivalism" and "informal economy" are viewed in the same way by some scholars. Alternatively, other scholars use the above historical narration to explain the beginning of the idea of the informal economy without referring to it as survival entrepreneurship. In this study, survivalism is seen as the nature of all those involved in the informal sector. While there are those, who are in the sector as a supplementary employment opportunity (section 2.2.2), the majority use it as a safety net and barely survive, hence they are viewed as survivalist entrepreneurs.

2.7.4 Linking informal maize millers and the concept of the informal sector

In this study, I have utilised the concept of the informal sector to understand how informal maize millers survive in a competitive environment. The study explored the four leading different schools of thought that explain the informal economy. Having analysed the different schools of thought, my study found the structuralist school to be more exhaustive in explaining the informal sector and, therefore, my study is aligned to that school of thought. As highlighted in section 2.2.2 above, the structuralist school of thought views the informal sector as being connected by nature to the formal sector since informal businesses are inferior to formal and bigger businesses and permit them to decrease costs and escalate competitiveness (Godfrey, 2011). This implies that the informal segment is a subordinated economic component of micro businesses and labour force with the objective of reducing the input and labour expenses and, thus, growing competition of large capitalists' businesses.

Furthermore, under this model, the means, and methods of production in the formal and informal sectors are said to co-exist and are mutually dependent. A good example of this from this case study is some of the informal maize millers operating as maize grain traders buying maize grain from the remotest parts of the country where big millers don't reach and supplying this grain to the big millers. In this case, we see the informal maize millers not only engaging in maize milling but maize grain trading as well. Suffice to say that the type of capitalist growth, rather than a lack of growth, is what brings about the growth of informal production relations (Porta and Shleifer, 2014). It is against this background that scholars aligned with this school of thought usually are of the view that the informal sector survives competition and is an important player in the economic activities of developing countries.

2.8 Conclusion

In conclusion, this chapter discussed concepts of the informal sector and survival broadly and engaged in larger debates at global, regional, and national level The four schools of thought on the informal sector were discussed. The chapter analysed literature on the informal sector and survival and stated how the two concepts complement each other. Furthermore, the chapter showed the linkage between informality and the survivalist concept. It has showed that the informal economy is mostly survivalist, and highlighted the implications this has for the study.

Furthermore, having critically analysed the four schools of thought, my study was informed by the structuralist approach which guided the presentation of my empirical data and overall discussion of the research findings. In agreement with other scholars aligned with this school of thought, I am of the view that the informal sector survives competition and is an important player in the economic activities of developing countries.

Chapter 3: The informal sector in Zambia: An overview or background

3.1 Introduction

In the previous chapter, I introduced and discussed the concepts and scholarly debates that guided the study, focusing on the informal economy and survival broadly and tracing these at global and regional levels. In this chapter, I provide the background/context to the study problem by situating the informal economy in Zambia. The chapter provides more details about the informal sector in terms of various activities, employment levels, trends over time, factors responsible for a large informal sector, challenges for people in the sector, and how the informal sector relates to the formal sector. The chapter is divided into four sections. The first section discusses the growth of the informal sector in Zambia. It provides a historical perspective of Zambia's economy starting from 1964 when Zambia gained its independence. The section shows that the economic system in the UNIP government was mostly formalised, and that informality grew in the early 1990s after the full implementation of the SAP by the new government, the MMD. The section then shows that the factors that led to its growth are the ones sustaining or contributing to the survival of the informal sector.

The second section presents the characteristics of the informal sector in Zambia. It shows that, generally, the informal sector in Zambia has low productivity and low income. The informal workers are usually less skilled and lower paid than their formal counterparts. The third section presents the role of the informal sector in Zambia and factors that account for its size. The section shows that the informal sector is a major source of employment and livelihoods for most Zambians. The fourth section presents the linkages that exist between the informal and formal sectors in Zambia. It discusses the forward and backward linkages that exist within the two sectors in Zambia. The chapter concludes by presenting the informal sector in the Lusaka District of the Lusaka Province, which is the focus of this study. This is important because Lusaka district is mostly affected by the activities of the informal sector as most of them are located there.

3.2 The growth of the informal sector in Zambia

The growth of the informal sector in Zambia can be traced back to the early 1990s during the full implementation of the SAP by the MMD government, which had just taken over the reigns of power from the UNIP government led by Kenneth Kaunda. During the second republic under the UNIP government, the economic system in Zambia was highly formalised with formal parastatal companies managing all aspects of the economy. Many working Zambians were in formal employment by the government. Those not in formal employment were engaged mostly in farming activities in the rural areas, where they grew crops for consumption and supply to NAMBOARD. To show the emergence of the informal sector in

Zambia, I will first show how formalised the Zambian economy was by discussing what was inherited at independence and how the UNIP government nationalised industries and turned the economy into a command economy with the view of creating employment for the people.

At independence, the Zambian government inherited a double economy. The primary economic sector was mining, which was mainly driven by contemporary technological advances and capital-intensive apparatus used to mine copper (Chirwa and Odhiambo, 2016; Chitonge, 2016). The copper-mining industry was, and still is, the backbone of the Zambian economy, funding approximately 75 per cent of all foreign exchange earnings. The sector is also the chief funder of government incomes. Secondly, the government inherited the agricultural sector encompassing a blend of commercial agriculture and smallholder agriculture, the latter being essentially labour-intensive by means of traditional technologies (ibid). The double economy that the Zambian government inherited was highly capital-intensive and could not create the employment that the country urgently desired to improve the sharing of wealth among Zambians (ibid). The smallholder agriculture system, that was anticipated to be a response, was weak due to the agricultural rules that the colonial government employed to encourage commercial agriculture (ibid). Consequently, the country faced a deficit in human capital development as evidenced by the fact that, in 1965, it is documented that only 100 Zambian citizens had university degrees and about 7 500 Zambian citizens had secondary school credentials (ibid). As a compensation for this challenge of human capital shortage, there were over 30 000 expats holding specialised, practical, executive, and supervisory positions in government and the private sector (ibid). It can, therefore, be seen that the main difficulties that the government of Zambia encountered at independence were around the scarcity of human resources and a divided education system that favoured the delivery of good quality education to immigrants and not the local population (ibid).

As a result of the above stated challenges, the Zambian government in April 1968 publicised the nationalisation of main companies and related businesses on socialist values and the philosophy of humanism aimed at growing Zambian involvement in the economy. Among those industries nationalised were fabrics, chemicals, building, and engineering, and included rural businesses, such as canning and cotton ginnery (ibid). By 1969, new reforms were introduced that covered the mining segment for government to acquire bulk shares not exceeding 51 per cent in all copper mines (ibid). By 1970, the nationalisation reforms had stretched into merchandising and trading and, in 1972, the government had stated that only true Zambian entities and personalities could participate in these sectors. In addition, any foreign-owned businesses were restricted to agreed selected areas in ten main urban centres (ibid). For example, in 1971, two leading foreign mining companies, namely, the Anglo-American Corporation and the Rhodesia Selection Trust, were nationalised with a majority share of 51% forming two parastatals:

the Nchanga Consolidated Copper Mines and Roan Consolidated Mines, respectively (ibid). These two mining firms were combined in 1982 and came to be known as the Zambia Consolidated Copper Mines (ibid). This nationalisation also filtered down to other segments of the economy, such as manufacturing, transportation, retail and wholesale, circulation and, to a lesser extent, financial organisations (ibid).

In the parastatal sector, there were several redundancies during the 1990s. The most significant were those in the mines. While redundancies were happening in the final years of the UNIP government, such as the one in the form of a venture and restoration agenda where the state-owned Zambia Consolidated Copper Mines (ZCCM) took the lead and confirmed 3 000 employees jobless in 1986, the years between 1991 and 1994 saw several mines shut down and numerous employees losing their jobs. Since the coming to power of the MMD government, loss of jobs took on a new stimulus. Furthermore, in 1992, the MMD declared its intent to privatise most state-owned businesses. This involved the mines, telecommunications, energy and railways. The implementation of privatisation of state-owned companies posed a serious challenge, as most of the people lost their jobs. Although sympathetic to the idea of privatisation, trade union leadership asked the authorities not to privatise strategic businesses, such as the mines. They cautioned the authorities that a verdict to privatise the mines would bring problems to their membership, but these appeals were not heeded. Consequently, by 1995, trade unions, particularly the main ones, such as the Mineworkers Union of Zambia (MUZ), had accepted the government verdict to privatise the mines. In explaining the gravity of these redundancies that were happening during this period, (Simutanyi, 1996:828) for example, argues that:

> MUZ fully supported the closure of the Kabwe lead and zinc mine and has recently endorsed the government decision to privatise the giant ZCCM. As before the union hopes that a privatised ZCCM will be more efficient and will offer better conditions than is presently the case. In preparation for the impending privatisation a retrenchment programme has been put in place. Trade union leaders' concern is that their members receive a good redundancy package. Trade unions have played a minimal role in halting labour redundancies. Two reasons seem to explain trade union weakness. The first is that the relationship between trade unions and the MMD was so intimate in the early years that they felt a kind of ownership of the government. The ZCTU not only helped in the organisation of the MMD but also provided it with leadership. This has made it difficult for it effectively to oppose certain aspects of the structural adjustment programme. Second, the nature of the decline in the economy has seriously affected the ability of the unions to halt redundancies, let alone bargain for favourable redundancy packages. The large layoffs have affected its bargaining power. Union membership dropped by almost 40 000 between 1990 and 1994 thanks to a combination of redundancies, privatisations, and liquidations in the last five years. For example, total union membership declined from 352 900 in 1990 to 312 697 in 1994. This figure is said to have dropped even further down to 295 747 in 1995.

The above quotation highlights the gravity of the structural adjustment programme in the early 1990s in Zambia and shows how privatisation led to the loss of jobs for thousands of people who were in employment with government parastatal companies. This situation emanating from the SAPs led to the emergence of a huge number of unemployed Zambians who needed to find the means to survive after losing their formal employment. This situation agrees with Armansyah et al, (2019:106) who is of the view that, “during a crisis, the informal sector appears as the survival livelihood strategy undertaken by layoff victims and unemployed persons because it enables them to create opportunities to earn incomes”. The negative effects of the SAPs were contrary to the objectives of the SAPs as stipulated by the World Bank, which were to enable the member states to restructure and steady their economies to produce conditions which would promote fair growth and development (Chitonge, 2015). Furthermore, the shift from the command economy to a free-market economy during this same period meant that people could now freely engage in private business. This gave rise to the informal sector with thousands of those, who had lost their jobs in the parastatals, engaging and utilising their skills in private informal work. For example, most of those who were formerly employed by Lusaka Engineering Co Ltd (LENCO), found themselves in the informal metal fabrication and motor vehicle garages sub-sector where they were employing their skills developed over time. This group of people opened garages across the country and started fixing vehicles informally. This is a group I refer to as specialised informal entrepreneurs. By specialised informal entrepreneurs, I mean a group of entrepreneurs who once worked for engineering and other specialised parastatals such as LENCO and were now using the knowledge and experience gained to run their own private informal businesses. With the coming of the free-market economy, many Zambians started importing second-hand vehicles thereby creating a larger market for these specialised informal entrepreneurs.

Besides the informal vehicle mechanics, this period also saw the rise of metal fabricators who started manufacturing all sorts of equipment, including hammer mills, in the local markets. The production of hammer mills meant an increase in people engaging in informal maize milling in the markets. The other factors that led to the increase in informal maize milling was the removal of maize meal subsidies for consumers by the new government and the shift to a free-market economy. What this meant was that people could no longer access cheaper mealie meal but had to find alternatives, hence, some resorted to hammer milled maize meal which was slightly cheaper and kept one feeling satisfied for long (ibid).

Apart from the specialised informal entrepreneurs, the early 1990s was also a period that saw the increase in many different types of informal businesses that did not require any specialisation. Vegetable trading, restaurant businesses, poultry businesses, maize grain trading, small grocery shops all increased at a very fast rate. Informal trading saw a sharp growth due to the shift from the command economy to the free-market economy that allowed people to buy and sell at their own will without fearing any reprisal from the government. All in all, two factors influenced the rise and growth of the informal sector, namely, the rise of unemployment, which came because of privatisation, and the shift from a command economy to a free-market economy, which opened up the market for all to participate including private individuals who saw an opportunity to engage in informal businesses to sustain their livelihoods.

3.3 Characteristics of the informal sector in Zambia

3.3.1 Low productivity and incomes in the informal sector

Generally, the informal sector in Zambia has low productivity and low incomes. The informal workers are usually less skilled and lower paid than their formal counterparts (CTPD, 2016). This scenario is in tandem with a "meta-analysis of worker-level empirical studies that showed that informal workers are, on average paid 19 per cent less than formal workers" (World Bank, 2019:245). In part, "this reflects lower productivity on account of lower skill and experience levels than formal workers have" (ibid). This picture of the informal sector is also given by (Tengeh and Iwu, 2014:98) who describe informal businesspeople as "survivalist entrepreneurs and further describe them as individuals who run and manage enterprises due to being unable to secure employment in the formal sector, but who have to find alternative ways to survive". These individuals, according to (Choto et al., 2014:94) "are not employed on a formal basis; their income levels are generally below the minimum poverty lines; the business ventures they run require minimal capital, and they lack training and experience". Similarly, in Zambia, as observed in the literature on the informal sector in Zambia, "informal firms tend to be small, lack funds, and operate in labour-intensive sectors, and, as a result, are less productive than firms in the formal sector" (Ohnsorge et al., 2021:126). Furthermore, the informal sector enterprises tend to invest less, possibly as result of wanting to avoid adopting technologies that would make them more visible to tax officials and other authorities (Dabla et al., 2008). Some studies have also shown that "low productivity in the informal sector can also cast a shadow over formal firms, that is, a sizeable informal sector that competes with the formal sector for low-skilled workers reduces the incentives to invest in human and physical capital and new technologies and slows growth in the long run" (Ohnsorge et al., 2021:144).

3.3.2 Lack of access to resources

Informal enterprises are also characterised by a lack of access to resources. In Zambia, with widespread informality at 70% (ZSA, 2020), access to finance and public resources is limited

(Mwango et al., 2019). This is similar to informal enterprises globally. Informal enterprises usually find it problematic to access loans from banks due to lack of resources, such as asset documentation, unavailability of property to use for collateral, and unavailability of financial statements (Bose et al., 2012; Ohnsorge et al., 2021). Furthermore:

> [m]ore than one-third of firms in the average EMDE with above-median informality identified access to finance as a major constraint—9 percentage points higher than in the average EMDEs with below-median informality—and a need to resort to internal finance to fund investment. On average, three out of four firms in EMDEs with above-median informality depend on internal finance for investment, and only one out of five firms can utilise bank funds to finance their investment needs (Ohnsorge et al., 2021:136 & 147).

The above quotation shows that access to finance is generally difficult for informal enterprises in EMDEs and that they usually resort to internal finance to fund investments. This scenario is like the Zambian case where the majority of informal enterprises fund their investments through self-financing, such as money obtained from Chilimba[2] and other sources including remittances that these informal players receive from their relatives and friends (CTPD, 2016, 2019). However, regardless of these characteristics of the informal sector in Zambia, the sector survives competition from big enterprises in the formal sector and continues to operate, as will be seen in Chapters 8 and 9 of this study.

3.3.3 Informal sector susceptible to economic shocks

The other general characteristic of the informal sector in Zambia is that they are prone to economic shocks and face a huge number of risks. For example, the informal sector does not have social safety nets, which make it vulnerable to economic shocks caused by public health emergencies, such as the COVID-19 pandemic and other diseases like cholera. Generally, in least developed countries, informal workers usually have no access to social security (Medina and Schneider 2018; Ohnsorge et al., 2021). Consequently, "in EMDEs with above-median output informality, only about 4 per cent of the population are covered by social security programs such as unemployment insurance—about two-thirds of the level in EMDEs with below-median informality" (Ohnsorge et al., 2021:148). For this reason, that is, the inability to benefit from social protection and with restricted individual savings, informal personnel are largely susceptible to a hostile environment, which can move them into poverty at any anytime.

As observed during the COVID-19 pandemic in Zambia, anecdotal data shows that large health care expenses are contributing towards the impoverishment of many households who rely on the

[2] Chilimba is a form of village banking where members of a group contribute money every month end to give to a particular member of a group.

informal segment for their source of revenue. The COVID-19 epidemic has exacerbated the issues encountered by the informal sector. The global depression emanating from the epidemic affected the informal segment particularly hard compared to those in the formal sector (ibid). Particularly,

> [l]ockdowns have had disruptive effects on services and activities involving human interaction which include most informal firms and have thus affected informal employment particularly hard. At a global level, large-scale fiscal support implemented in 2020 primarily targeted formal workers and formal firms, with limited support for informal workers or firms (Ohnsorge et al 2021: 156).

From the aforegoing, we see that the informal sector suffers the most when faced with global public health emergencies and that the Zambian informal sector has not been spared. However, in terms of survival, I observed that the informal sector in Zambia has continued to survive and operate despite the observed structural weaknesses which are part of its characteristics.

3.4 Role of the informal sector in Zambia

Zambia, like many other African countries, depends on its informal sector to drive its economy forward (Chisala, 2008). According to GRZ (2008), the aggregate contribution of the informal sector to national development is astronomical. The informal sector has the highest capital/employment ratio and provides a source of income for most people in the country. The 2020, Labour Force Survey put the combined numbers of the informal and household sectors at 66.6 per cent (informal sector 45.5 per cent and household sector 21.1 per cent), while the formal sector accounts for 33.5 per cent (GRZ, 2020). These statistics show a drop in informal sector employment in the last decade. For instance, by comparison, GRZ (2008), reported that most Zambians (over 90 per cent) were employed in its informal sector. Later information showed a slight drop in informal jobs in Zambia, according to GRZ (2018:8), in 2008, “informal employment accounted for 88.9 per cent. Informal employment remained relatively high at 88.6 per cent in 2012 and increased to 89.3 per cent in 2014.” Furthermore,

> [i]n absolute terms, informal employment was estimated at 4,309,006 individuals out of 5,003,871 persons in employment in 2008. Informal employment increased to 4,874,368 individuals in 2012 and to 5,229,599 individuals in 2014. With a relatively stable informality rate during the period under review, several new informal jobs were created in the Zambian economy (GRZ,2008:84).

The development of the informal sector is looked at as one viable option of fighting poverty levels in the country and increasing the quality of life of the people through employment creation (ibid).

The Zambian informal segment is made up of enterprises engaged in the production of goods and services, such as metal fabrication and carpentry, and whose primary objective is to create jobs and generate revenue for the individuals involved (GRZ, 2007). Furthermore, the informal sector activities are mainly in the traditional economic sectors. Traditional economic sectors are those made up of low machinery, that depend on mostly social linkages and inter-personal support and are disposed to the local and not so much prosperous sections of the market. Most informal businesspersons have the features of domestic businesses (ibid). These are generally presided over by an individual with or without support from family. These business types are mainly made up of trading or modest manufacturing, and very few are service-oriented (ibid). In addition, GRZ (2007:3) states that “the range of activities is usually in the production of consumer goods. Among their manufactured products are textile products, carpentry and other wood products, light engineering and metal fabrication, food processing, leather products, handicrafts, and ceramics.”

Despite all the contributions that the informal sector is making to the Zambian economy, it is argued that they encounter several problems, some of which include inaccessible markets, lack of proper machinery, administrative and legal barriers, absence of trained labour, unavailability of utility services, and shortage of shop/rental space and so on and so forth (GRZ, 2008).

Regardless of all this, Chisala (2008) is of the view that a few competitive informal sector businesses are flourishing and adding to economic progression, employment generation and local development in battling poverty. For this reason, efforts should be made to unlock the potential of these informal businesses in a quest to make them contribute positively to the nation’s economic growth. However, the problem posed by government, like other African governments, is that it tends to target large companies at the expense of the informal sector. What the government does not realise is that a conducive environment for bigger firms may not necessarily be good for the informal sector. However, if there is a conducive atmosphere for the informal segment, then it will also be positive for bigger companies (ibid).

The informal sector in Zambia makes “part of the bigger entity referred to as the ‘Non-Observed Economy’ (NOE). NOE are activities that are not usually measured by traditional means such as administrative registers, enterprise-based surveys, and/or household-based surveys” (GRZ, 2014:38). Additionally, “Zambia’s informal sector is made up of units engaged in the production of goods and services whose primary objective is providing incomes and employment to the concerned persons. The units in the sector operate on a small-scale basis, with low level of organisation and with little or no division of labour and capital as factors of production” (ibid). Furthermore, “the characteristics of labour relations where they exist in this sector are based mostly on casual employment, kinship, or personal and social relations instead of contractual arrangements with formal guarantees” (ibid).

3.4.1 Factors that account for the informal sector size

The informal sector in Zambia has been expanding since the 1990s due to widespread liberalisation and privatisation, which resulted in massive loss of jobs in the formal sector and widespread poverty, as can be seen from sections 3.3.1, 3.2.2 and 3.3.3. The “growth of the informal sector in Zambia has seen a rise in various forms of non-standard and irregular forms of employment” (ibid). According to the GRZ (ibid), 90 per cent of the labour force in Zambia are employed in the informal sector. However, the 2019 LFS introduced an additional disaggregation called the household sector to bring the sectors to three. As seen in Table 3.1 below, because of this, those in formal employment represent 33.5 per cent, informal employment is at 45.5 per cent and household employment at 21.1 per cent. These numbers should be understood in the context of the new disaggregation. Table 3.1 below shows the distribution of the labour force in Zambia as of 2019.

Table 3.1: Labour force by sector of employment, 2019.

Sector of Employment	Total			Rural			Urban		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
	Number	Percentage		Number	Percentage		Number	Percentage	
Total	2,988,379	60.2	39.8	1,015,723	61.3	38.7	1,972,656	59.6	40.4
Formal sector	1,000,594	67.4	32.6	196,855	68.8	31.2	803,738	67.1	32.9
Informal sector	1,358,694	59.7	40.3	498,100	62.9	37.1	860,595	57.8	42.2
Household sector	629,091	49.8	50.2	320,768	54.2	45.8	308,323	45.3	54.7

Source: GRZ, 2020.

Among the many factors that account for a huge informal sector in Zambia, lack of development plays a major role. As the country’s economic indicators continue to perform badly, people look for alternatives to meet their daily needs and the informal sector provides that avenue (CTPD, 2019). Studies have shown that a “higher informality is related with lower levels of per capita income and other measures of economic development” (Ohnsorge et al., 2021:283). Furthermore, Ohnsorge et al., (2021:157) are of the view that:

> [f]or both output and employment informality, GDP per capita in EMDEs with below-median (“low”) informality is about four times that in EMDEs with above-median (“high”) informality. Since informal activity is concentrated in services and agriculture, more manufacturing-based and more urban economies feature less informality. On average, about three-fifths of the population in EMDEs with below-median informality, but only two fifths of the population in EMDEs with above-median informality, resides in urban areas.

Furthermore, in line with the above quotation, earlier research also demonstrates that additional widespread informality is related to sluggish growth of production and ventures and, in some research, labour productivity (ibid).

Related to a huge informal sector, is the high prevalence of extreme poverty in Zambia. Poverty in Zambia has been consistently high since the 1980s, when the UNIP government started experimenting with the SAPs. The economic boom that was experienced post-independence subsided in the mid-1970s when oil prices increased on the international market and copper prices slumped, thereby reducing government resources, and pushing many into abject poverty (GRZ, 2017). However, most people during the second republic were employed in the parastatals, and most of those in small-scale agriculture continued to receive producer subsidies under the UNIP government, and the informal sector remained relatively small. However, with the coming of the MMD government in 1991, the SAPs were fully implemented throwing many citizens into abject poverty, as a number of government-supported subsidies were removed and many parastatals privatised, leading many into unemployment and, therefore, no disposable income (Simutanyi, 1996). It can, therefore, be seen that poverty also has a role to play in terms of incentivising for a large informal sector in Zambia. Even the rapid economic growth experienced in Zambia between 2000 and 2015 did not result in declines in informality and poverty, as is the case where rapid economic growth often coincides with drop in poverty (GRZ, 2017). In addition, the World Bank in agreement with the above perception are of the view that the huge predominance of informality is usually linked to bigger predominance of high poverty (Ohnsorge et al., 2021). To further elucidate this point, “in the year 2000, the part of the populace surviving on below $1.90 a day was 44 per cent in EMDEs with above-median informality – more than double the part in EMDEs with below-median informality” (Ohnsorge et al., 2021:129). Additionally, “in 2018, it was stated that one in every four persons continued in high poverty in EMDEs with above-median informality, though fewer than one in ten persons were in high poverty in EMDEs with below-median informality” (ibid).

From the foregoing paragraph, we see that poverty is directly related to the huge informal sector, and its existence is fertile ground for the thriving of the sector. This is because the poor see the informal sector as an avenue that can lead them out of poverty but also as a livelihood strategy to keep them going in difficult times. In terms of survival of the informal sector, as long as the poverty levels remain high, the informal sector, in general, will continue to thrive and survive as it is a way of livelihood for those in abject poverty who make a living through engaging in informal activities. However, not all in the informal sector are engaged in informal business activities because of poverty, as some of these require relatively huge capital for investment which those in abject poverty cannot afford. For example, to engage in informal maize milling, one requires enough capital investments in the form of hammer mills, and these require one to have enough money to be able to purchase them. A hammer mill may cost between $3000 to $6000. This is not easy money to come by for those in abject poverty, as many live on less than a dollar a day (CTPD, 2019). In addition, while informality is typically accompanied by poverty, as alluded to above, there is inconclusive proof that informality decrease is linked with lesser poverty or income disparity. In some cases, for example, the informal sector offers a vital source of revenue for the underprivileged and assists in averting poverty during difficult times (Ohnsorge et al., 2021).

3.5 Connections between the informal and the formal sectors in Zambia.

Whether we like or hate the presence of the informal economy, its rising significance in Zambia is a strong sign of the point that this segment will not fade anytime soon and its incorporation into the rest of the economy is inevitable. To try and comprehend the interlinkages between the formal and informal sectors in Zambia, I borrow from the United Nations description of these interlinkages. The United Nations report (1996) on "Informal sector development in Africa" outlined five main categories of linkages. The first one was forward linkages, which stipulated that the sector employs goods and services produced by informal workers and businesses as an input in their own production (Kumasi, 2010). Secondly, backward linkages; that is, enterprises in the formal sector can also provide goods and services to the informal businesses, particularly raw inputs, but also, more recently, information and communication technology (ibid). Third, technological linkages, which implies that the transfer of technology and skills can also link the two sectors as mentioned in the case of backward linkages (ibid). Fourth, consumer linkages, which means that consumers (individuals, households, farmers, and the public sector) purchase final goods and services from the informal sector (ibid) and, lastly, credit linkages, that is. the formal sector invests or provides credit to informal enterprises (ibid).

In this chapter, I analyse only the forward and backward connections as presented above. I contend that the informal and formal sectors in Zambia are connected to one another and that these connections are in certain cases "synergetic" (common advantage between both sectors) and in some cases "opportunistic" (one sector abusing the other) (Kumasi, 2010). The connections between the informal segment and the formal segment can be made at the stage of the manufactured goods market (demand for informal segment products) as well as at the factor or issue market (supply of formal segment products) (ibid). That is, the informal sector has forward connections to markets external to the informal sector and backward connections to inputs external to the informal sector. This viewpoint is in tandem with the structuralist school that sees the presence of the informal sector as a moderately permanent occurrence of the contemporary economy incorporated with its lead sectors (Castells and Portes, 1989). These connections among the informal and the formal sectors are made through the latter delegating certain labour-intensive phases of production to the former.

Furthermore, the structuralists are of the view that, since the informal sector is inherently connected with the formal sectors, given a continuous level of state directives, the informal-formal sector association is pro-cyclical or, in other words, complementary: growth or decrease in one unavoidably indicates growth or decrease in the other (ibid). These connections among the formal and informal sectors are vital to the continued existence of the informal sector. This is because they provide the informal sector with the essential supplies and resources to continue functioning. For example, as understood in the introductory chapter, some millers are involved in both milling and maize grain trading. They purchase maize grain from the furthest parts of the country where these big millers don't reach and supply the maize grain to the big millers.

3.6 The informal sector in Lusaka

Lusaka city, which is also the capital city of Zambia, is rapidly urbanising, with 44.63 per cent of the country's populace living in urban centres in 2020 (ZSA, 2020). In Lusaka city, where people buy more food than they produce, the informal sector is a significant contributing factor of urban domestic food security through the delivery of vital food access to urban populations. Informal sellers account for 42 per cent of Lusaka's retail food across the various markets, such as meat, dairy, cereals, and vegetables (Fraser et al., 2014). Other players are minor shop owners and informal food dealers, who also meet the demand by repackaging maize meal and working from suitable points of sale easily accessed by customers. Furthermore, occupations are an important determining factor of access to food. In Lusaka, the informal sector, which is largely made of micro, small and medium enterprises (MSMEs) is a key occupation. These informal MSMEs are categorised as companies that engage fewer than 50 personnel, including the proprietor, and personnel are either unpaid, paid in cash or paid in kind (Fraser et al., 2014:6). It is approximated that these initiatives employ 88 per cent of Zambia's working-age population, unlike the seven per cent and five per cent employed in the public and formal private sectors, respectively (Fraser et al., 2014; World Bank, 2017; Mwango et al., 2019). Most of these businesses are minor in terms of transactions, and therefore categorised as survivalist businesses (ibid). Some researchers and analysts associate survivalist businesses with insufficiency and individual- and household-level vulnerability due to low average earnings and unstable incomes (ibid). Accordingly, the type of Zambia's informal economy shows the significance of a robust social protection system in relation to income and consumption.

Social protection encompasses “a menu of policy instruments that addresses poverty and vulnerability, through social assistance, social insurance and efforts at social inclusion” (Fraser, 2013:11). However, in Zambia, both social cover and social support are not “adequate in terms of the numbers of the population covered, the scope of coverage and the adequacy of benefits/payments received” as social insurance is only available through formally incorporated employers, and thus only reaches three per cent of the labour force (ILO, 2008:5). Additionally, there are no schemes that cover informal workers in Zambia. Some researchers and analysts contend that, for those working in survivalist informal sector undertakings in Lusaka, recurrent economic shocks pose the risks of poverty and starvation (Fraser et al., 2013; ILO, 2008). The concept of survival has been discussed in detail in Chapter 2 of this thesis.

Another school of thought views informality as worsening individual- and household-level income and consumption uncertainties, as well as posing the danger of poverty, hunger, and death for those already poor (Fraser et al., 2014). Against this background, some researchers have claimed that “the main contest is therefore to extend social protection to the informal economy. By pursuing these diverse levels of vulnerability, social protection agendas aiming at informal labour force address some of the deep causes of transient and chronic food insecurity” (Fraser et al., 2014:128). As a result, some scholars are of the opinion that the first step in generating such programs could be a social protection examination of Zambia’s labour market to expose the layers of vulnerability predominant among the informal labour force and the survivalist portions of the informal economy and their relationship to food insecurity. For this reason, this study is focussing on this aspect by assessing how informal maize millers survive in an industry dominated by large-scale milling firms.

3.7 Conclusion

The chapter provided the context of the informal sector in Zambia. It provided details about the informal sector in terms of various activities, employment levels, trends over time, factors responsible for a large informal sector, challenges for people in the sector, and how the informal sector relates to the formal sector. Firstly, the chapter discussed the growth of the informal sector in Zambia. It provided a historical perspective of Zambia’s economy starting from 1964, when Zambia gained its independence, up to the 1990s. The chapter showed that the economic system in the UNIP government was mostly formalised, and that informality grew in the early 1990s after the full implementation of the SAPs by the new government, the MMD. The chapter then showed that the factors that led to its growth are the ones sustaining or contributing to the survival of the informal sector. Secondly, the chapter presented the characteristics of the informal sector in

Zambia. It showed that, generally, the informal sector in Zambia has low productivity and low income. The informal workers are usually less skilled and lower paid than their formal counterparts. Third, the chapter presented the role of the informal sector in Zambia and factors that account for its size. It showed that the informal sector is a major source of employment and livelihoods for most Zambians. This role of the informal sector is the major reason that the sector should survive. Fourth, the chapter presented the linkages that exist between the informal and formal sectors in Zambia. It discussed the forward and backward linkages that exist within the two sectors in Zambia. All in all, this chapter has provided the background/context to the study problem by situating the informal economy in Zambia.

Chapter 4: The political, economic, and social context of the informal economy in Zambia: A review of literature

4.1. Introduction

In the last chapter, I provided the background/context to the study problem by situating the informal economy in Zambia. In this chapter, I present Zambia's social and economic situation with the view of providing a general context in which the informal sector operates. To achieve this, the chapter will give a country background focusing on population and the economic policy environment. After providing the general population of the country, I will focus on Lusaka urban and show that the biggest population in Lusaka resides in the low-income areas, popularly known as compounds, hence, their important role of hosting the informal sector and the reason that they were chosen as study areas. The next section will discuss the policy environment in which the informal sector operates. The section will show that the policy frameworks available have not been supportive to the informal sector. This section will be followed by the one looking at the country's economic outlook generally and then will delve into the poverty and employment situation. Lastly, the chapter will discuss why there has been no corresponding growth in formal employment in Zambia despite massive economic growth between 2000 and 2015. The conclusion of the chapter will then show that the informal economy has remained resilient to the negative environment in which it operates and that it continues to be a means of livelihood and survival for those outside the formal employment and trapped in poverty.

4.2 Country background – population and economic policy environment

4.2.1 Zambia's population

The country's population has increased from just below 4 million at the time of independence to about 19,610,769 in 2022 (ZSA, 2022). Most of Zambia's population is young. In the last census of the population conducted in 2010, the age group 15 years and below accounted for 45.4 per cent of the total population (CSO, 2010). The population is higher for females than for males at 9,028,652 and 8,856,771, respectively. Lusaka province is estimated to have the highest population, which, as of 2020, was at 3,289,132, followed by Copperbelt Province at 2,675,446 (ZSA, 2020). Table 4.1 below shows the 2020 projected population by province and sex.

Table 4. 1: Projected Population by Province and Sex, 2020

Province	Total Projected Population		
	Total	**Male**	**Female**
Zambia Total	**17 885 423**	**8 856 771**	**9 028 652**
Central	1 815 801	901 205	914 596
Copperbelt	2 675 446	1 334 740	1 340 706
Eastern	2 071 895	1 027 048	1 044 847
Luapula	1 278 847	628 003	650 845
Lusaka	3 289 132	1 625 060	1 664 072
Muchinga	1 079 501	530 687	548 814
Northern	1 503 180	746 084	757 096
North-western	952 470	475 764	476 706
Southern	2 140 034	1 066 804	1 073 231
Western	1 079 115	521 377	557 739

Source: ZSA, 2020

Population growth in the country has been increasing at the rate of 2.9 per cent per annum (ZSA, 2020). Population projections show that, by 2050, 70 per cent of the country's population will reside in urban areas. Urban population projections for 2021 are at 43.6 per cent (CSO, 2013). Being the country's capital and commercial centre, Lusaka's population is among the fastest growing in the country, emanating from rural-urban migration and those coming from other urban centres to Lusaka seeking economic opportunities. From Table 4.1 above, Lusaka province is highest with a population of 3,289,132 out of the national total of 17,885,423 accounting for 18 per cent of the total population. Furthermore, the above table shows that females are in the majority compared to males. Within the Lusaka province, projected 2020 population shows that a total of 2,567,093 are from Lusaka urban representing 78 per cent of the total population of Lusaka province (ZSA, 2020). Table 4.2 below shows the breakdown of the population in Lusaka province by districts and sex.

Table 4. 2: Lusaka province projected 2020 population by sex.

Province and District	Total projected population		
	Total	**Male**	**Female**
Lusaka	**3,289,132**	**1,625,060**	**1,664,072**
Chilanga	157 290	79 135	78 155
Chirundu	69 563	33 932	35 630
Chongwe	207 613	104 165	103 448
Kafue	176 926	88 220	88 705
Luangwa	35 710	17 599	18 111
Lusaka	2,567,093	1,264,125	1,302,969
Rufunsa	74 937	37 883	37 054

Source: Adapted from (ZSA, 2020).

In Lusaka urban, the biggest population resides in the low-income areas, popularly known as compounds. Statistics show that over 70 per cent of the population in Lusaka urban resides in unplanned and unserviced settlements or what are called shanty compounds (ZSA, 2020; ECZ, 2017). These compounds are dotted around Lusaka urban. The origin of compounds can be traced back to the colonial days when the Administrator accommodated the African labour force in semi-permanent settlements, such as, the old Chilenje and Matero compounds. Following Zambia's independence, compounds became more pronounced as there was an increase in the demand for low-cost housing, yet no new houses were being built (Seymour et al., 1976).

4.3 Economic policy environment in which the informal sector operates

4.3.1 Citizen Economic Empowerment Act

The economic policy environment has continued to exclude the informal sector in national development. For example, arising from the SAPs of the 1990s and the subsequent economic changes and transformation that the country was experiencing at the time, it was evident that the citizens of Zambia were being side-lined and not participating meaningfully in the economic affairs of the country. The major factors that were identified included marginalisation arising from poor education and lack of skills and training among citizens, high cost of borrowing, and inaccessibility of investment capital, among others. To this effect, the Citizen Economic Empowerment Act of 2006 was passed and rests on the

creation of the Citizens Economic Empowerment Commission (CEEC) and the Citizen Economic Empowerment Fund together with its nine pillars of empowerment. The Citizens Economic Empowerment Fund is targeted at encouraging the economic liberation of targeted citizens, citizen

> empowered businesses, citizen influenced firms and citizen owned enterprises; encouraging gender-equality in accessing, possessing, handling, regulating and using economic resources; promoting an escalation in broad-based and effective ownership and meaningful involvement of targeted citizens, citizen empowered businesses, citizen influenced firms and citizen-owned enterprises in the economy in order to contribute to viable economic growth; removal of social customs that result in discrimination based on gender to ensure equitable income distribution; promoting equal opportunity of targeted citizens and citizen empowered companies, citizen influenced companies and citizen-owned companies in accessing and being granted procurement contracts and other services from State institutions; encourage Greenfield investment through shared ventures and partnerships between local and foreign investors in order to enhance broad-based economic empowerment and provide for any matters related to these (Citizen Economic Empowerment Act of 2006).

However, a careful review of the Act shows that it focuses on the formal sector, leaving out the informal. The Act does not resolve the challenge of the credit and finance access that informal traders are faced with, as none of the traders interviewed had ever accessed funds through this financial channel (Mwango et al., 2019). This can partly be attributed to the requirements put up for one to access finances through the fund. Among the requirements, an applicant must submit a business plan in addition to other paperwork for their business. Such requirements indirectly exclude the category of citizens who have not gone high in the education hierarchy. Mwango et al. (2019), in their field survey for traders, show that the majority (51.5 per cent) have only attained primary education and only 0.3 per cent have gone up to tertiary level.

4.3.2 Seventh national development plan

The wider policy setting and guidance for all segments of the economy in Zambia is stipulated in the medium-term country development strategies, which cater for ten years. The long-term plans are cast in the Vision 2030. The other regional and global development plans, such as the African Union agenda 2063 and the United Nations' 2030 Agenda for Sustainable Development, are mainstreamed in national development plans. In 2017, the government unveiled the Seventh National Development Plan (SNDP), which was expected to run for the period 2017 to 2021. A review of the development plans since the country reverted to national planning in 2006 to date shows that all successive national development plans have emphasised the need for broad-based economic growth that includes all citizens, though the focus and tone of these plans implied moving a greater number of the workforce into formal employment. As an example, the Fifth National Development Plan (2006-2010) with the theme "broad based wealth and job creation through citizenry participation and technological advancement" (GRZ, 2009:33) openly concentrated on formal job generation in the important segments that were identified, including agriculture, infrastructure, manufacturing, and energy. The Sixth National Development Plan (2011-2015) focused on sustained economic growth and poverty reduction. The priority growth sectors were agriculture, livestock and fisheries, mining, tourism, manufacturing, and commerce and trade. However, the plan had to be revised when a new government came to power. The revised Sixth National Development Plan from 2013-2016 had a theme: “people-centred economic growth and development”. The plan emphasised Government’s assurance to building economic advancement favourable to *all*. Agriculture was still looked at as a priority in the Revised Sixth National Development Plan, though transport infrastructure development was the main thrust. Further, on agriculture, the explicit focus was developing agro enterprises in rural areas and supporting infrastructure. Here again it can be seen that formal job creation through investments in the identified key sectors was a key objective.

Currently, the country is implementing the Seventh National Development Plan (7NDP). The theme for the 7NDP is: “Accelerating development efforts towards the Vision 2030 *without leaving anyone behind.*” This theme implicitly entails that all sectors of the Zambian economy, including the informal sector, are covered. However, the document does not explicitly outline how it would specifically address pertinent issues within that sector so that it can have a positive impact on the economy. The informal sector is recognised as having the majority number of employees, representing 89.3 per cent of the employed. However, the key challenge according to the 7NDP is to enhance decent job opportunities ,which points to aspects of formalisation of the informal sector. However, formalisation of the informal sector is a long-term process that requires a well-thought-out plan with incremental steps that would result in varying degrees of formality. The bureaucratic procedures and requirements that hinder formalisation should be streamlined while increasing incentives for businesses to formalise (Sepulveda and Syrett, 2007). The above discussion has demonstrated that the focus of the development plans is to move towards formalisation. This policy focus is a threat to the survival of the informal sector as it indirectly calls for its demise. It can, therefore, be seen that the history of national development planning has not been supportive to the operations of the informal sector in general and the informal milling sector.

4.3.3 Second National Agriculture Policy (SNAP)

The national policy on agriculture is a key policy directive that has potential to impact on informal food traders precisely because the traders are a key linkage between production and consumption. Currently, the country is being guided by the Second National Agriculture Policy (SNAP), which is the successor to the National Agriculture Policy (NAP) implemented in 2004-2015. The main aim of the NAP was to guide the development of the agriculture sector. However, with the change of governments, it was felt that there was a need to review this policy and align it with the vision of the entire country and the political vision of the government in power. The SNAP is aimed at guiding the agriculture sector for the period from 2016 onwards.

The SNAP however envisions “an efficient, competitive and sustainable agricultural sector, which assures food and nutrition security, increased employment opportunities and incomes” (GRZ, 2016:11). Among the notable key principles championed by the policy is private sector led agriculture with the government assuming the role of a facilitator. Specifically, for crops, the objective is to increase production and productivity by promoting the use of improved seed varieties. Generally, the main objectives of the policy focus on increasing production and productivity with several supporting objectives to achieve this. One objective that may extend to the informal food traders is objective number four (4) which wishes to improve the effectiveness of agricultural markets for inputs and outputs. Among the measures put in place to achieve this objective is to reinforce the capabilities of farmer groups and co-operatives in production, processing, marketing, and trade (ibid). However, the focus remains on producers rather than the informal traders, who are actively engaged in agricultural value chains. In terms of survival of informal maize millers, this means that they are left out of the main policy frameworks in the nation, which impacts negatively on their survival.

4.4 Economic outlook

Zambia’s economy continues to be propelled by the mining, agriculture, construction, transport, and communication industries. Nevertheless, latest economic information demonstrates that the biggest percentage share of the GDP is the Wholesale and Retail trade industry which has grown widely in the last twenty years (LFSR, 2019). From 2015 up to 2017, Zambia’s real GDP was in the range of ZMK125,003.5 million and ZMK134, 998.0 million (ibid). The wholesale and retail trade sector accounted for 22.9 per cent in 2015, 22.1 per cent in 2016 and 22.9 per cent in 2017 (ibid). By contrast, the mining and agriculture industries accounted for 10.2 per cent and 7.3 per cent of the GDP, respectively (ibid). In 2010, the annual real GDP growth was 7.6 per cent, the highest level recorded since 1972, while, in 2017, the annual real GDP growth was 4.1 per cent, showing a huge slump from the large growth of 2010. Zambia’s yearly inflation rate from 2015 and 2017 trended from 10.0 per cent in 2015 to 18.2 per cent in 2016 and to 6.5 per cent in 2017. In recent times, the economic fundamentals have dropped significantly, resulting in high inflation rates and massive joblessness because of the COVID-19 pandemic.

Furthermore, the World Bank (2021:285) states that

> [a]fter 15 years of significant socio-economic progress and achieving middle-income status in 2011, Zambia’s economic performance has stalled in recent years. Between 2000 and 2014, the annual real gross domestic product (GDP) growth rate averaged 6.8%. The gross domestic product (GDP) growth rate slowed to 3.1% per annum between 2015 and 2019, mainly attributed to falling copper prices and declines in agricultural output and hydro-electric power generation due to insufficient rains, and insufficient policy adjustment to these exogenous shocks.

The above quotation shows that Zambia enjoyed massive economic growth in the 2000s until 2015 when the growth stalled. However, this economic progress did not lead to a vital drop in poverty levels in the country. As highlighted in the following section, poverty has remained a major problem facing the country.

4.4.1 Poverty situation

Poverty is among the main challenges that Zambia is facing today. It is a crisis, as most of the people in the country are denied a minimum decent living standard. According to the LFSR (2019), it is turning out to be more and more problematic for most Zambians to realise basic needs, since inflation has been rising very fast while salaries stay the same. The seriousness of the situation is such that more and more people are unable to get the basic minimum in terms of needs. Poverty differs from one place to another and has been defined differently by different authors. For example, in the context of Zambia, it can be defined as lack of a "long healthy life, educational opportunities, access to resources for a decent standard of living (e.g., income and consumption, housing, health, clean water and sanitation), and lack of freedom to exercise choice and participate in society" (MCDSS, 1998a:123).

According to the United Nations (UN), in SADC, Zambia is amongst the five worst countries on human development pointers together with the Democratic Republic of Congo, Malawi, Mozambique and Zimbabwe. Notwithstanding the growth in GDP in the past two decades, poverty levels in the country remain extremely high. Furthermore, even though the poverty headcount reduced minimally from 62.8 per cent in 2006 to 60.5 per cent in 2010, there was almost no alteration in the number of persons living in high poverty (United Nations, 2015).

Even though Zambia made some steady economic increase in the years 1990-2015, poverty has continued to be the biggest problem to national development (GRZ, 2017). The poverty trends show that, generally, income poverty prevalence dropped in the years 1991 and 2015 by 24.6 per cent, although an upsurge was seen towards the end of the 1990s (ibid). The most significant drop in poverty was seen mostly in urban centres, where it decreased by 25.6 per cent, from 49 per cent in 1991 to 23.4 per cent in 2015 (ibid). In the same period, income poverty reduced from 88 to 76.6 per cent in rural areas (see Figure 4.1).

Poverty levels are generally high in Lusaka but the unplanned or unserviced areas are the worst hit. In these compounds, most people earn as low as one dollar a day from their small businesses ranging from vegetable selling to small groceries known as "*tuntemba*" in the local language, Nyanja. Most of the people in these compounds run their own small enterprises, while some work as domestic workers, security guards and drivers in the more affluent areas of the city.

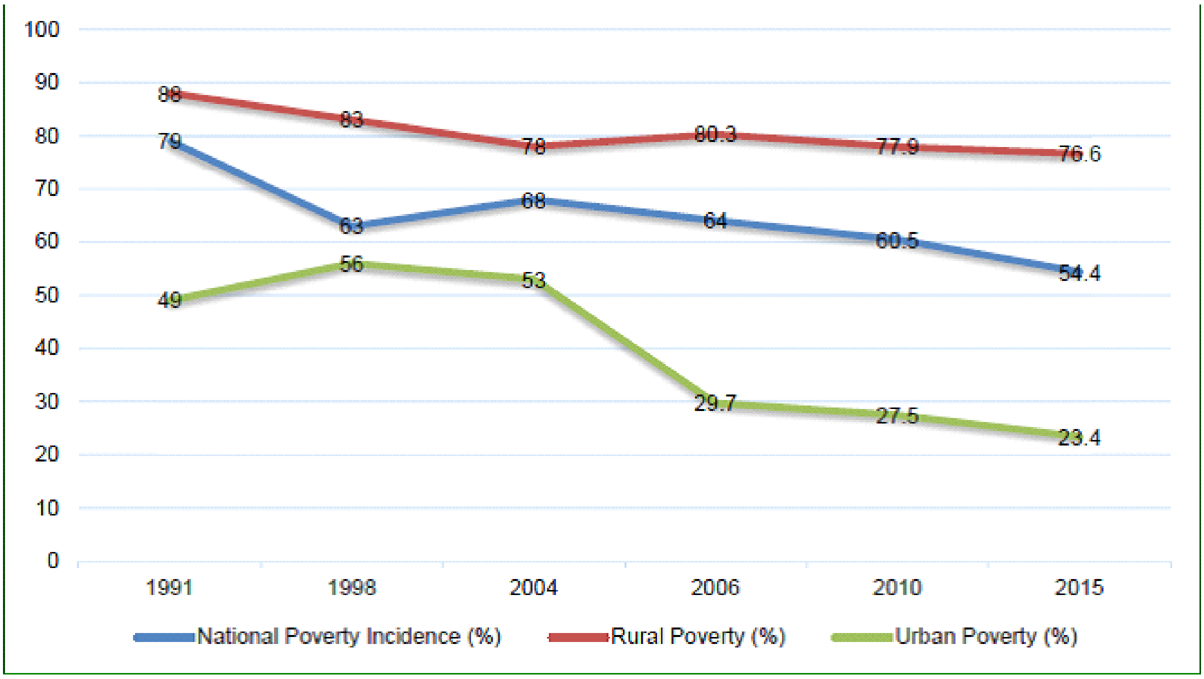

Figure 4. 1: Poverty levels, 1991-2015

Source: GRZ, 2017

Figure 4.1 above shows that, according to the proportion dissemination of the populace by level of poverty in 2015, 40.8 per cent of the populace was very poor while 13.6 per cent was reasonably poor (GRZ, 2017). The proportion of the non-poor was at 45.6 per cent. As a result of the 2015 expected national population of 15.9 million, it meant that 8.5 million individuals were living in poverty, while 3.5 million of those were living in extreme poverty (ibid). Against this background, economic increase did not lead to significant poverty decline, especially in the rural areas. Furthermore, it was observed that the design of economic advancement in Zambia is highly uneven and has not led to increased incomes of the poor swiftly enough to move them out of poverty (GRZ, 2017; LCMS, 2019). According to the GRZ (2017: 3):

> This is mainly for three reasons: first, economic growth has historically been concentrated in capital-intensive industries such as construction, mining, and transport. The second reason is related to the geographical component of growth, where urban areas have gained more than rural areas. The third reason is related to the structure of the economy; economic growth in the country has not been associated with labour-intensive sectors in which the poor tend to work, such as agriculture.

In addition, a review of a policy brief by IGC (2017) reveals that poverty in Zambia has dropped but continues to be significantly high. This is despite the significant economic increase recorded over the past fifteen years. It can be deduced from the aforegoing that effective policies for targeting poverty cannot assume that economic growth automatically translates into poverty decline, and, thus, there is a need to integrate policies intended at reallocation of the gains from growth (ibid). Poverty was found to be high mainly in the agricultural sector, where many families live below the poverty line. These outcomes are of interest in view of the costly government programmes that have been undertaken, such as the Farmer Input Support Programme (FISP) and maize marketing through the Food Reserve Agency (FRA) (ibid). For this reason, there is a necessity to evaluate current programmes and look for alternate policy options for improving output and income levels in the agricultural sector. Alternatively, policies could look at moving agricultural labour to sectors with better scope for output increase and job creation, such as manufacturing and services. It is in the manufacturing sector where maize processing, which is the subject of inquiry in this study falls. The high poverty levels discussed in the aforegoing section account for a large informal sector in Zambia. This is because, as seen in the preceding chapters, the informal sector acts as a source of livelihoods for those left out of the formal sector. Furthermore, as will be seen in Chapter 7 of the study, poverty acts as a motivation for those engaged in the informal milling business to work hard in their businesses and ensure that that they make enough and sustain their businesses so that they don't fall back into abject poverty.

4.4.2 Employment situation

The previous section has demonstrated the incapability of recent economic progress to meaningfully influence poverty reduction. This is mostly due to low job creation (GRZ, 2017; IGC, 2017). Growing the economy can lessen poverty meaningfully on condition that the jobs potential it makes allows poor individuals to increase their income, either through increased jobs or through higher returns to labour (ibid). However, evidence in the previous sections shows that formal sector employment growth has been lethargic in the last fifteen years. According to the 2014 Labour Force Survey in 2017 (GRZ, 2017), nearly 84 per cent of the working people were engaged in the informal sector. Informal work in the years 2005 and 2019 has remained high – ranging between 84 and 89 per cent of the overall number of people working.

Underemployment remains one of the most pressing problems facing Zambia. The subject of employment dominates conversations among most Zambians, and also dominates debates in the media, academia, and the policy environment. As stated in the previous chapters, the 2020 LFS estimates those working in the informal and household sectors are at 66.6 per cent (GRZ, 2020). Nonetheless, the sector was made up of low levels of output, capital injections and equipment, thereby giving limited forecasts to add to national development and finally improving the standard of life of most of the people.

In the past few years, unemployment of young people was among the most critical issues in the country as in most countries in sub-Saharan Africa. It is anticipated that the country's youth population will increase to 36.5 per cent in 2035 from 35.5 per cent in 2011, a situation which will continue to offload additional youths into the employment market (CSO, 2013). While the youth population has been increasing massively, no corresponding jobs have been created, leading to massive youth unemployment. (Machina et al., 2018). Likewise, based on the national classification of employment by the Zambia Statistics Agency, employment entails "…persons who work for pay (i.e., in cash or in kind), barter, family gain, or profit…" (Machina et al, 2018:153). Available data show that approximately 45.5 per cent to 51.1 per cent of young people in Zambia in the age range 15 to 35 years had no jobs in 2017 (ibid). Zambia has not been generating jobs at a rate equal with the labour demands, particularly from the young people, partly due to a paltry agriculture growth rate and upsurge of mechanisation in the industrial segment (ibid). Consequently, if unemployment of young people is not prioritised, it is possible that it will result in political challenges for the country.

The GRZ (2017) reports that:

> of the 3,812,923 young people in the labour force, 400,810 were out of employment, indicating a youth unemployment rate of 10.5 per cent. The male youth joblessness was higher at 12.2 per cent than the female youth joblessness at 9.1 per cent (GRZ, 2017). For the rural youth, joblessness was 6.4 per cent, compared to 15.2 urban youth joblessness. This underlines the unemployment problem in urban centers, Lusaka to be precise. Many of the individuals working in the informal sector were classified as working poor with low levels of income, limited or no access to social security and other core labour standards as prescribed by the International Labour Organization. In addition, a significant number of the working population was self-employed, mainly in subsistence agriculture or small-scale and often fragile businesses.

Furthermore, according to the 2013 Afrobarometer survey "unemployment" came out first on the most important issues facing Zambia that the government needed to work on, with 19 per cent of participants choosing it (Afrobarometer, 2013). Additionally, according to World Bank (2013:132),

> Unemployment in Zambia is an issue but afflicting mainly the urban youth. In 2010 about 8.5 per cent of Zambians in the working-age group reported themselves as unemployed. There was a significant urban–rural difference, with the urban unemployment rate at 19.6 per cent, more than six times the rural rate of 3.1 per cent.

From the above statement, it can be deduced that the problem of unemployment in Zambia mainly affects the urban youths. It is because of this same problem that the urban centres in Zambia have, from the beginning of the 1990s, seen the booming of the informal sector to accommodate this large number of individuals out of formal employment. It is in the same period that informal maize millers mushroomed to provide a livelihood for those out of employment, but also to provide cheap mealie meal to an increasing number of people suffering from the effects of the SAPs. All in all, the high levels of unemployment in the formal sector have been sustaining the growth of the informal sector in general and the informal milling sector.

4.4.3 Economic growth and the unemployment situation in Zambia

Research shows that economic progress is likely to be positively associated with job creation in the formal sector. At the global level, for example, Kapsos (2005) is of the view that, for every 1-percentage point of extra GDP growth, total employment grew between 0.3 and 0.38 percentage points during the years 1991 and 2003. However, between 2003 and 2015, Zambia experienced massive economic growth but there was no significant corresponding increase in formal employment, consequently allowing the informal sector to continue growing. As already discussed in the preceding sections, Zambia's economy in the years 2000 to 2005 increased at a yearly average of about 5.8 per cent while the 2006 to 2015 period saw an increased and constant growth, averaging 6.9 per cent (GRZ, 2017).

Nevertheless, the country continued to be largely reliant on its copper industry, leaving other sectors lagging. Zambia's reliance on copper continued to make it susceptible to commodity price fluctuations (ibid). Notwithstanding the Zambian governments post-2000 policy initiatives to expand the economy by building resilient manufacturing and agriculture sectors, mining continued to be the leading sector. Despite the fact that agriculture yielded growth rates over the 2000 to 2014 period, the sector's influence on Gross Domestic Product (GDP) dropped from 23.8 per cent in 2000 to 6.8 per cent in 2014 (ibid). The share of mining grew from 4.2 per cent to 14.6 per cent in the years 2000 and 2014 respectively. This scenario left little room for the expansion of the formal sector. Furthermore, (GRZ, 2017) contends that the design of economic progression in Zambia is extremely unequal and has not led to increased incomes of the poor fast enough to get them out of poverty due to lack of corresponding growth in formal employment. GRZ, (2017:96) states that,

> [a]n explanation to this maybe primarily for three motives: first, economic growth has in history been focused in capital-intensive industries such as construction, mining, and transport. The second reason is related to the geographical component of growth, where urban regions have benefited more than rural areas. The third reason is linked to the structure of the economy; economic progress in the country has not been associated with labour-intensive sectors in which the underprivileged tend to work, such as agriculture).

From the aforegoing, though the country recorded massive economic growth between 2000 to 2015, formal employment remained elusive due to the reasons discussed above. On the other hand, this scenario was conducive for the growth of the informal sector. Consequently, in the period under review, the informal milling sector grew and provided employment to many left out of the formal sector and provided food access to most of the people of Lusaka district.

4.5 Conclusion

Chapter 4 has provided the political, economic, and social context in which the informal sector operates in Zambia. The chapter has shown that the biggest part of the population resides in low-income areas of the city and that it is in these areas that most informal sector businesses are located. Furthermore, the chapter discussed the economic policy environment and has shown that the policy environment does not support the thriving of the informal sector. Lastly, the chapter has belaboured the point that the country witnessed economic growth in the period between 2000 and 2015. However, there was no significant reduction in poverty as it continues to be a major challenge facing the country today and unemployment levels in the formal sector have continued to be elusive, hence, pushing many into the informal sector. In conclusion, the chapter has demonstrated that the informal economy has remained resilient to the negative environment in which it operates and that it continues to be a means of livelihood and survival for those outside formal employment and trapped in poverty. Furthermore, a review of the various policies and their implementation shows that the development agenda has not been inclusive of the informal sector.

Chapter 5: The maize grain sub-sector in Zambia

5.1 Introduction

The previous chapter presented Zambia's social and economic situation with the view of providing a general context in which the informal sector operates. In this chapter, I present the general profile of the maize grain sub-sector by discussing the history of maize production, use and informal maize milling, the politics of maize meal prices regulation and the role of the informal milling sector in Zambia. The maize sub-sector in Zambia is one of the most important and political sub-sectors of the country's economy. This is because maize is Zambia's staple food and, historically, has been at the centre of politics due to its ability to make the general populace rise against the government if they feel the government is not doing enough to secure the crop for them (Chapoto, 2019). Availability of maize in Zambia, as is the case in many Eastern and Southern African nations, is synonymous with food security, hence any price spikes or shortages in maize and maize meal results in food insecurity which in turn threatens to affect the country's internal security. Owing to the importance of this sector, as explained in the aforegoing discussion, this chapter interrogates in detail the politics about pricing, regulatory Food Reserve Agency (FRA) and the component of the Zambian population accessing maize meal from the informal economy. Furthermore, the chapter discusses farmers who grow it, who they are and why they grow maize. The chapter then introduces and discusses traders, as they are the main players. Lastly, the chapter argues how the maize value chain, which is divided into farmers, traders and millers, who are also divided into informal and formal, contributes to sustaining a viable informal maize milling sector.

5.2 History of maize production, use and informal milling in Zambia.

In this section, I present the history of maize production, its use and the informal milling sector in Zambia. According to (Chapoto and Jayne 2011:5),

> [m]aize is the dominant staple food in Zambia. Its share in total gross farm income in the small- and medium-scale farm sector (hereafter smallholder sector) has risen from 26 per cent in the early 2000s to nearly 40 per cent in 2010/11. Maize also accounts for 60 per cent of the total area cultivated by the smallholder sector.

Furthermore, studies have shown that over 85 per cent of maize production in Zambia is done by small-scale farmers, who own very small pieces of land. Only about 15 per cent is produced by commercial farmers. Most of these small-scale farmers live-in far-flung areas that are not easily accessed by road and not easily connected to the markets. Studies done on small-scale farmers and maize production in Zambia highlight several challenges, such as lack of storage facilities in the villages, lack of financial capital to enable them to invest in various farming mechanisms, long distances to the markets and late payments from the FRA who are the main buyers of their crop (CTPD, 2016).

These small-scale farmers use simple means to produce their maize grain. Several of them use oxen to plough their fields while a few can hire or own tractors to till the land. There is also a considerable number of small-scale farmers, who produce maize grain using hoes. As a result of these limiting factors, including small pieces of land used for this activity, most farmers are only able to produce enough for consumption, while some produce a surplus., which they can sell. The huge percentage of their contribution to maize production in the country is due to their collective numbers as small-scale farmers.

The historical significance of maize in Zambia can be traced back to the beginning of British colonialism in Zambia in 1888. For this reason, if we are to enhance our understanding of the current happenings in the maize sector in Zambia, it is very important that we first start by understanding the historical trajectories of maize politics. Zambia, like many other countries in Southern Africa, has its current policy environment interlinked with its history (Zoephel, 2011). When the British invaded and colonised Zambia in 1888, they discovered that it was a country well-endowed with mineral resources, especially copper. In a quest to manage its newly discovered copper resources efficiently, the British government asked British private companies to come and run the mines in its new colony. Transportation of copper to the Indian Ocean for onward transportation to Europe and other markets proved challenging due to Zambia being a landlocked country. It therefore became necessary to build railway lines to link the copper mines to the Pacific Ocean.

The British companies running the mines recruited and, sometimes, forced local people to work in the mines, where they were paid meagre allowances. In the beginning, the rations for the miners were imported from abroad but, with the increase in the population of workers, it became necessary for the mining companies to start sourcing food for miners locally. To help meet this need, the government provided fertile land along the line of rail to the white farmers so they could start producing for supply to the mines. Maize was chosen as it was easy to grow and because of the grains being bigger, it could easily be supplied in huge quantities. It was also not as labour intensive as other local grains, like sorghum and millet. Furthermore, (Zoephel, 2011:10) states: “Maize meal contributes 60 per cent of the energy equivalence required to satisfy nutritional demands and was therefore a good crop to provide energy for the local Zambian workers to increase their productivity rate.” It is against this background that intensive farming of maize started.

The growth of mines in the Katanga region of the Belgian Congo in the early 20th century and the completion of the railway link to Katanga in 1909 also created a huge demand for maize from the white farmers in Northern Rhodesia. By the 1920s, the mines in Congo were importing about 40 per cent of Northern Rhodesian maize (Bhagavan, 1978). With time, the white farmers could not satisfy the demand from the mines. As a result, the locals, who were settled near the railway line, also started growing and suppling maize to the mines. By the 1920s, the locals were outdoing the white farmers in terms of maize production and supplies to the mines. This unsettled the white farming community, and the government came to their aid by introducing the Maize Control Board in 1936. Zoephel (2011:213) argues that "this intervention was besides the introduction of maize itself, a second decisive point in Zambian history as it set the precedent for state intervention in agriculture that persists today." By the 1940s, demand for maize had risen so high that both white and local farmers along the line of rail could not meet the demand. Consequently, the government intervened by forcing people in all the rural areas in the country to start producing maize to supply to the mines. It is against this background that, by the time of independence, almost all rural areas in Zambia were producing maize.

5.2.1 The maize milling sector in the colonial period

To understand the evolution and survival of the informal maize milling sector in Zambia, it is important to first understand the political and economic pressures that drove the maize policy decisions in the country during the colonial period. It is interesting to note that informal maize millers during both the colonial period and post-independence up to 1990 barely survived because of the government's policy of controls.

The rise of the centralised maize marketing system in the colonial period indirectly contributed to the rise of a centralised and concentrated milling industry mainly along the line of rail. This capitalist system was common for most countries in southern and east Africa. According to (Jayne and Jones, 1997), "the rationale for the development of controlled, maize marketing systems in Zimbabwe, Kenya, Zambia, and South Africa was the former white governments' goal of ensuring the viability of European farmers. This required, to varying degrees, the suppression of African maize production and trade." Furthermore, Jayne and Jones (1997:15) state:

> In the mid-1950s in Kenya, Zimbabwe, and Zambia, starting in the mid-1950s and solidified by the 1960s, state maize marketing boards and large-scale, roller milling firms became either vertically integrated in a single agency, or the state marketing boards served as de facto procurement agents for several licensed, private, large-scale milling firms. Some large mills even had conveyor belts directly linking them into the marketing boards' silos.

In addition, the rise and growth of the informal milling sector during this period was suppressed as the rise of a few, large-scale millers were helped by the state to "link downstream processing and retailing activities into the official marketing system thereby creating a convenient and easily managed system for supplying the blossoming urban population with maize meal at prices easily controlled by the state" (Jayne and Jones, 1997:15). To hinder survival of the informal milling sector, the marketing board and milling companies made sure that maize grain was marketed through the controlled system and was heavily subsidised by government. In addition, there was a "cheap food policy" which only applied to food that was distributed through the official marketing channels. Most local industrial sectors were happy with this policy, as it suppressed the development of non-registered small-scale/informal traders and millers due to preferential subsidies that narrowed the margin within which they could operate (ibid).

5.2.2 Maize milling in the First Republic: 1964-1971

At the time Zambia was getting her independence in 1964, it had the second largest number of settled urban working-class households in sub-Saharan Africa, about 19 per cent in proportion to the population. The new government needed to find ways of feeding this group of people in the towns with cheaper staple food while ensuring that farmers also received a significant amount for their produce. This precarious scenario set a foundation for the government's adoption of colonial policies of control. The new government followed in the footsteps of the colonial government by promoting the production of maize meal through providing subsidies to a formalised milling system. As in the colonial period, agricultural marketing was controlled by the state and done through state enterprises, such as NAMBOARD and Zambia Cooperative Federation (ZCF). Furthermore, in 1971, the Zambian government introduced fertiliser and consumer maize meal subsidies. Jayne and Jones (1997:16) attest to this when they note that,

> [i]n Zambia, over the period of 1967 to 1985, consumer subsidies averaged 70 per cent of the retail price of refined and super-refined meal. In some cases, hammer mill operations in urban areas were banned by regulation. Within this policy environment, the subsequent pattern of urban, maize-milling investments was largely predetermined.

While help towards production and government controls related to marketing resulted in some increase in the segment leading to increase in maize area production and availability of affordable maize to the consumers in town areas at a huge cost to the government, it contributed towards the suffocation of the informal milling sector and subsequent maize meal shortages, as subsidies were not sustainable.

5.2.3 Maize milling in the Second Republic: 1972-1991

As in the First Republic, the Second Republic did not provide any chance for informal milling to thrive or compete in a fair environment. The UNIP government gained additional authority of the economy during this time by declaring a one-party state. All competitors were banned as UNIP stamped its authority on national politics. Price controls and heavy subsides continued to be implemented during this period, thereby contributing to the suffocation of the informal maize milling sub-sector. In the years that followed, UNIP transformed the marketing system by bringing about a system of pan-territorial and pan-seasonal pricing for maize in the country through NAMBOARD (Chapoto and Sitiko, 2015). This system was designed to ensure a consistent flow of maize meal to urban consumers at prices, which were capable of being controlled and stabilised by government, while, at the same time, ensuring high producer prices to smallholder farmers. This was not only the case in Zambia but most countries in eastern and southern Africa had highly controlled and centralised distribution, storage, and milling facilities. The "milling and maize procurement by the state was either vertically integrated in a single agency or the state marketing board served as a de facto procurement agent for the private large-scale milling sector" (Jayne and Rubey, 1993:168). What this implies is that the informal milling sector was completely pushed out of the equation.

To maintain the huge inputs, output market, credit, and subsidy programmes that the government had created, the government had to continuously depend on external borrowing. What this meant was that the government lost some autonomy on its agricultural policies (Chapoto et al., 2015). As a result of increased pressure due to escalating national debt and pressure from international lenders, the government gave in and implemented the first structural adjustment programme in 1978 and went on to implement the second SAP between 1985 and 1991 (ibid).

Following the partial implementation of SAPs, consumer and producer subsidies were reduced, while NAMBOARD was abolished in 1989. Specifically, the new measures included the removal of price fixing on all crops except for maize, removal of state monopoly and marketing rights and encouragement of foreign investments in agribusiness (Chapoto and Sitko 2015). Furthermore, a partial liberalisation of the grain market was undertaken by the government (Mwanaumo et al., 1997; Tembo et al., 2010). These measures were meant to cushion the treasury following the dwindling of resources. However, chaos followed these initiatives, as the suffering masses blamed government for their misfortune. As a result, government reverted to price controls and subsidies in 1987 as a way of appeasing the masses especially in the urban centres, where food riots had become the order of the day.

However, even with the partial implementation of SAPs in the late 1970s and the 1980s, maize processing activities remained in the hands of the parastatals, such as National Milling Company. Maize grain was still not easily accessible in the informal markets. This meant that informal maize millers and consumers still could not capitalise on the grain market. In summation, the policy environment of the Second Republic saw the continued stifling of the informal milling sector in Zambia.

5.2.4 Maize milling in the Third Republic

Prior to 1991, the Zambian government, through its parastatals, oversaw the milling and distribution of maize, which they tightly controlled, and determined prices. "At each stage of the distribution process, the producer price, selling price to millers and retail price of maize meal were set by the government" (Scott, 1995:308). These prices were to be applied nationwide and did not change for most of the year (GRZ, 2004). NAMBOARD and the Provincial Cooperative Unions monopolised the purchase of maize.

Following the full implementation of the structural adjustment programmes in 1992, these parastatals were privatised. Maize meal prices increased, while several people lost their formal employment. It was at this stage that the informal sector maize millers emerged to cushion the impact of the withdrawal of government parastatals by providing cheap mealie meal to a growing number of the urban poor (Nijhoff et al., 2002; Mason, Burke et al., 2011).

The importance of the informal sector in the context of developing countries has long been recognised, even as early as the 1980s (Beck and Demirguc-Kunt, 2006; Kefale and Chinnan, 2012). It is not surprising therefore, that, as Zambia proceeded into full liberalisation in the 1990s, a huge number of small-scale millers emerged (Chapoto, 2013). The agricultural marketing reforms of the 1990s represented an important shift in the development and growth of food processors in Zambia's informal sector (ibid). Since the deregulation and liberalisation of the agricultural sector from the mid-1990s – which had been one of the government's key priorities – several small-scale maize millers mushroomed across the country (Chapoto, 2012). These were mostly servicing the rural people and the urban poor (Guyton and Temba, 1993; Saasa, 1996).

The Zambian informal maize sector is characterised by several small-scale maize buyers and sellers, who are also sometimes linked to commercial trading and milling firms, and small-scale maize millers (Sitko and Kuteya, 2013). It's interesting to note that there are small-scale maize millers who also buy and stock maize, which they sell to consumers, in addition to grinding the maize at a slightly cheaper price than the big millers (Chapoto ,2012). Furthermore, the growth in the small-scale milling sector has largely been responsible for driving decreases in the marketing margins between wholesale grain prices and retail maize meal (Chisanga, Mofya-Mukuka et al., 2015). Often, urban dwellers buy whole grain maize in informal retail markets and take it for grinding to small-scale millers. This is cheaper than buying refined maize meal that is produced by large-scale maize processors (Nkonde et al., 2011). For example, while 25kg bags of breakfast meal and roller meal were selling at K170 and K140, respectively, in the formal markets, a 50kg bag of maize grain was officially (in the current marketing season 2021) being sold at between K170 and K200. When ground into *mugaiwa*, a 50kg bag of maize grain produces two 25kg bags of mealie meal. It costs only K30 to grind a K50 bag of maize, hence most urban dwellers prefer to use the informal markets than to buy maize meal from the formal markets (Zambia Reports, 2015). While this provides a cheaper source of maize meal to the urban poor, it also acts as a source of healthier mealie meal (locally known as *mugaiwa*) to the rich, as it is less processed than both the breakfast and roller meal from large millers. However, it has not been easy for such informal millers as they have faced numerous challenges over time, such as restrictions on supply, which seems to have effectively restricted small-scale millers from operating (Nijhoff et al., 2002).

The maize market in Zambia is seasonal. Whole grain maize is in abundance during the harvest period from April to August and prices tend to be lower in the informal markets during this period. However, in the case of the large milling firms, the price for their processed maize meal does not usually decline, even in the harvest period. It usually remains static, and this disadvantages the urban consumers, who do not benefit from lower prices in the periods of bumper harvests (Mason et al., 2011). Most of the maize is usually captured by the large-scale milling firms during the marketing season. Once this has been done, it comes back to the retail urban markets as very expensive, refined mealie meal. Furthermore, evidence shows that, in periods of maize deficits, imports by the FRA and other brokers are usually given disproportionately to the large-scale milling firms in the formal sector (Chisanga et al., 2015). What this means in essence is that the maize goes to the formal markets, which are not easily accessed by the majority of the urban people, and it also pushes out the informal retail and small-scale milling sectors that the majority of the urban consumers rely on for their maize meal. From the aforegoing, there is some sort of policy bias against the informal sector and yet it plays an important role in maize meal access for the urban dwellers. The implication of this policy bias is that maize grain goes where maize meal is very expensive, as large-scale milling firms dominate the maize market. Furthermore, (Chisanga et al., 2015) argue that a handful of large-scale milling firms control much of the processing, distribution, marketing and retailing of maize meal. Consequently, Chapoto (2012) is of the view that this concentration of power enables these large-scale milling firms to wipe out competition and dictate tough terms to their consumers, which force consumers into poverty and hunger.

5.3 The politics of maize prices and regulation of the sector

As observed in the preceding section, the status of maize as a political crop is embedded in the country's maize policies dating back to the early 1900s. Following a sustained increase of maize meal prices in the country in the early months of 2016, the government of the Republic of Zambia through the Ministry of Agriculture commissioned a study through the Indaba Agricultural Policy and Research Institute (IAPRI) to carry out a rapid survey of the milling sector in Zambia. The study was necessitated by a continuous increase in the maize meal prices, despite previous consecutive years of bumper harvests. This study found that, though there have been many investments in milling over the years due to high and sustained profitability of the milling sector (which has consequently brought the milling capacity to about 2 million mt per year and exceeds the national mealie meal requirements), this did not, in the long run, lead to the reduction of mealie meal prices (IAPRI, 2016). Furthermore, the study found that, despite FRA offloading cheaper maize to several millers from November 2015 onwards, retail breakfast meal prices were higher than the government recommended prices (IAPRI, 2016). See Chapter 7 for a detailed discussion on maize meal prices. This finding was in line with previous studies that have shown that subsidies to large millers are ineffective in keeping consumer prices low (Kuteya and Jayne, 2012; Kuteya and Sitko, 2013; Chapoto, 2015; Chisanga et al., 2015). Furthermore, this study found that large millers tend to rely on the FRA and only make initiatives to buy maize from private sector traders following good rainfall seasons. In addition, most of the large millers have sufficient maize grain storage facilities, which gives them an upper hand over the informal maize millers. In a relatively good season, it is expected that large millers will source their own maize from traders and farmers.

5.3.1 Large-scale millers and the politics of "arm twisting government"

On 5th June 2018, the Millers Association of Zambia (MAZ), a grouping of large-scale millers, issued a statement saying that mealie meal prices were likely to be adjusted upwards due to an increased number of briefcase buyers in the country, who had already started buying maize (*News Diggers*, 2018). According to MAZ president, Andrew Chintala, in an interview with *News Diggers*, "millers were concerned with the increased number of brief case buyers in the country who had started buying maize ahead of the 2017/2018 crop marketing season." Chintala further warned that the move was likely to influence an upward adjustment of mealie meal prices should the price of maize be found to be high on account of an increased presence of briefcase buyers' (ibid). In addition, he noted the following:

> And now, the current price [of maize] obtaining on the market translates into about K75 [per 50kg], that's what they are buying on the open market. But that is maize, which is last season's crop, not the current crop. So, we are aware that there are brief case buyers, not traders, who have gone out there to buy the maize at cheap prices, even at K1 per kg, and those are the same guys who are coming to offload maize at the current price where we are buying maize. Now looking at how much profit margins they are making, they are barely making a killing. So, we are concerned as consumers to say at what price we are going to buy mealie meal. We are equally mindful and that's why we are appealing to our farmers to hold on a little bit. We the millers, are providing the offtake market, which is readily available (*News Diggers*, 2018:4).

From the aforegoing statement, it can be deduced that the millers' association was not happy with the competition that was being offered by the small private buyers whom they called "briefcase businessmen". The big millers, through MAZ, use their influence to discredit these small traders. This, in turn, contributes to the negative perception that the government and other players have of these small businesses.

The expansion of FRA activities has led to a concentration of milling strength on the larger millers to the detriment of hammer millers (IAPRI, 2016). Most importantly, as will be seen in Chapter 7, where this subject is discussed in detail, this study confirmed anecdotal data that the existence of hammer millers led to competition that eventually led to lower milling prices in real terms over time and a less concentrated and, consequently, less vulnerable mealie meal sector. Maize meal from hammer millers is cheaper than that from larger millers, especially when compared to the repackaged (*pamela*) form in which most high-density residents consume their mealie meal. Residents in high-density urban areas are already paying higher prices for mealie meal especially in the repackaged form, which is the most common way.

5.4 Characteristics of large-scale milling firms

5.4.1 Motivations for investing in milling

The primary incentive stated by large millers for entry into the milling industry is high demand for the commodities from the sector and sustainable profits (IAPRI, 2016). None of the millers stated that their entry was imposed by access to cheap maize from the government although it was mentioned by a few that local availabilities of grain persuaded them to invest in the sector. Investments in the milling sector are tilted towards the manufacture of mealie meal as the major product rather than differentiating their product range (IAPRI, 2016). For this reason, the profitability of the sector is strongly linked with selling of a single-product-mealie-meal. Furthermore, large millers are characterised by the employment of large numbers of permanent workers, which is likely to affect their costs, as they still must pay workers despite the level of production at any given time.

5.4.2 Installed milling capacity for large-scale millers

The installed milling capacity in 2016 stood at 1,974,563 metric tonnes (mt) (ibid). With this capacity, Zambia can supply both its domestic and neighbouring markets. Assuming the human consumption requirement of 130,000 MT per month and the conversion rates of 61.8% for breakfast meal and 22.6% for roller, the total mealie meal requirement is 1,316,640 mt (IAPRI,2016). This means that Zambia has excess capacity to produce surplus mealie meal beyond its domestic requirements. Table 5.1 shows the installed capacity and locations of large millers in Zambia.

Table 5. 1: Installed milling capacity and location of commercial millers in Zambia

Province	Total installed capacity per annum	Number of commercial millers
Lusaka	1,180,980	21
Copperbelt	340,423	11
Central	155,280	8
Southern	144,000	6
Northern	25,200	2
Luapula	15,840	2
Muchinga	15,840	1
Eastern	50,200	5
North-Western	25,200	2
Western	21,600	2
Total	**1,974,563**	**60**

Source: MoA, 2016; Rapid Millers' Survey

5.4.3 Milling extraction percentage

The normal extraction proportion for breakfast meal is about 61.8 percent, roller meal is about 22.6 percent, maize bran is about 16.4 percent and wheat flour is about 78.5 percent (ibid). The wide range of extraction rates for different milled product highlights the variation in efficiencies in the technologies used by various millers. The proficiency in the utilisation of maize grain to produce mealie meal and other outputs differs from miller to miller based on the technology used (ibid).

5.4.4 Millers involvement in crop purchasing

According to the rapid survey of Lusaka and the Copperbelt, on average, each miller had storage capacity for grain of nearly 35,000 mt consisting of 42 per cent open slab, 44 per cent closed warehouse and 14 per cent grain silos (ibid). The total grain storage capacity of the 11 large millers interviewed amounted to 215,536 mt, the biggest of which was closed warehouses (ibid). It follows therefore that large-scale millers, have the capacity to safely store grain for long periods given the capacity to store grain either in closed warehouses and grain silos (ibid). Table 5.2 shows the main sources of grain for the large millers in the 2015/16 marketing season.

Table 5.2: Main sources of maize grain for large millers

Number	Source of Grain	Number of Millers Sourcing Maize Grain from Source	Average Quantities of Maize Grain Purchased from the Source (MT)	Price at which the Maize Grain was Purchased (ZMW/MT)
1	Small-Scale Farmers (without contract)	6	13,021	1,690
2	Small-Scale Farmers (with contract)	1	9,588	1,500
3	Large-Scale Farmers (without contract)	1	15,980	1,500
4	Directly from Large-Scale Farmers (with contract)	0	-	-
5	FRA	11	30,822	1,655
6	Larger-Scale Grain Traders, e.g., NWK Agri services, Cargill	1	2000	1,370
7	Small-Scale Grain traders	0	-	-
8	Agents	0	-	-

Source: IAPRI, 2016

The results from the rapid assessment conducted by IAPRI in 2016 showed that the biggest source of maize grain for most of the large millers was the FRA, followed by small-scale farmers (ibid). The study showed that few millers contracted farmers to produce maize for them. Furthermore, evidence drawn from the Rural Agricultural and Livelihoods Survey (RALS) showed that smallholder farmers sell very little maize to millers. In 2012, the RALS data showed that only 1.4 per cent of households sold maize to millers, while in 2015, this had increased to 2.2 per cent (ibid). The assessment showed that farmers were their main suppliers of maize grain over the periods 1996 to 2001 and 2002 and 2009 (ibid). The study found that their purchasing behaviour showed heightened dependence on FRA, which became a major player in 2010 (ibid). This is frequently reinforced by poor weather patterns, such as drought, when, millers indicated, FRA becomes their main source of grain owing to high grain prices and low availability on the market. This sub-section is important as it highlights the main source of maize grain for the large millers, which is FRA. This will help build a narrative in subsequent chapters that the large millers have an undue advantage over informal maize millers due to the preferential treatment they receive from government.

5.4.5 Costs of production for millers

Figure 5.1 below indicates the ratio of the costs of production based on a rapid survey of millers in Lusaka and the Copperbelt conducted by IAPRI in 2016. The largest cost component for large millers was maize grain (85 per cent), which was followed by transportation (7 per cent) and labour (3.5 per cent) (ibid). The least items in the millers' cost structure were fumigation and insurance. Interestingly, electricity accounted for only 0.6% of the millers' costs per tonne, indicating favourable electricity tariff rates at the time. Based on average costs from the industry, the total costs of converting maize to mealie meal by large millers was ZMW416.00 during the 2015/16 season (ibid). The rationale for this section is to show the cost of production for large millers with the view of making comparisons with the small millers in subsequent chapters.

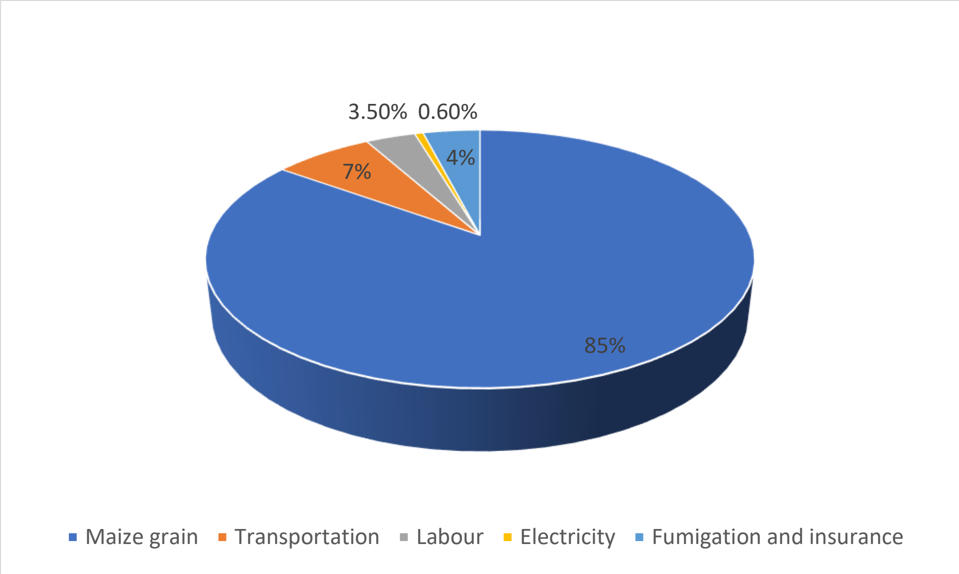

Figure 5. 1: Proportion of costs of production for millers

Source: IAPRI, 2016

5.4.6 Large millers, subsidies, and the export market

Despite the FRA offloading cheaper maize to several millers since 2011, mealie meal prices have continually been rising. More worrisome is the fact that government's price intervention in the maize sector produced incentives for opportunistic conduct among players in the maize value chain (ibid). As a result of the huge difference between the FRA price and the market price for grain, a miller can earn margins by simply selling grains at market prices without milling it (ibid). Moreover, there were huge margins to be gained by millers, retailers, and agents by selling above the FRA recommended retail price. In addition, there were more margins to be earned by exporting maize or mealie meal obtained from the FRA to the neighbouring countries like the Democratic Republic of Congo and Malawi. According to the study by IAPRI, millers who accessed maize from the FRA, increased the quantities of maize milled monthly from November onwards. However, the retail prices of mealie meal remained high. This is possibly due to the increased demand coming from export markets (ibid). So, while the government's aim when subsidising maize grain to the large millers is to bring down the prices of maize grain for the benefit of consumers, the opposite is the case. For example, on 11th April 2023, President Hakainde Hichilema issued the following statement addressing measures his government had undertaken concerning the mealie meal shortage in the country:

> In response to the mealie meal shortage affecting certain regions of the country, we have convened multiple consultative meetings with both government and private sector officials at a high level. We acknowledge the seriousness of the current situation, particularly with the shortage of the commodity in some neighboring countries.

> An emergency response has been activated to address this specific situation. We anticipate that the measures implemented will improve the situation and we will closely monitor developments on the ground.
>
> It is our appeal to the citizens to uphold the interventions implemented by the government and maintain lawful and orderly conduct[3].

From the above quotation, the country is facing a maize meal crisis despite the government providing the large-scale millers with access to maize grain from the national strategic reserves through the FRA. With some neighbouring countries experiencing serious shortages of maize meal, some large-scale millers export most of the maize meal produced from the maize grain provided by FRA for huge profits thereby causing shortages on the local market. This sub-section has shown that despite large-scale millers enjoying support from government through FRA subsidies, the benefits do not trickle down to the consumers.

5.5 Maize grain traders in Zambia

Maize traders in Zambia can be divided into two categories, namely, structured enterprises and unstructured enterprises. Under structured enterprises, we have large-scale enterprises, small-scale enterprises, and government parastatal FRA (CTPD, 2016). In the category of unstructured enterprises, we have open-market traders and mobile, seasonal maize buyers, who are mostly informal in nature. These different categories of traders play varying roles in the maize marketing system.

5.5.1 Informal maize traders or unstructured traders

In this category, there are open-market traders and mobile seasonal buyers. The open-market traders work from markets where they own stands or sell their products in open space. These usually purchase maize ranging from 1000 to 2000 50kg bags during a marketing season. They buy from remote areas, where the large-scale traders do not reach. In addition, they also buy from farmers, who sometimes sell directly to them. Some of these traders have makeshift storage facilities within the markets where they stock their products (ibid). Furthermore, they also stock inputs, although their seed and fertiliser are normally not trusted by many farmers, as they think the inputs are uncertified (ibid). Some of the challenges faced by these traders is that they don’t have access to loans and other credit facilities. Prices offered by open-market traders can be very low compared to FRA, as they are usually among the first to start buying, when most farmers are desperate to sell, and they often do so in hard-to-reach areas. In the 2015 marketing season, their prices ranged from K25 to K50 per 50kg bag (ibid). In terms of their

[3] Statement issued by the Republican President Hakainde Hichilema on his Facebook page on 11th April, 2023.

customers, open-market traders supply their maize grain to customers mostly from high density areas, as these traders are in the markets, which are found in these high-density areas.

The mobile seasonal buyers, also negatively referred to as "briefcase buyers" by some stakeholders in the sector, possess similar characteristics to open-market traders although their operations are seasonal (ibid). According to IAPRI (2016), mobile seasonal buyers usually raise some money before the maize becomes ready. When the time comes, they buy second-hand clothes, which they take with them into the villages, where they exchange them for maize, but also buy for cash. These mobile seasonal buyers come from different places and set up camp in villages during the maize-marketing season. In 2015 to 2016, their prices ranged from K25 to K50 per 50kg bag. The mobile seasonal buyers sell their maize to large millers but also supply markets. They can buy from 1000 bags to 5000 bags of 50kg maize meal in a single marketing season. Like the open-market traders, these buyers service remote areas as well and provide a ready market for the farmers in remote areas, who would otherwise find it difficult to sell their produce.

5.5.2 Formal maize traders

Under the structured/formal maize traders, there are three categories, namely, large-scale enterprises, small- and medium-scale enterprises, and the FRA. Large-scale enterprises buy maize on a very large scale and usually own large storage facilities in various parts of the country. In their dealings with the farmers, they make use of calibrated scales and pay immediately on receiving the maize, but his is not so with the FRA (CTPD, 2016). Unlike unstructured traders, these traders have access to credit and insurance cover and hence can pay on time. In addition to maize buying, they also stock large quantities of inputs, such as fertiliser, and provide extra services to farmers, such as input credits, by which farmers get inputs, such as maize seed and fertiliser, on credit and agree on the amount of maize grain bags that they will pay back once the maize is ready (ibid). These traders pay competitive prices and can match what FRA pays farmers. The majority of them were paying prices ranging from K65 to K70 in the 2015 marketing season, while FRA was buying at K75 (ibid). The advantage they have over FRA is that, while it takes FRA a minimum of six months to pay the farmers who supply maize grain to them, these large-scale private enterprises pay immediately the maize is supplied to them.

The small- and medium-scale enterprises buy and resell maize grain to millers and large-scale enterprises. Their most pressing challenge is access to finance and insurance cover as highlighted in a study conducted by (CTPD, 2016). These traders do not own large storage facilities and, because they have very limited capacity to stock maize, they tend to buy and resell maize within short periods of time.

Unlike unstructured traders, these have fixed places from which they operate (ibid). Their prices are competitive but less than what the FRA offers farmers.

Lastly, the FRA, a government parastatal whose creation was

> through the Food Reserve Act, Cap 225 of the Laws of Zambia, has a mandate to administer the strategic food reserves, engage in market facilitation, development, and management of national storage facilities. As highlighted in the Food Reserve Act, the FRA was established as a corporate body with perpetual succession and a common seal, capable of suing and of being sued in its corporate name. Furthermore, the FRA has power to do all such acts and things as a corporate may by law do or perform (CTPD, 2016: 21).

Furthermore,

> The rationale behind the FRA managing the national strategic food reserve is to ensure a reliable supply of designated agricultural commodities for the country, to meet local shortfalls in the supply of a designated agricultural commodity and to meet such other food emergencies caused by drought or flood, or by such other natural disaster. The FRA also has the role of addressing issues affecting the food reserve and the stabilisation of prices and essential food supply (ibid).

In addition, the agricultural marketing policy of the Government of the Republic of Zambia is echoed in the FRA Act. The Act has provisions, which are aimed at generating the necessary environment to encourage the private sector to develop efficient agricultural production and marketing systems, while at the same time, trying to stop the direct intervention and control by government agencies and institutions. The FRA, therefore, is the implementing body of the Food Reserve Act.

From the aforegoing statement, the FRA is supposed to create an enabling environment for all players in the sector to flourish but this has not been the case, as indicated in the preceding sections. The general perception is that they tend to favour large-scale milling firms to the detriment of informal maize millers. The following section briefly discusses the informal maize milling sector in Zambia. Chapter 6 will provide a detailed description of the different aspects of the informal milling sector.

5.6 Role of the informal milling sector in Zambia

The informal milling sector is a very important component of the Zambian economy. It plays the role of providing cheaper and healthier maize meal to most Zambians in addition to providing employment and a source of livelihood to the owners and their employees (Nijhoff et al., 2002). Despite this important function, its role in the maize milling industry continues to be undermined. According to Kuteya and Jayne (2012), the subsidies by government on maize are usually seen as an indirect support to large-scale milling firms. On the contrary, research has shown that informal maize millers play a crucial role in promoting competition in the maize milling industry in Zambia. For this reason, if the playing field is not rectified, their performance and survival will be hindered by selective subsidies and, consequently, this will lead to lessening competition in the maize milling industry, thereby driving the prices of maize grain products upwards. This will then result in high marketing margins between wholesale maize grain and breakfast meal retail prices, which will be beyond the reach of most Zambians. Furthermore, according to Nijhoff et al. (2003), in Zambia, hammer mills appear to process as much maize grain as the industrial mills until public market maize supplies dwindle towards the end of the marketing season. My argument in this study is in tandem with Kuteya and Jayne (2012) and Nijhoff et al. (2003), as it views the informal maize millers as very important players in the maize milling industry, who deserve to be studied regarding their survivability so that the knowledge gained can be applied to the informal sector in general.

Hammer mills are dotted across the country and produce *mugaiwa* and other maize products. As earlier highlighted, until public market supplies reduce towards the end of the marketing season, hammer mills constantly provide milling services to their customers' satisfaction, hence making them a very important component of the maize-milling sector. In terms of products, they produce other products such as roller and breakfast meal by first de-hulling the maize and using finer sieve settings. This is the skill they have developed over time to meet growing demand and needs of different clients. According to Kuteya and Jayne (2012:76),

> [t]he study found that while some Hammer Mills produce and package for reselling, almost all hammer mills provide service milling for customers who bring relatively small maize quantities to be milled for maize meal, samp or maize rice. In addition, some hammer millers have also started getting into commercial milling and selling their product to the public. Comparatively speaking, hammer millers' fees for grinding maize grain into *mugaiwa* are substantially less than large-scale commercial millers' costs of milling maize into roller and breakfast meal plus the packaging and retailing costs incurred on these kinds of maize meal. As a result of this, it becomes cheaper for consumers buying maize grain and milling it into *mugaiwa* at a local hammer mill as they pay only about 50 per cent of the cost of purchasing breakfast or roller meal in retail stores. The importance of hammer mills to many urban and rural consumers' food security cannot be over-emphasised. Research shows that about 80 per cent of rural households' total maize and maize meal purchases is in the form of maize milled into *mugaiwa* the remaining purchases are in the form of packaged industrial meal. The implication of this is that most rural consumers prefer to satisfy their remaining maize needs by purchasing maize grain and having this grain hammer milled into '*mugaiwa*' rather than purchase relatively expensive roller or breakfast meal from large commercial sources.

Urban consumption, though largely dependent on large commercial sources, is also beginning to have more *mugaiwa* consumed and this is becoming very important, particularly for low-income consumers. However,

> the government's preferential treatment of large-scale millers during times when the availability of maize grain through the small-scale public market distribution channels is constrained seems to be problematic and affecting the performance of informal maize millers. For example, when local maize shortages occur, industrial mills have generally been able to import maize due to their ability to access credit, or are given access to government-imported maize, resulting in a temporary increase of the market share for industrial mealie meal versus hammer meal (Kuteya and Jayne, 2012). These are usually difficult periods for

> consumers when they are temporary unable to procure maize grain due to shortages in local markets. For example, in 2001/02, following the importation of 150,000 MT of maize facilitated by Government, all the maize was channelled exclusively through industrial mills (ibid). What this did indirectly was that the low-income consumers were forced to pay a higher price for their maize meal than would have been the case if some imported grain was made available to small traders and consumers in the local markets. In summation, if consumers or small traders cannot source maize grain to have it milled into *'mugaiwa* 'or any products of their choice, they will be forced to incur higher prices for their staple food needs (ibid).

Consequently, this ends up jeopardising poor urban and rural consumers' food security. For this reason, the informal maize millers' survival is critical to enhancing both urban and rural food security. The following sub-section briefly discusses the duality of Zambia's maize-milling sub-sector.

5.6.1 Duality of Zambia's maize milling sector

The maize-milling sub-sector in Zambia follows a dual system; that is, it is formal as well as informal. The formal part is composed of the government parastatal FRA, which plays a role of buying maize grain for the government for purposes of maintaining strategic reserves. Besides the FRA, the formal sector is also composed of the private large-scale milling firms, which are engaged in maize buying from the farmers, milling and distribution. Within this category are also large firms, which are engaged in grain buying for export purposes. An example of these is NWK, which is involved in maize buying and input supplies. Alternatively, the sector is driven by informal players, who are involved in both maize buying, milling and distribution. These informal players include some small and medium enterprises, open-market traders and mobile seasonal maize buyers who have similar characteristics with open-market traders, but their operations are seasonal. Furthermore, there is a link between the informal and formal businesses. Some of these informal market traders buy from the farmers and supply maize grain to the big millers.

5.7 Conclusion

In conclusion, this chapter has given a detailed examination of the maize sector in Zambia and discussed it as one of the most important sub-sectors of the country's economy. The literature has illustrated that both the colonial government and successive post-colonial governments promoted a centralised milling system at the expense of informal maize millers, thereby hindering the growth and survival of the informal milling sector.

Furthermore, the chapter has highlighted that maize is Zambia's staple food and historically has been at the centre of politics due to its ability to make the general populace rise against the government if they feel it is not doing enough to secure the crop for them. In addition, the chapter has highlighted that the availability of maize in Zambia is directly connected to food security, hence any price spikes or shortages in maize and maize meal results in food insecurity, which, in turn, threatens to affect the country's internal security. In summation, due to the importance of this sector as explained in the aforegoing discussion, the chapter has interrogated in detail the politics about pricing, regulatory FRA and the component of the Zambian population accessing maize meal from the informal economy. Furthermore, questions on the farmers who grow the maize, who they are and why they grow maize have been dealt with ably. The chapter went further to discuss traders, as they are the main players in all this, as they link the farmers with millers and consumers, and concluded by discussing how the maize sector is divided into farmers, traders and millers, who are also divided into informal and formal. Informal traders and farmers contribute to the survival of informal millers, as they sell directly to the people and the informal millers themselves rather than the large traders, whose primary purpose is export. Overall, some millers have maintained a constant supply of maize by linking their supply network with the farmers and maize grain traders, who act as a link between the farmers and urban consumers. As a result, the chapter has shown that there is still a market for the small miller despite the concentration of market power among a few large millers. The availability of market as shown in the chapter is important to the survival of the informal maize millers.

Chapter 6: Informal maize millers: The Lusaka case study

6.1 Introduction

So far, the previous chapters introduced and discussed the concepts and scholarly debates that guide the study, focusing on the informal economy and survival broadly, and tracing these at global and regional levels. An overview of the informal sector in Zambia, political, social, and economic context of the informal economy in Zambia and the general profile of the maize sub-sector in Zambia were also presented. In this chapter, I turn to the case study areas (Garden, Chilenje and Soweto Markets and the compounds that host them) providing the empirical materials for the informal maize millers and what they do to survive. An overview of linkages between the general characteristics of informal maize millers, informal markets, customer profiles, sources of maize grain and survival is provided. The customer profiles are presented in this chapter as they are directly linked to the survival of informal maize millers. The chapter shows that, through access to different categories of customers, informal maize millers have a ready market for their products. All in all, the chapter examines the key features of the informal sector and how they link to survival. The chapter is divided into four sections. Firstly, the chapter begins by providing a detailed description of the areas in which the study was conducted. The second section provides a detailed general description of informal maize millers. In the third section, the chapter interrogates informal millers' motivations for becoming involved in milling. The chapter presents views from various stakeholders as well as my observations while in the field. It highlights the informal millers' motivations to remain in business. What drives their continued stay in informal milling business? Having a clear understanding of the motivations is key to understanding the survival of these millers. This is followed by a section that provides an overview of the customers that buy from the informal maize millers and how this is important to the survival of the millers. In the conclusion, I state that the characteristics of informal maize millers namely their location, education, source of maize grain and customer bases are critical to the survival of informal maize millers because they each provide a unique business support contribution, which enables the informal millers to be competitive.

6.2 Low-income (unplanned/informal/peri-urban) communities

Before I present a detailed description of the markets (Chilenje, Garden and Soweto) and selected townships, namely, Chibolya, Garden and Chilenje, in which the study was done, I first present an overview of the unplanned/informal and peri-urban communities in general. "Most of the major cities and towns in Zambia are surrounded by unplanned settlements, and a large proportion of the urban population resides in these informal settlements. Lusaka which is the capital city of Zambia has 70 per cent of its population living in unplanned settlements" (Antonio et al., 2019:49). It is in these unplanned settlements that some of the big markets in Lusaka are located. Unplanned settlements are defined as "areas occupied without right or legal title under government regulations" (Yasini, 2007:1). These "informal or unplanned settlements are categorised into two namely: improvement areas (upgraded) and unrecognised settlements" (ibid). The improvement areas are former squatter settlements that have been given legal title for occupation and provided with basic services by the local authorities, such as water and sanitary systems. Furthermore, "the residents are also given an opportunity to obtain occupancy licenses, which are renewable after 30 years" (ibid). Otherwise, unrecognised settlements are squatter settlements that have not been granted legal title, and include settlements, such as Misisi, Chazanga, Mazyopa, John Laing, Chibolya and so on. The following sub-section presents a description of the markets (Chilenje, Garden and Soweto) and selected townships namely Chibolya, Garden and Chilenje in which the study was done. It starts by giving a general description of the markets in Zambia and then narrows down to the specific selected markets and compounds.

6.3 General overview of markets in Zambia

In Zambia, markets provide opportunities for income generation to the ever-increasing informal sector. Due to the privatisation programme in the 1990s, which led to most companies closing or downsizing operations, most former state enterprises employees were retrenched. As a result of very few formal job opportunities, most of these former employees turned to trading in various goods in markets.

Historically from the UNIP days in the Second Republic, "markets were highly politicised with traders expected to be card carrying members of the ruling party" (Kanchela and LaFleur, 2001:139). With the introduction of multiparty politics in 1991, an attempt was made to depoliticise the markets, with very little success. I observed during field work that the then ruling party, the Patriotic Front, still maintained offices in the markets and its party cadres exerted influence on the operations of the markets. This observation is in line with Mwango et al. (2019) whose study alluded to ruling party cadres exerting their influence in the running of the markets. However, this situation has been changed following the ascendancy of the United Party for National Development (UPND) to power on 12th August 2021. The current republican president of Zambia, Mr. Hakainde Hichilema, in his inaugural address, declared zero tolerance to political activities in the markets and other public places. As a result, political activities have ceased in the markets and ruling party cadres no longer exert influence on the operations of the markets.

I was informed during field work by a respondent at the Lusaka City Council (LCC) that, generally, the markets in Zambia are administered by the Markets and Bus Station Act, Chapter 20. This act specifies that the control and management of markets and bus stations should be in the hands of local authorities (municipal/city council) that have jurisdiction in the areas in which they are situated (The Markets and

Bus Stations Act 2007). It is against this background that markets in Zambia are administered by local authorities. According to the LCC respondent,

> [a] market is to be managed by a local authority or a management Board. The local authority is to manage the market in accordance with the Food and Drug Act, Public Health Act and the Weights and Measures Act. The Act prohibits against the establishment of unauthorised markets and managing a market in contravention of this Act. However, the Act empowers local authorities on their own or through application of any person, club or cooperative to designate any place for a specified period as a market street. The local authority may prescribe days and the type of goods to be sold at a street market. Section 8 of the Act give local authorities the power to demolish, reconstruct or move a market prior to a written notice to all concerned people.[4]

In addition to the provisions of the Act in the narrative above, "the functions of the market Act include regulating the use of markets and market buildings, keeping order, preventing obstructions, and maintaining cleanliness in markets. The Act also prescribes the goods which may be sold and specifies the goods that are prohibited to be sold in any market" (LCC respondent).[5] In addition,

> the Markets and Bus Station Act, 2007 imposes and provides for the collection of a fee payable on the amount realised by the traders. It also enables the local authority from time to time to determine by resolution rents or tolls and fees for inspection of produce and providing for the collection of such fees. The market authorities are empowered by this Act to determine by resolution the days and the hours during each day on which a market may be held and preventing the sale and purchase of goods in the markets on any days or at any hours except those determined; It also enables the local authority to determine by resolution the maximum price which may be demanded on the sale by retail of any article of food in a market. When it comes to weights and measures, the market authorities are to prescribe the weights, scales, and measures to be used in the sale of any produce and regulating their use. The examination of produce or articles of food and prohibiting the adulteration and regulating the duties and conduct of inspectors and other persons appointed for the purposes of this Act are provided for in the Act (LCC respondent).[6]

However, though this should be the ideal case as prescribed by the Act, my observations and information from interviews with marketeers revealed that these regulations are not followed religiously in the markets.

In line with the above regulations, my study noted that, in all the markets surveyed which were under local authority management, a market levy was imposed on all traders, though the fee differed from one market to another. A notable feature of the markets in general is that, though the local authorities collect levies, few or no services are provided, and this presents a major source of conflict between authorities and the traders, who see no justification in paying council levies. However, when it comes to pricing, there was no regulation from local authorities to determine maximum and minimum prices; rather traders were at liberty to use their own measures and come up with their own pricing mechanisms. In markets,

[4] Interview with a Lusaka City Council official held on 14th July 2017.
[5] Interview with a Lusaka City Council official held on 14th July 2017.
[6] Interview with a Lusaka City Council official held on 14th July 2017.

such as Soweto, traders that belonged to a product- specific association agreed on the retail price of their products. “In addition to the selling and buying of goods in the markets, there are also all sorts of services provided in the markets, ranging from hair cutting, tailoring, shoe repair, milling of maize meal, bars, restaurants, selling of medicines by unauthorised dealers, transport services and traditional healers” (Mwango et al., 2019:51).

6.3.1 Markets in the study area

The following sub-section provides a detailed description of the sampled markets and compounds in this study. Table 6.1 below is a summary of the markets in which the field work was conducted and the compounds that surround, and are serviced by, them.

Table 6.1: Sample of markets and compounds

Name of Market	Compounds surrounding the selected markets	Type of settlement
Soweto	Chibolya	Unplanned settlement
Garden	Garden	Improved areas
Chilenje	Chilenje	Improved areas

Source: Author’s own compilation

6.3.2 Soweto Market

Soweto Market is the largest market in Zambia. It is located on the south- west part of Lusaka city. It derives its name from Soweto, a township in South Africa. Farmers and traders countrywide bring their products to sell at the market. The market is composed of farmers, middlemen (who sell products on behalf of the farmers) and traders, who are permanently stationed at the market. Soweto Market has hundreds of different stalls stocking different goods. At the market, you find bakeries, butcheries, farmers, fishmongers, greengrocers, grocers’ stalls, maize grain traders and hammer millers. The market services all parts of the city but the compounds surrounding it are Chibolya and Kanyama. For the purposes of this study, only Chibolya compound, among the other compounds with proximity to the market, will be profiled. The market is managed by the Lusaka City Council (LCC), which collects daily levies from the traders. In addition to the LCC, the former ruling party, the PF, which was in power until 12th August 2021, had a branch within the market and their officials also collected some form of a levy from the marketeers. This was according to the information provided by the traders during field work even though the officials themselves did not want to agree to this. I confirmed this through my own observations during my field work in the market. The current ruling party, the UPND, which came to power after 12th August 2021, abolished political party structures in the markets and handed over complete responsibility of running the markets to the Lusaka City Council.

At the time of field work, the governance structure of the market was still fragmented, with the Lusaka City Council and the then ruling party, the Patriotic Front exerting various degrees of influence. According to an interview with a ruling party official at the market, the role of the party in the market is to instil law and order and ensure the smooth running of trading activities. However, an informal chat with three traders at the market revealed that the party officials were also collecting levies from the marketeers. These sentiments were supported by my own observations during fieldwork. Some traders also stated that the lack of proper services in the market was because of failure by the LCC to collect all the levies, thereby, consistently running on a low budget.

In terms of the location of the informal maize millers at Soweto Market, I observed that there were those who were located inside the market and those located immediately outside the market but on the boundaries of Chibolya settlement. Those outside the market had access to more customers compared to their colleagues inside. This is because the outside millers are easy to access by customers while it is not easy to access the inside millers due to overcrowding in the market. I also observed that the pricing of milling services was uniform within Soweto Market and that competitive advantage among informal maize millers had to be sought in other areas, such as location, cleanliness, and quality of products. However, compared to the other markets (as will be seen in the subsequent sections), Soweto Market has more customers accessing it compared to the other markets, thereby, giving those located at Soweto Market a competitive advantage.

The above scenario (political) interference as was the case during the PF rule affects the operations of the informal maize millers, thereby, also affecting their survival. This is because the traders were made to pay double levies but also had an unclear reporting channel when it came to their grievances in the market, as there were two forces exerting influence on them. In the next sub-section, I present a detailed description of Chibolya compound, an improvement settlement, which shares boundaries with Soweto Market.

6.3.2.1 Chibolya Settlement: history, population and income generating activities

Chibolya is an improvement area, which was legalised on 16th February 1999 by the Ministry of Local Government and Housing) MLGH under Statutory and Improvement Areas Act of 1999 (Yasini, 2007). The settlement is situated about 1.5 kilometres south of the Central Business District (CBD) on the peripherals of the commercial centre (ibid). Among the townships surrounding Chibolya, are Kanyama on the western boundary, John Laing on the southern boundary, and Misisi on the eastern boundary across the Kafue road. The settlement covers an area of about 473,211 square meters (ibid). It is occupied mostly by individuals, who are in the informal sector, that is, traders, garden boys, maids, drivers, and other categories of informal workers. Additionally, the compounds are now home to workers in the formal sector, including teachers, nurses, soldiers, police, secretaries etc. These workers are in the formal sector but don't get paid enough to afford decent housing in middle-income areas. Chibolya compound also plays host to informal maize millers, who supply maize meal to the people in the compound. These millers are in the compound due to the availability of a ready market for their products.

In *Bemba*, one of the major local languages in Zambia, *Chibolya* means an abandoned settlement. This is because this settlement started as a compound for council employees in the 1930s during the colonial period, but they were later relocated to newly built houses in Kamwala near the railway station. This was due to the poor toilet facilities and lack of water, resulting in the area being abandoned for a very long time, hence the name *Chibolya* (ibid). By 1931 and 1932, people had started squatting in a nearby area, which was all bush and had often been used as a dumping site. History records that most of these squatters were farm labourers, construction workers, factory workers and shopkeepers for Indian shops (ibid). As some companies were closing and others relocating to other areas, some squatters decided to remain in the area and established permanent structures. Over time, the settlement started expanding, as some of the squatters started inviting relatives and friends to come and settle in the area. The compound became known by the derogatory term 'lofas' compound due to most residents in the area not being in formal employment (ibid). The most common activities in Chibolya are illicit beer brewing and drinking, selling of illicit drugs, piecework, and petty trading (ibid).

Chibolwa has a total population of approximately 25,000, the number of households is estimated at 4,500, and the average household size is 5.6 (ZSA, 2020). The population is growing very fast due to high birth rates (CSO, 2010). The houses in Chibolwa were built without layout plans from the council. The quality of the houses differs between the old settlements and the new settlement. As one moves from the north (old) to the south (new), there is a noticeable change in the housing infrastructures and surroundings. The southern part has good quality houses, which are well spaced, and most of them are made of concrete blocks. The northern part is congested; houses are built very close to each other in a very dirty environment. They are also poorly constructed and some of them are made of mud brick with cast off metal roofing sheets.

Anecdotal data shows that Chibolya settlement is notorious for brewing illicit beer (*kachasu*) and selling of illicit drugs. It is not uncommon to hear media reports of arrests involving drug dealers in Chibolya Township. This vice is so common that illicit drugs and beer are sold in open spaces without any regard for the law (ibid). This scenario is much more common in old Chibolya, where almost every house has been turned into an illicit brewing industry. As a result of these illicit activities, Chibolya has seen escalating crime levels and prostitution. In addition to brewing and selling of illicit beer, females are involved in selling groceries and foodstuff, street vending, tailoring, and working as maids. Additionally, I observed that their male counterparts are involved in informal trading of various food stuffs within the compounds and in the nearby Soweto Market. Examples of activities they engage in are carpentry and joinery, petty trading, bricklaying, welding, tinsmithing, plumbing, and mechanics. Furthermore, I observed that some are involved in the selling of pigs and goat meat at an open-air abattoir for small ruminants situated near Chibolya basic school. Nevertheless, Chibolya settlement has a handful of people, who are engaged in formal employment, and these include teachers, clerks, security guards, drivers, and police officers (ibid).

6.3.3 Garden Market

Garden Market is found in the middle of Garden compound and is occupied by traders from Garden compound and other surrounding areas, such as Chaisa, Chipata and Kuku compounds, all of which are high density areas and have the same characteristics as Garden settlement. The market is made up of different trading sections, such as vegetable, poultry, groceries, hammer mills, bakeries, meats, and fisheries. It also has a section where you find welders and carpenters. The market services residents from Garden compound, the nearby Northmead suburb and the other surrounding compounds as mentioned above. Just like Soweto Market, Garden Market is managed by the Lusaka City Council which collects levies from the traders and oversee the operations of the market. The former ruling party also had a branch at this market, just as at Soweto Market, and oversaw some of the operations at the market. In terms of the flow of customer traffic, the numbers are lower compared to Soweto Market. I also observed during my field work that all the informal maize millers in this market operated from inside the market. However, according to my observations and interviews with some informal maize millers in the market, those located near the entrances had an advantage over those located further inside the market. This is because those closer to the entrances are easily seen and accessed by the customers. Just as the case was at Soweto Market, I also observed that the pricing of milling services was uniform within Garden Market and that competitive advantage among informal maize millers also had to be sought in other areas such as location, cleanliness, and quality of products. However, compared to the Soweto Market, Garden Market has fewer customers accessing it because it is more of a local market while Soweto Market has a national character. From my observations and through the interviews, although the informal maize millers in Garden Market were also doing well, those located in Soweto Market were doing much better due to the high numbers of customers they have. In the next sub-section, I present a detailed description of Garden compound.

6.3.3.1 Garden Settlement: history, population and income generating activities

Garden Settlement is an improvement area and was granted legal status on 16th February 1999 under the Statutory and Improvement Areas Act of 1999 (Yasini, 2007). It is one of the largest settlements in Lusaka. The settlement lies 5 kilometres north-west of the city centre about 1 kilometre on the right-hand side of the Great East Road towards the city centre. Parts of the settlement are waterlogged, and the area becomes flooded every year during the rainy season. The settlement covers a total surface area of about 3,844,517.78 square metres of flat land (ibid).

The population of Garden Settlement is estimated at 60,000, and the average household size is 6 (CSO, 2010). The population of the settlement is increasing rapidly due to high birth rates and immigration of people from other areas (ibid). As a result of its unplanned status, the housing infrastructure in Garden Settlement is informal. The plots are very small, and the houses are built very close to each other in a poor environment. The houses are of poor quality though they are made of concrete blocks and iron roofing sheets.

As in most unplanned settlements in the city, most residents of Garden Settlement are involved in informal activities: women are mainly involved in selling vegetables and groceries in the market and along the street, work as maids, washing clothes for money, shop keeping; men are involved in carpentry, bricklaying, plumbing, water vending, selling groceries, block making, renting out houses and welding (Yasini, 2007). The few residents formally employed, are engaged as security guards, drivers, teachers, police officers, council workers, health workers, secretaries, and clerks.

6.3.4 Chilenje Market

Chilenje Market is in the middle of Chilenje Settlement. The market accommodates traders from other townships outside Chilenje and provides various food stuffs, such as vegetables, meat and meat products, fish, bakeries, fruits and legumes and hammer millers. The market services Chilenje and other surrounding areas, such as Woodlands, Kabwata, Libala, and Nyumbayanga. Woodlands is a low-density area while the rest are medium-density areas.

Chilenje Market is found in the middle of Chilenje Settlement and is occupied by traders from other townships outside Chilenje. Just like Soweto and Garden Market, Chilenje Market is managed by the LCC, which collect levies from the traders and oversees the operations of the market. The former ruling party also had a branch at this market just like at Soweto and Garden Markets and oversaw some of the operations at the market. In terms of the flow of customer traffic, just like Garden Market, the numbers are less compared to Soweto Market. I also observed during my field work at Chilenje Market that informal maize millers in this market operated from both inside and outside the market. However, according to my observations and interviews with some informal maize millers in the market, those located outside the market had an advantage over those located inside the market. This is because those outside the markets are easily seen and accessed by the customers. Just like the case was at Soweto and Garden Markets, I also observed that the pricing of milling services was uniform within Chilenje Market and that competitive advantage among informal maize millers had to be sought in other areas, such as location, cleanliness, and quality of products as well. However, just like Garden Market, compared to the Soweto Market, Chilenje Market has fewer customers accessing it as it is more of a local market, while Soweto Market has a national character. From my observations and through the interviews, though the informal maize millers in Chilenje Market were also doing well, those located in Soweto Market were doing much better due to the high numbers of customers they have. The following section presents a detailed depiction of Chilenje Settlement.

6.3.4.1 Chilenje Township: history, population, and income-generating activities

It is a township located in the central of Lusaka city, in the Lusaka province. It consists of two sections, namely, New Chilenje and Chilenje South. New Chilenje is made up of British colonial low-cost houses suitable for single people. A typical house in this section is more like a bed-sitter. Chilenje is

> a peri-urban settlement with somewhat better amounts of education and wages per family than Chibolya and Garden Settlements. While this means that families are much better off than those in Chibolya and Garden, alcohol and drug abuse are a common phenomenon (ibid).

According to observations by the author, most areas that were strictly open for youth to play have been changed to beer gardens and taverns attracting youth with their noisy music, TVs, and games.

Chilenje's population is estimated at 52,220, and the average family size is 6 as per last census of population (CSO, 2010). The population of Chilenje Township is also increasing rapidly due to high birth rates and immigration of people from other areas (ibid). Since it was a British colonial low-cost area, the housing infrastructure in Chilenje Township is formal. The plots are small, and the houses are built close to each other. The houses are old and small, as they were built in the colonial days although most of the current residents have made some improvements by extending them to increase the number of rooms.

Chilenje Township has a mixture of people working in the formal and informal sectors. Those in the formal sectors are mostly teachers, nurses, police officers, security guards, and different types of civil servants. The township also has various people working in the informal sector. Activities involve chicken rearing, vegetable selling, groceries, carpentry and welding, informal maize milling and selling of second-hand clothes known as *salaula*" in the local language, *Nyanja*.

In summation, the above section on the markets and compounds has illustrated that the compounds, in which the informal maize millers are located, host most of the people in Lusaka, many of whom are poor people. These people are the biggest customers of the informal maize millers as will be seen in section 6.5.2 when I discuss the customers of informal maize millers. Consequently, informal maize millers choose to be in these compounds because that is where many of their customers are located. Furthermore, the section has shown that the main points of competition among informal maize millers are location, cleanliness, and quality of products, and not price. In the next sub-section, I present a description of a surprise observation in terms of location of informal maize millers, which was initially not part of the data collection plan. The section shows that, contrary to available literature, which claims that informal maize millers are only located in the markets in the low-income areas, there has also been an emergence of informal maize millers in high income areas.

6.4 Informal maize millers in middle- and high-income areas

At the start of this study, my understanding from experience and available literature was that informal maize millers are only located in the markets around high-density areas. Historically, this has been the case. However, during my field work, I observed that the informal maize milling business had extended to low- and medium- density areas, which host many of the city's relatively well-to-do individuals. This was a surprise to me as I did not expect to see informal millers in these areas. For example, while driving in Meanwood Kwamwena, a new suburb in Lusaka town, I observed the presence of a hammer mill just within a complex of shops, which services the nearby Foxdale, Chamba Valley and Meanwood Kwamwena suburbs. Foxdale, Chamba Valley and Meanwood Kwamwena are suburbs with a mixture of middle- and high-income earners. I took some time to observe the flow of customer traffic to the hammer mill and realised that, within the two hours I spent observing, a total of about 8 customers had brought their maize grain for grinding. A chat with these customers revealed that they came from the surrounding suburbs. Furthermore, I had a quick interview with the millers, who revealed that there is good business in this area, as most people bring their maize grain for grinding, unlike in the past when this low-density area was known as a bad business area for informal milling business. What this implies in terms of survival of informal maize millers is that there is growing demand for their services beyond the traditional boundaries. With the opening of these low-density areas, it means more customers for the informal maize millers. In the following section, I will present the general characteristics of informal maize millers.

6.5 General characteristics of informal maize millers

Informal maize milling in Zambia is usually done by individuals, who process maize in markets or compounds as a service to the local population (Guyton and Temba, 1993; IAPRI, 2016; Mwango et al., 2019). Mostly, these businesses are run by the family but, in some instances, two or three employees are engaged. Hammer mills are located throughout the country in both rural and urban areas. In urban areas, they are mostly found in low-income areas (Guyton and Temba, 1993; IAPRI, 2016; Mwango et al., 2019). Most of the hammer mills in urban areas run on electricity, while a number of those in rural areas run on diesel.

Business activities for these millers are usually high between April to November because that is the time when farmers and consumers have greatest access to maize grain (Mwiinga et al., 2003). In the urban areas, consumers must usually wait up to four hours to have their maize milled during peak periods. Whereas this delay may be because of high demand, it can also be attributed to less efficient machines used by these informal millers. Most informal millers usually provide only milling services to consumers, while some of them are also engaged in buying of grain, which they re-sell to consumers.

In their work, Guyton and Temba (1993) are of the view that the quality of maize meal produced by informal millers places them at a competitive disadvantage because consumers complain that the maize meal processed at the hammer mills is less processed compared to the breakfast and roller meals processed by large-scale millers. While this may be true historically, things have changed, as the findings of this study suggest that the less processed maize meal from hammer mills is what may be drawing customers to them. This view is built on researcher observations and responses from customers and hammer millers during the data collection process. These observations are important to the survival of informal maize millers, as customers are drawn to them due to the perception that their maize meal is healthy. This is because of the growing awareness among the middle class in Zambia about the importance of healthy eating. The next chapter will build on this finding.

Like other members of the informal sector, informal maize millers are survivalists in nature and make enough to take care of family needs. Most of the informal millers interviewed said they educate their children, feed their families, and pay bills from the money they make from the milling businesses. This subject of survivalists is dealt with in detail in the subsequent chapters.

6.5.1 Different categories of informal maize millers

Informal millers were asked to describe how they perceived themselves in the context of the entire milling sector, and where they obtained the initial capital to start their businesses. From my observations in the field and through their own perspectives of who they are, informal millers are different in nature and can be divided into three distinct groups in terms of milling capacity. The first group is the one with the capacity to produce more than 1,800 tonnes of maize meal a year. The second group produces between 900 and 1,800 tonnes a year and the third group produces less than 900 tonnes.

In the top-producing group, some hammer mills are owned by people, who are working in government as senior officials, and those with political connections. An informal miller at Garden Market said that "the business has been operational since 2004. We even access some maize from the Food Reserve Agency (FRA). Our production is high as we can produce 100 by 50 kilograms bags every day".[7] Another hammer miller based in Chilenje did not consider himself as a hammer miller because of what he thought were his contributions to the milling sector. He stated: "My business is big, and we mill at a commercial level. We even package our products."[8] There are several other millers within this category, who seem advanced compared to the others. This is because most of these have connections that enables them to access maize even from FRA, a preserve of large-scale commercial millers. Several participants were of the view that the connections are both political and non-political and this happens usually because of their official positions in government or within the ruling party. For example, by virtue of one's position as a senior government worker or position held in the ruling party, one may have a good relationship with the people in charge of maize grain sales, since they interact with them most of the time during official business and so it is easy for them to organise some sales that would otherwise be difficult for those without the necessary connections. Under this category, the number of workers is between three to five including the owner. This number is slightly high compared to the other categories because this group's production capacity is also higher and capable of indirectly supplying their products to government institutions through their connections with some formal firms, who have contracts with government.

Furthermore, the millers were asked where they had acquired the money to start the milling business? The responses from the millers in this category were that they saved enough money from their formal jobs, which made it possible for them to invest in the maize-milling businesses through the purchase of hammer mills. For example, a miller at Soweto Market had this to say when asked a question on the source of capital:

[7] Interview with an informal maize miller at Garden Market conducted on 8th June 2016.
[8] Interview with an informal maize miller at Chilenje Market conducted on 12th June 2016.

> I work in government, so I have been keeping some money aside for me to start a business. You know it is important that I prepare for retirement, and it is now while I am still working that I should start putting certain things in place. I have seen several people and I assume you also know some who have gone into depression after retiring as they were not prepared. For me, I want to prepare myself and it is the reason I have invested into this milling business from my savings.[9]

The narrative above highlights where millers in this category get their money to start their milling businesses. This response was given by several other informal millers, who were asked a similar question in this category.

The second group is composed of those who mainly produce a tonnage of between 900 and 1800 per year. According to a hammer miller in Chilenje, “we produce a lot of mealie meal in a day. When at full capacity we do 50 by 50kg bags of maize meal in a day. We have two hammer mills with two employees operating them.”[10] From my observations, this group is mainly made up of retirees and other individuals, who have either not found an opportunity in the formal sector or prefer to engage in an informal business for a living. This can also be seen from the following words by a hammer miller at Soweto Market who said: “I started this business way back in 2006 when I retired. I needed something to provide me with a steady flow of income, so I ventured into maize milling. I bought two hammer mills and placed them at Soweto Market.”[11] Another hammer miller in Chilenje said that he started his business with one hammer mill, and it is the one he has been using to feed his family and send his children to school. Hammer millers in this category do not have access to FRA maize and they fund/support their business through their retirement packages or money made from other sources for those who are not retirees but decided to pursue informal maize milling as a business.

The third category is that of those with the production capacity of less than 900 tons of maize meal a year. According to a miller at Garden Market, “I own one hammer mill and I can process 25 by 50kg bags of maize in a day when maize is readily available in the markets, and we have customers.”[12] There were a few more millers at Soweto and Chilenje market, who expressed similar views in terms of production capacity. This group also does not have access to FRA maize. In addition, they have serious challenges to finance their business, as most of them do not have any other source of income and depend solely on their hammer mills. Most of them established their businesses through the money they were given by relatives, or they had made some savings after having done seasonal jobs somewhere. For this group, their survival is at risk as they do not re-invest their profits into the business. What they do is use the profit to buy household needs and pay for other bills, such as school fees while leaving capital to keep

[9] (Interview conducted with Hammer Miller 1, Soweto Market, Male, Age 50).
[1010] Interview conducted with Hammer Miller at Chilenje Market on 12th June 2016.
[11] Interview conducted with Hammer Miller 1, Soweto Market, Male, Age 50.
[12] Interview with Hammer Miller at Garden Compound conducted on 1st June 2016.

the business running. This is how they have been surviving for a long time, but this is not sustainable as any challenge out of the ordinary can see the business failing. For example, during the period of the COVID-19 outbreak, I observed that some of the hammer millers in this category were highly affected as they used part of their capital in addition to profits they had made to provide for their families during the period of the lockdown. A few will need to access government funds for them to start operating normally after the lockdown.

Understanding the categorisation of these informal maize millers and how they perceive themselves is crucial to understanding the dynamics affecting their survival. For example, it may be that some of the informal maize millers are surviving through their connections in government or feeding on money obtained from other ventures. Therefore, understanding their operations and perspectives is important if we are to understand the survival of informal maize millers in an industry dominated by large-scale milling firms and other competitors of their kind. Lastly but not least, the section has also shown through the different categories of informal maize millers that enterprise size, though important, does not affect the survival of informal maize millers. This can be evidenced from the fact that all informal maize millers interviewed were in existence for more than five years since their first entry and have since continued to operate. In the next section, I present the informal millers' education and its impact on their businesses and survival.

6.5.2 Education of hammer mill owners

In this sub-section, I discuss education status of the hammer mill owners as one important owner characteristic that is seen as being key to the survival of informal maize millers. From what I observed and heard during my field work; the informal maize millers, who have some superior level of education, tend to do better than the rest. For example, the educated owners mostly have some formal jobs, which also enable them to pump more money into their businesses and keep them afloat. Because of their education, they are also able to negotiate proper business deals for their businesses, as they can access most of the institutions that need their products without feeling intimidated.

For example, a business owner at Garden Market had this to say:

> My milling businesses are a form of alternative investments for me. Though I work and earn a good salary, it is important that I prepare for a rainy day. So, I made sure that I found two places to start my business that is here at Garden and another at Kabwata market. For me, because of my exposure to different institutions through my work, I team up with my friends who have registered companies and we supply to these organisations through my friend's

> companies. Sometimes, we go together with my friends to make business presentations to different institutions that we supply.[13]

The statement above illustrates the superiority of educated informal maize millers in the way they approach their business. They are confident and are not easily intimidated. This is not to say businesses with less educated owners die but they perform less well compared to those with educated owners.

Educated people are incessant learners, who are always informing themselves about the outside environment in which they work. Though educated people may not own all the necessary knowledge and skills themselves to operate their business, they are able to comprehend and appreciate their restrictions. As a result of understanding their restrictions, they are then able to seek the required level of help to enable their businesses to move forward. Against this background, it can be deduced that shortage of suitable education restricts the businessperson's capacity to invent, and benefit from existing, opportunities, acclimatise to changing environments, improve the quality of marketing channels, and identify the proper market to target and enlarge the business.

This study found that the hammer mills owned by educated individuals were doing better than those owned by less educated individuals. My observations revealed that the owners with secondary level education and above were more literate, including financial literacy, and this contributed in the positive way they handled their business operations and finances. Educated owners can attend business workshops and read various literature concerning how they can improve their businesses, and they are able to negotiate with other stakeholders with ease. On the other hand, less educated business owners are limited in what they can be able to do due to low literacy levels. For example, an informal maize miller at Soweto Market had this to say:

> I fear going to look for business in schools, hospitals, and prisons because I don't know what to say when I reach there. As you know, those offices are very intimidating for some of us who cannot express ourselves in English. To go and solicit for business in those areas, you need to know how to write and speak English but that is difficult for some of us. I remember one time I was asked to go and make a presentation to management at one of the hospitals by a customer who came for milling services at my hammer mill. Though I agreed to go, I was so scared of embarrassing myself that I decided not to proceed.[14]

The above statement highlights the challenges that come for some of the informal maize millers who lack proper education. Similar sentiments were echoed by other informal maize millers, who had low levels of education or none at all. I, therefore, conclude that the education of business owners impacts greatly on the survival of informal maize millers, either positively or negatively depending on their

[13] Interview with hammer miller at Garden Market conducted on 15th July 2016.
[14] Interview with hammer miller at Soweto Market conducted on 25th July 2016.

education levels. Businesses of the educated millers are more likely to survive than those of uneducated millers. In the following section, I present informal maize millers' motivations for engaging in informal maize milling.

6.6 Informal millers' motivations for engaging in informal maize milling

In any endeavour of life, motivation is key. This is true for the survival of informal maize millers. Informal millers were first asked to state what motivated them to start their businesses. The millers provided narrations on why and how they started their milling business. At Soweto Market, some millers cited death of a spouse, retrenchment from work, need to send children to school and provide necessities as a motivation for starting their businesses. According to a miller at Soweto Market, "what led me to start my *chigayo* [15]business is because I saw that life was becoming difficult and I didn't want a situation whereby I am continuously asking for financial help from my husband, even for small items like buying tomatoes".[16]

Another miller had this to say:

> I started my business at Soweto Market after getting retrenched from work in 1999. My family is big, and I need to go out of my way to provide for them and ensure that my children are well provided [for]. If I was just staying home doing nothing, we would have been evicted from the house we are renting and even the children would have been suffering."[17]

At Chilenje Market, a miller gave the following account of her motivation:

> I started my business here in Chilenje sometime in the early 90s. My children were still very young then. My actions followed the death of my spouse. At the time my husband died, I got depressed and engaged in drinking but I quickly realised that drinking beer was not the answer so I told myself to just start some business that I can rely on and that's how I raised capital to buy a *chigayo* and started operations at Soweto Market. I have been feeding my children and sending them to school through this business. In my *chigayo* business, I have found something to sustain my family and me. Three of my children have since gotten married and my family loves the mealie meal from *chigayo*.[18]

From the statement above, the desperate situation arising from the death of a spouse prompted this hammer miller to engage in the milling business and it is the fuel that has kept her going despite the challenges she faces. The fact that she has managed to raise her children and send them to school through this business is motivation enough to keep her moving and ensuring that she survives, and the business remains operational.

Similar views were echoed by a miller from Garden Market who stated:

[15] *"Chigayo"* is a local name for hammer mill.
[16] Interview with female hammer miller at Soweto Market conducted on 21st June 2017.
[17] Interview with female miller, 3, at Soweto Market conducted on 21st June 2017.
[18] Interview with female hammer miller at Chilenje Market conducted on 18th August 2017.

> I used to work for the Indians and the money I was getting was little. It couldn't sustain my family for the whole month. So, I had to find something to do that would bring in money daily and that's how I started my business here in the market. Since I started the business, we have enough to last us the whole month. Before I started my business, we used to borrow a lot and were always in debt, but this is no longer the case. As a result of my business, I have even managed to build a house and all my children go to school.[19]

For this hammer miller, she engaged in the informal milling business with the view of supplementing her small income from her job. What motivated her to start the business was the desire to start doing something that would add more income to what she was getting, and the hammer mill business was appealing to her. The fact that she makes enough to see them through the month and that she has even built a house from the same is motivation enough to keep pushing and ensure the business remains operational/survives. Again, being motivated is key to the survival of hammer millers and this motivation arises from different circumstances but it is all driven by the desire to successfully provide for one's family.

Another miller at Garden Market said:

> I began my business following the demise of my husband who left me with very young children. I tried doing piece works but the money I was making was not enough to sustain my family, so I started saving through sacrifice and my brother added some money which enabled me to buy a hammer mill. That's how I found myself here in the market.[20]

Yet another informal miller at Chilenje stated:

> I was one of those who were retrenched in the 1990s. Life was very difficult, so I had to find a survival plan. With the little money I got after retrenchment, that's how I got myself a hammer mill and started providing milling services here in the market. Initially, I was just alone but we now have several people operating hammer mills. When you don't have an income, you start expecting your relatives to help you which can lead to conflicts if they are not helping you.[21]

It can be inferred from the aforegoing texts that there is common ground among the informal maize millers interviewed, which is the desire or motivation to succeed in their business because of family problems or challenges. This is the only means of earning a living and, therefore, they put in every effort for this to work, as getting a job is not an option for most of them because there are no jobs.

However, some other informal millers, especially those who engage in the business while still in formal employment, engage in this as a way of having a side business which they can fall on for extra income. This is especially true for those with the production capacity of between 900 to 1,800 and those above 1,800 as described above.

[19] Interview with Hammer Miller at Garden Market conducted on 10th September 2017.
[20] Interview with female Hammer Miller conducted at Garden Market on 10th September 2017.
[21] Interview with hammer miller conducted at Chilenje Market on 11th September 2017.

What is common from the aforegoing is that there are economic circumstances that motivated the informal millers to engage in the informal milling business and these circumstances motivate them to continue or persevere in their businesses, an element which is key to them continuing with their operations. In the following section, I begin to present and describe the customers for the informal maize millers and how this affects the millers' survival.

6.7 Informal maize millers' customers

6.7.1 Customer demographics

Two hundred customers from across the study areas were surveyed. One hundred and forty-seven were females, representing 74 per cent, while 53 were males, representing 26 per cent. These results show that women are the ones mainly involved in making decisions about food in their households. Table 6.2 below shows the number of customers surveyed disaggregated by sex.

Table 6.2: Number of customers surveyed disaggregated by sex

Sex	Frequency	Percentage
Male	53	26
Female	147	74
Total	200	100

Source: Researcher's own compilation

In terms of the education of the customers of the informal maize millers, 148, representing 74 per cent had secondary level education, while 3 customers, representing 1 per cent had no schooling. Fifteen (15) customers, representing 8 per cent had tertiary education. These results show that most of the informal maize millers' customers have secondary-level education.

Table 6.3: Education levels of informal maize millers' customers

Level of education	Frequency	Percentage
No schooling	3	1
Primary education	34	17
Secondary education	148	74
Tertiary education	15	8
Total	**200**	**100**

Source: Researcher's own compilation

Sources of income for the customers of informal maize vary. Results show that most of the customers, – 135, representing 67 per cent, had their own businesses, while 14 customers, representing 7 per cent were in formal employment. Thirty-five customers, representing 18 per cent mentioned receiving assistance from relatives as a source of income. Table 6.4 below shows the sources of income for customers of informal maize millers.

Table 6.4: Sources of income for customers of informal maize millers

Source of income	Frequency	Percentage
Formal employment	14	7
Own business	135	67
Assistance from relatives	35	18
Other incomes	1	1
No response	15	7
Total	**200**	**100**

Source: Researcher's own compilation

The study also investigated the annual incomes of customers of informal maize millers. The study found that 195 out of 200 customers surveyed earned ZMK30,000 and less per annum which translates to $2,100 at the exchange rate of ZMK14 to $1 at the time of data collection in 2016. Table 6.5 below highlights the annual incomes for customers of informal maize millers.

Table 6.5: Annual incomes for customers of informal maize millers

Annual income	Frequency	Percentage
K30,000 or less (exchange rate was at ZMK14 to $1 at the time of data collection.	190	95
K30,001-K50,000	8	4
K50,001-K70,000	2	1
Total	**200**	**100**

Source: Researcher's own compilation

As will be seen in the analysis chapters, the above demographics will be important in establishing the economic status of the customers of informal maize millers, thereby, helping in understanding the context in which informal maize millers operate, and why customers prefer mealie meal from informal maize millers to those from big commercial millers.

6.7.2 Customers from the higher-income group

During field work, some hammer mill customers that I interviewed were identified to be from the upper-income group or those who could be considered rich from the income perspective. For example, when asked how much he earns per month, one of the customers said that he earned $8,500 per month from his job as a researcher at a top agricultural think tank in Zambia. By Zambian standards, where the majority live on less than a dollar per day, this amount is big enough to have one qualify to be classified among the rich Zambians. However, when asked where they usually get their maize meal and why, this customer from Chilenje Market had this to say:

> For me and my family, we get our maize meal from the hammer mills around Chilenje. I get maize from the market and take it for milling. As a family, we love *mugaiwa* because it is tasty and has a natural taste. It is also healthier than the commercially milled maize meal because it has no additives or any other artificial ingredients. It retains all its nutrients; nothing is lost in the process of milling. So, every month we come to the hammer millers to have our maize milled.[22]

The above narrative is important in terms of the competitiveness of hammer millers in that it shows that hammer millers command respect from the rich in society due to several reasons highlighted in the quotation, such as the product being tastier and healthier. This means that they are assured of business from this category of customers if they continue meeting their expectations.

This view was given by another respondent from Soweto Market, who seemed to be relatively rich as well. The respondent was asked why he preferred hammer-milled maize meal to the commercially milled one found in the supermarkets and local markets. The following was his response:

> I am a politician but also into farming. I do poultry and horticultural farming I have a very big farm somewhere along Kabwe road. I enjoy hammer-milled maize meal as it is tasty and healthy. It is better than this maize meal that we get from the shops. I am diabetic also, so I must eat healthy and this maize meal from hammer mills contains a lot of fibre which I need in my diet. We are used [to it], even my family enjoy this maize meal. Even when I am away from home for long periods, they will still take the maize for grinding to the hammer millers. At the hammer millers, we are also able to choose what type of mealie meal we want whether coarse or one which is less coarse. Whichever type one may choose, I believe it is still better than the maize meal from the shops. Another advantage of hammer-milled maize meal is that you are guaranteed of eating the maize grain for the current season which has not stayed in the storage shade for a long time. For the maize meal found in shops from

[22] Interview with hammer mill customer at Chilenje Market conducted on 25th October 2016.

commercial millers, the maize they use may have stayed for a long time maybe two years and this affects the taste. That's why roller meal from the big commercial millers sometimes has a bitter aftertaste.[23]

The above statement shows that some customers from the higher income group prefer maize meal from the hammer millers because, apart from it being tastier and not staying on the shelves for long compared to maize meal flour from big millers, this type of customer produce their own maize grain and only have to take it to the hammer millers to make it into maize flour. This is also important to the survival of informal maize millers, as they are guaranteed business from this group of customers. There were similar views expressed by other customers of informal maize millers in this category. What came out clearly from this group was that they prefer hammer-milled maize meal because of its health benefits, which made it superior to that milled by big millers. This is a contributing factor to the survival of informal maize millers as they are assured of business from this group of customers.

6.7.3 Customers from middle-income group

There was another group I identified from the interviews whose income started from a minimum of ZMK3,000 to ZMK15,000 a month. This group is composed of civil servants and other workers from the private sector and some businesspeople. For example, a customer, who identified herself as a teacher, said that she gets maize meal from the hammer millers because she is a part-time farmer who grows her own maize grain and therefore, she has no reason to buy commercially milled maize meal. She had the following to say:

> I am a teacher by profession but also do part-time farming. I grow maize and groundnuts. What I harvest every year during a good rain season can feed me and my family for the whole year. So, us we don't buy commercially milled maize meal, we just take our own maize to the hammer millers. This way, I do a lot of savings as commercially milled maize is very expensive. Most of the time I also do encourage my workmates to engage in farming and be able to supplement their incomes.[24]

This view was like that of other customers, who belonged to this middle-income group. These are looking for strategies to reduce their monthly expenditure, and they agreed that spending on hammer-milled maize meal is less costly compared to commercially milled maize meal from big millers. In this vein, one of the customers at Soweto Market, who happened to be a nurse by profession, had this to say when asked about her profession and why she preferred hammer-milled maize meal:

> I am a nurse by profession. My family and I prefer buying the maize and bringing it for milling at the market than buying commercially milled maize meal from large millers. It is cheaper in the long run and one can save something. What we do is we buy maize in advance just when the maize buying season starts and we keep it at home. So, we just take it to the

[23] Interview with hammer mill customer at Soweto Market conducted on 22nd October 2016.
[24] Interview with hammer mill customer at Soweto Market conducted on 20th October 2016.

> hammer mill for milling whenever we run out of maize meal. My husband also travels a lot for work, so he occasionally buys bags of maize from farmers to replenish the stocks. That's how we have been doing it, so we are used [to it].[25]

Other customers talked to also expressed similar views that highlighted the cost effectiveness and the health nature of hammer-milled maize meal as a reason for their preference. This also plays a role in the survival of hammer millers because they have these loyal customers who believe that getting maize meal flour from them is much cheaper than buying mealie meal flour produced by the big millers. In the next section, I present a detailed description of customers from the lower-income bracket.

6.7.4 Customers from the lower-income bracket

The third group of customers came from the low-income areas surrounding the hammer mills. These customers from the lower-income groups are in the majority and mostly live in high-density areas, which are also referred to us low-income areas. Many of these customers work in the informal sector as house helps, gardeners, shop keepers, security guards, bus conductors and drivers. Poverty levels in these areas are high compared to other settlements. During my field work, I observed that a good number of people in these areas could not afford to buy a 25kg bag of commercially produced mealie meal from big millers but would instead buy a 1kg repackaged mealie meal locally known as *pamela*. During the 2019 to 2020 maize-marketing season, when the mealie meal prices had risen to record levels, I observed that the number of people purchasing the small unit repackaged mealie meal increased in low-income areas. The demand for *pamela* shows an increase in the number of households, who survive from hand-to-mouth in low-income areas, but, at the same time, highlights the fact that they end up paying more than the actual price of a 25kg bag once they calculate what they have been spending on the *pamela* at the end of the month. Because of the costly nature of commercially milled maize meal, as explained above, these customers prefer hammer-milled maize meal to that produced by big millers. When they have enough money, they buy maize grain from the markets located within their areas and take it for milling. Most of these customers were of the view that this was cheaper, and that hammer-milled maize meal kept them full for long.

Since most of the hammer mills are in low-income areas, this group of customers provides an important customer base for informal millers. This category of customers, being unhappy with the high cost of commercially milled maize meal, play their role in ensuring that informal millers have a guaranteed group of customers and these are many.

[25] Interview with hammer mill customer at Soweto Market conducted on 20th October 2016.

A customer at Soweto Market, who lives in Chibolya Compound, had the following to say when asked why she preferred hammer-milled maize meal flour over commercially milled maize meal:

> For me it's not a matter of choice but circumstances. Commercially milled maize meal is very expensive and for some of us with large families it's even worse because for a 25kg bag, we need three in a month. So, this is very expensive. But when I get a 50kg bag of maize grain at the market at 80 kwacha per bag, I will almost have two bags at a price of one and *mugaiwa* keeps you full for long hours compared to commercially milled maize meal. So, because of these circumstances, as a family, we consume hammer-milled maize meal.[26]

Another customer from Garden Market, who lives in Garden Compound, had this to say:

> The hammer mills are really providing humanitarian service to us. Prices of mealie meal keep going up and some of us get very low salaries where we work and cannot afford the escalating mealie meal prices. So, it's much cheaper for me to buy maize meal from farmers in the markets and take it for milling. We are eight in our household so a 50kg bag of hammer milled maize meal will last for a month.[27]

What is clear from the above is that, even among customers of informal maize millers, there are different dynamics which contribute to the survival of millers. The fact that there are people among the affluent in society, the middle class and the lower-income people, who prefer hammer-milled maize meal for different reasons means that informal maize millers have a ready market for their products. If there is a market, then the sector is more likely to survive. Furthermore, by showing the three different categories of customers, I have endeavoured to show that they present different factors, which contribute to the survival of informal maize millers. The first group prefers hammer-milled maize meal flour because its tastier and healthy, while the second group like it because, apart from it being healthy and tastier, it is also cheaper compared to the maize meal flour from big millers. The last group of customers prefer hammer-milled maize meal flour because it is cheaper and keeps them full for long hence, they don't have to spend as much on maize meal compared to if they were consuming commercially milled meal flour. These different reasons from the three groups of customers so far discussed are key to the survival of hammer millers as they are guaranteed of this customer base due to the reasons highlighted.

To have a deeper understanding of the customers, the millers were asked who their main customers are. There common view was that although they have loyal customers, who come regularly, there is also a huge number of once-off customers, who come from various places. According to an informal maize miller at Garden Market,

> [w]e have no permanent customers. Every day we have different customers who come. Our main customers are the business ladies who buy samp and go to repackage. Every day

[26] Interview with hammer meal customer conducted at Soweto Market on 19th October 2016.
[27] Interview with hammer mill customer conducted at Garden Market on 1st November 2016.

> they come and buy for repackaging. You find that, if they come the three of them, one buys three bags, the other one five and the other maybe ten. Maybe just two days will pass then they come again to mill samp[28].

The above statement shows that the survival of the informal maize millers is also dependent on the loyalty of customers, with whom the informal maize miller has developed a relationship over a long period of time. In other words, customer retention seems to be key in maintaining competitive advantage especially in a business where products are usually similar and of the same standard. ,

In the same vein, the customers of hammer millers were asked whether hammer-milled maize was their first choice or most preferred, and their responses are represented in the table below.

Table 6.6: Is hammer milled maize meal your first choice or not?

	Number of people	**Percentage**
Yes	175	88
No	25	12
Total	**200**	**100**

Source: Researcher's own compilation

One hundred and seventy-five (175) customers out of 200 interviewed said that hammer-milled maize meal was their first choice. Only 12 per cent said it was not their first choice. What this implies in the context of survival is that the informal maize millers have a readily available market for their products. The figures above, as obtained from the hammer millers customers survey, support the findings from the in-depth customer interviews. These high figures can be attributed to the reasons given above by the different categories of customers, such as hammer-milled maize meal being healthy and tastier, cheaper and more filling compared to commercially milled maize meal. My observations were that it was this group of loyal customers that contribute to keeping the businesses going during many challenges.

Customers were also asked what best represents the times they buy mealie meal from the hammer millers and the following table highlights their responses:

[28] Interview with hammer miller at Garden Market conducted on 2nd November 2016.

Table 6.7: Periods when customers source their maize meal from hammer millers

Period	No. of people	Percentage
Throughout the year	158	79
When we don’t have enough money to buy commercially milled maize meal	28	14
During months when maize meal is readily available on the markets	14	7
Total	**200**	**100**

Source: Researcher’s own compilation.

The table above show that 79 per cent of the hammer mill customers get maize meal from the hammer millers throughout the year, while 14 per cent only get it when they do not have enough money to buy commercially milled maize meal, and lastly, 7 per cent said they only utilise the hammer millers when maize is easily accessible in the local markets. From the aforegoing, informal maize millers have customers throughout the year as evidenced by the 79 per cent, who said they buy from informal maize millers. What this implies is that the hammer millers are assured of business throughout the year, thereby, almost certainly guaranteeing their survival. This gives them an advantage in that they are assured of this loyal customer base which gives them business throughout the year. When it comes to these customers, hammer millers do not have to compete with big millers as these have their own strong reasons why they prefer hammer-milled maize meal, hence, the reason they access their maize meal flour from the hammer millers throughout the year.

The customers of hammer millers were asked their views on the price of maize meal they get from hammer millers. There responses are highlighted in the table below.

Table 6.8: Customer's views on the prices of maize meal from hammer millers

	No. of people	Percentage
Cheap	126	63
Fair	71	36
Expensive	3	1
Total	**200**	**100**

Source: Researcher's own compilation.

The above data shows that 63 per cent were of the view that hammer milled maize meal was cheap while 36 per cent thought the pricing was fair. Only 1 per cent said it was expensive. The implication of the above table is that the informal millers are assured of business as a huge number of their customers (almost 100 per cent – 63 per cent, who said it was cheap, and 36 per cent, who said it was fair) believe that their products are affordable. Therefore, they are almost assured of retaining the loyalty of these customers, a key element of the survival of the informal millers. One of the factors that is key for the informal maize millers to survive competition is assurance of continued business. This may also be the reason why informal maize millers continue to operate even when faced with numerous challenges. They have customers who believe in their products being of good quality and affordable and this guarantees business for them. In the following section, I present a detailed description of the maize bran customers.

6.7.5 Maize bran customers

Among the hammer mill customers, there was this group, which was interested in maize bran. This group of customers buy maize bran from the hammer millers and supply to stock feed manufacturing companies, and some are also involved in export of the same. A customer at Soweto Market had this to say:

> Maize bran is lucrative business for us. It is on very high demand because it is used for chicken feed, livestock feed and for those with fishponds. They mix it with other products to come up with nutritious feed for animals and chickens. Since it is on high demand, it is difficult to get from hammer millers. People pay the hammer millers in advance and just come to collect when their bags are ready. You must follow a que and you will find that maybe you are number 10 on the list. So, what I do is that I organise enough capital and target different hammer mills. You go to each hammer mill and pay in advance for the number of bags you want. For example, if I want to buy 1,200 of 50kg bags, I will probably engage 60 hammer mills whom I will pay in advance. Each hammer mill will give me 20 bags. This business is very [much more] lucrative than maize grain trading because you get

> the bran very cheaply and then sell it at 300% profit. We get a 50kg bag at between ZMK25 to ZMK30 and from one bag I can make ZMK120.[29]

The above quotation is reflective of the views I received from other customers concerning the buying and selling of maize bran. My observations during field work were that maize bran had a double effect in that it was beneficial both to the hammer miller and the customer. Maize bran trading is central to the survival of informal maize millers due to the high profits involved and the readily available market. Though commercial millers also produce maize bran, it remains a lucrative business venture for hammer millers as it is in high demand due to the growing poultry and animal stock feed industry in the country, hence, the high demand for maize bran. The commercial millers on their own fail to meet this demand. As can be seen from the aforegoing, informal maize millers are able to make additional profits from maize bran, hence, being able to survive competition from the big millers.

All in all, as indicated in the main sections above, I argue that the characteristics of informal maize millers, namely, their location, education, source of maize grain and customer bases, are critical to their survival because they each provide a unique business support contribution, which enables the informal millers to be competitive. This last point will be returned to in Chapter 9, but suffice to point out that this has implications for survival of informal maize millers. Literature on the informal sector highlights three important areas affecting the survival of informal sector businesses: (1) firm characteristics; (2) owner characteristics; and (3) contextual or external factors, which may mean the environment in which the owners and businesses operate (Raj and Sasidharan, 2014) as discussed in Chapter 2.

6.8 Conclusion

In this chapter, the lived experiences of informal millers were examined across different markets in Lusaka. The chapter also described the linkages between the general characteristics of informal maize millers, informal markets, customer profiles, and sources of maize grain, and survival. It went further and examined the key features of the informal sector and how they link to survival. The chapter was divided into four sections. Firstly, the chapter began by providing a detailed description of the markets and compounds in which the study was conducted. The second section provided a detailed general description of informal maize millers. The third section of the chapter provided an overview of the customers that buy from the informal maize millers. The chapter has shown that the customer base for informal maize millers has been increasing, as evidenced from the presence of informal maize millers in high-income areas. This is a shift from the past when informal maize millers were only found in high density areas. This shift is key to the survival of informal maize millers, as it provides them with additional

[29] Interview with maize bran customer at Soweto Market conducted on 5th November 2016.

markets for their products. Furthermore, this also means that informal maize millers with enough capital can open new branches in the medium- and high-income areas as market is guaranteed.

The chapter further showed that understanding the categorisation of informal maize millers and how they perceive themselves is crucial to understanding the dynamics affecting their survival. For example, it may be that some of the informal maize millers are surviving through their connections in government or feeding on money obtained from other ventures. For this reason, understanding their operations and perspectives is important if we are to understand the survival of informal maize millers in an industry dominated by large-scale milling firms and other competitors of their kind. The chapter has also shown, through the different categories of informal maize millers, that enterprise size, though important, does not affect the survival of informal maize millers. This can be evidenced from the fact that almost all informal maize millers interviewed had been in existence for at least five years since their first entry and have since continued to operate. It has also been established in the chapter that the education of business owners impacts greatly on the survival of informal maize millers either positively or negatively depending on their education levels.

In addition, the chapter has established that motivations for engaging in informal milling business help in understanding why informal millers persevere and continue operating. What emerged from the study is that there are economic circumstances that motivate informal millers to engage in the informal milling business and these circumstances motivate them to continue or persevere in their business, an element which is key to them continuing with their operations.

Lastly, the chapter illustrated that one of the factors that is key for the informal maize millers to survive competition is assurance of continued business, which is highlighted through the customers of informal millers, who presented various reasons that they buy from informal maize millers. The informal maize millers have customers, who believe in their products being of good quality and affordable, and this guarantees business for them.

Chapter 7: Informal maize millers' survival strategies

7.1 Introduction

This chapter builds on Chapter 6 which examined the lived experiences of informal maize millers across different markets in Lusaka. The chapter provides a detailed description of the strategies that informal maize millers use to survive and ends with a section on the challenges that informal maize millers face. At the core of the chapter are the concepts of informality and survival. As stated in the theoretical chapter, the concepts of informality and survival have been defined differently by different scholars. However, for this study, as already indicated in the earlier chapters, informality implies those businesses not registered by the PACRA and unable to meet all the required statutory obligations. For the concept of survival, in this context, it means the ability to continue operating despite the many challenges they face. Specifically, survival refers to informal maize millers that have continued to exist for a period of not less than five years, despite competition and other adverse conditions they face.

Following this is a section that deals with competition. The section examines competitors of informal millers and examines how such competition affects the miller business under discussion. This chapter ends by discussing how the different strategies presented link to the survival of informal maize millers in an industry dominated by large-scale milling firms.

7.2 Informal millers' business strategies

7.2.1 Informal maize millers and the formalisation process

The informal maize millers were asked whether they had any plans of graduating to the formal sector. The majority of those interviewed were of the view that they were not willing to move into the formal sector due to the high operational costs involved with formalisation. For example, an informal maize miller at Garden Market was of the following viewpoint:

> In Zambia, it is very difficult to operate in the formal sector. This is because immediately you register a business with Patents and Companies Registration (PACRA), immediately you will be burdened with statutory obligations, such as turnover tax; you will need someone to organise your accounts books and all this needs money. Government policies are not friendly to local small businesses like ours. For this reason, I am better off operating informally as I am doing right now, as I am not burdened with so many taxes. I know we miss out on certain businesses, such as supplying to the government institutions, since they require that you have a registration certificate from PACRA and that you also should have a Taxpayer Identification Number (TPIN), which is provided by the Zambia Revenue Authority (ZRA).[30]

[30] Interview with hammer miller at Garden Market conducted on 20th November 2016.

The above narrative highlights some of the challenges faced by informal maize millers in formalising their businesses and why they decide not to do so. It can be deduced from the above narrative that it is more profitable for informal maize millers to remain informal than to formalise. The above viewpoint was collaborated by those of other participants I interviewed in the other markets. They stated that the burdensome statutory obligations prevented them from formalising their businesses. However, there was one miller at Chilenje Market and another at Garden Market, who said they initiated the process of formalisation and have even started branding their products. This is in line with some scholars, who argue that some informal sector entrepreneurs would rather formalise if the barriers to formalisation were removed (Development Alternatives Inc. and Bannock Consulting Ltd, 2005). This point is discussed in detail in the next chapter. According to the miller at Chilenje Market, "for me, I am not informal. I produce a lot of mealie meal which I package, brand, and sell. I have also employed about six employees, and I registered my business at PACRA, so I have a brand name."[31] However, according to my observations, this business was not fully formalised but had graduated into what I describe as partial formalisation from their previous informal status. This was so because their workforce was still informal. They were not registered with National Pensions Scheme Authority (NAPSA) or Workers Compensation Fund (WCF). Furthermore, taxes such as Pay as You Earn (PAYE) were not being paid.

The above narratives have implications for the survival of informal maize millers in that, for the informal maize millers to remain in business and make enough profits to be able to take care of their family needs, they must choose whether to formalise, partially formalise or remain informal. In this case, the informal maize millers remain informal as a survival strategy, while a few others decide to partially formalise to reap some benefits that come with formalisation. The following section will present strategies on operations, management structure, and maintenance of hammer mills as important aspects of survival and competitiveness among informal maize millers.

7.2.2 Operations, management structure, and maintenance of hammer mills

In a quest to understand how the millers operate and keep afloat in their businesses, they were asked how the operations are carried out at the hammer mill, including their management structure. What emerged clearly among all the millers is that the hammer mill is operated by two or three people depending on the number of hammers mills an informal miller owns. The two or three employees are the ones tasked with the role of overseeing daily operations, including maintenance. It was also clear that, in most cases, the owner is part of the operations team. A miller at Soweto Market had this to say:

[31] Interview with hammermiller at Chilenje Market conducted on 18th November 2016.

> We are three who work here. Me and that other gentleman are employed while the other one is the son to the owner. Most of the time the owner is also found here to supervise the work. Like now, he is around but he has gone on the other side to check on something. In terms of management, the owner is in charge and makes all the decisions. We meet in the morning daily and agree on several issues related to our operations. The son also has some authority over us and the business. His role mainly is to ensure that work is going on well and that all of us are working. My role with my colleague is to mill and clean the place, ensuring that the area we operate from is well tidied up[32].

Other millers interviewed had similar views in the sense that the owner usually was the manager/supervisor and, in the case where there was a family member involved, some of the authority was delegated to them. From my observations, this arrangement is the main operational and management structure of informal maize millers.

When asked how they service their hammer mills, the millers responded that they did it themselves. For example, a miller at Soweto Market who had been in business for five years said that "everything to do with servicing my hammer mills or repairing is done by myself and my colleague. We can change parts that are non-functional and replace them."[33] This description was repeated by other hammer millers interviewed. However, there were a few, who said they hired local technicians to repair their hammer mills once they broke down or for routine general servicing. A hammer miller from Garden Market, alluded to this fact when he said that "we have people who fix our hammer mills within the market. Once it breaks down, we call them, and they come to fix for us. Their fees are also affordable, as they are not exorbitant though this depends on which technician you hire."[34] Furthermore, when asked whether they had any form of training as hammer mill repairers, the informal millers said that they did not have any form of training but that this is something they learnt through the challenges they face on the job. A hammer miller from Chilenje Market said:

> I do not have any formal training in fixing machines, but I have learnt to do this over time through experience. This is because it saves costs and time once you do it for yourself. If you depend on other people to do it, you may be inconvenienced as they work at their own pace. So, I was forced to learn to fix my hammer mill myself."[35]

Another informal maize miller at Soweto Market had this to say:

> In terms of maintenance of the hammer mill, we carry out daily maintenance while other tasks are done on a consistent but less recurrent basis. Failure to do this and keeping checks and chronicles of what needs to be done can lead to a drop in the effectiveness of a hammer mill and, ultimately,

[32] Interview with a hammer mill employee conducted on 1st June 2016 at Soweto Market.
[33] Interview with hammer mill employee conducted on 1st June 2016 at Soweto Market.
[34] Interview with hammer iller conducted at Garden Market on 30th May 2016.
[35] Interview with hammer miller at Chilenje Market conducted on 30th May 2016.

to expensive interruptions. It is very vital to make sure that the hammer mill is always in decent running order and condition.[36]

As such, it can be deduced that close owner supervision, knowledge, and skills on servicing of the hammer mills are key to the survival of informal maize millers. Narratives show that, to remain operational, hammer mill operators or the owners must be conversant with the servicing of the hammer mills. This leads to the issue of daily maintenance as presented in the following section.

7.2.2.1 Daily maintenance

The informal millers were then asked to provide explanations on how they go about maintaining their mills. A miller at Chilenje Market had this to say:

> For the things that we need daily, those of us who use diesel need to ensure the availability of diesel and need to monitor this to guarantee that the hammer mill does not stop running suddenly. For this reason, preparation is essential, especially these days, when there are a lot of fuel shortages. Our friends with hammer mills, which use electricity are better [off] but persistent load shedding is also affecting them badly. The other area that requires daily maintenance is the room where the actual milling is done. This requires cleaning every day so that customers come to a clean place and so that the food being handled is clean and we do not attract the wrath of the city council. We usually do the cleaning at the close of the day. This also helps in preventing rodents and pests from invading the hammer mill and its environment. When you don't clean, rodents and pests leave unwanted products that pollute the hammer mill and can cause health problems.

From the narrative above, it can be deduced that being knowledgeable and skilled in maintaining hammer mills is very important for hammer millers. This is so because they need to continuously monitor different aspects of the milling process if they are to reduce costs and ensure maximum utilisation of the available resources. A hammer miller should, for instance, be able to know how much diesel is needed for a given tonnage of mealie meal to be produced. Additionally, even those who use electricity should be able to monitor the load shedding schedule and the use of electricity units so that they can properly plan for their production without risking the hammer mill stopping unexpectedly. The other important aspect is maintaining a clean environment. Customers prefer to receive a service from an environment which is well maintained and is clean. Hammer millers, who do not pay attention to this, risk losing business, hence, the emphasis from the hammer miller above that they clean their workplace every evening after working. Daily cleaning also helps to increase the life span of the hammer mill as rodents and insects are kept away, but this also mitigates any health problems that may be caused by these if not properly managed. What this means in view of the survival argument I am making in this study is that hammer mill operators need to understand how to maintain their machines to keep them operating at optimum capacity, thereby, ensuring their ability to continue offering milling services to their customers. Daily

[36] Interview with hammer miller at Soweto Market conducted on 1st June 2016.

maintenance not only helps keep the environment clean and makes the place more appealing to the customers but also reduces the risk of the business being closed by the Lusaka City Council for not adhering to the rules. All these issues are key to the survival of the business.

Other millers from the three different markets also brought out other areas of concern in terms of daily maintenance. An informal miller at Garden Market said that

> some other areas of concern in terms of maintenance include the hammer mill inside that requires vacuuming daily. This is because the form of hammers and screens must be tested, as they can simply become broken during a day of milling. For this reason, daily cleaning and routine checks are of utmost importance.[37]

Consequently, daily maintenance is very important in maintaining a clean and hygienic place for conducting business, something that is key in attracting customers. From my observations, customers prefer to take their maize grain in a clean and well-maintained place, making this aspect critical to the survival of informal maize millers. Besides the daily maintenance, there is also periodic maintenance, as highlighted in the section that follows.

7.2.2.2 Intermittent maintenance

Besides the daily maintenance needs, informal millers were also of the view that there are also other needs that happen intermittently. For example, the millers alluded to the fact that the level of lubricating oil that is required for smooth operations of a hammer mill in the engine drops gradually, and this requires topping up as well as replacing from time to time in the same way as happens to motor vehicles. They further stated that the oil filter also requires replacing on a regular basis – about every 350 hours of use. Consequently, the millers were of the view that they make sure they follow instructions from the manufacturers, as this helps to prolong the life span of the hammer mill.

A miller from Soweto Market responded thus when asked about the periodic maintenance of the hammer mill:

> I ensure that I continuously tighten the drive belts as they become loose after continuous use. Furthermore, I make sure that I keep all the belts at the same tightness. What happens is that once some belt flops, all belts are changed to have them evenly fitted. The mounting of the mill needs to be tested occasionally. This is done in a quest to ensure that all holding-down screws, beater screws, plate-fixing screws, etc. are fitted. Additionally, entire bearings require constant lubrication as well. The air-intake filter requires scrubbing also, as a mill background is generally very dusty, hence, the filter must be checked occasionally.[38]

The miller further went on to say that

[37] Interview with hammer miller conducted at Soweto Market on 18th August 2016.
[38] Interview with hammer miller conducted at Soweto Market on 18th August 2016.

[i]f a filter is blocked, fuel intake increases and ultimately halts the engine. The other areas of concern are the hammers in hammer mills that must be fixed time and again. Hammers are prepared from a rectangular-shaped part of steel with holes apiece. As one corner of the hammer diminishes, we move it over to present the other corner. These can be rotated until all four corners have diminished. We restore worn hammers by joining on some layers of welding rod until they can be ground back to the original form. The joined part of the hammer through welding is very hard and has good wear features. Nevertheless, all things being equal, changing of finished hammers is better. This is ordinarily done after a few hundred hours of running. We make spare hammers from the toughened leaf springs of trucks or other high-quality steels.[39]

The informal miller went on to provide an explanation on how the replacements are done:

> As we do the replacements, we make sure that the tip clearance in the middle of hammers and screen stands about 5 mm. We likewise ensure that all hammers remain balanced after repair or after being changed. The thing is that most lesser mills only have up to 16 hammers. For example, if the sets on each side of the mill are referred to as the north, south, east and west, then it follows that the east ones should balance with those on the west, and the north ones with those on the south. If this is not done, the mill will shake, which will then add extra pressure, and escalate damage on the bearings[40].

As can be seen from the quotation above, some millers are able to maintain their hammer mills on their own without requiring the services of trained technicians. This is very important for their survival, as they can eliminate maintenance costs, thereby, keeping their operations going.

Keeping of maintenance records was another area of interest among informal maize millers interviewed. One miller at Garden Market had this to say:

> Keeping records of maintenance is vital for profitable operations. For this reason, we make sure that we keep records on the consumption of electricity and fuel; costs concerning repairs or change of filters, belts, hammers, screens, plates, or stones; any expenditures related with contracting labour; building rent; payments on items, such as storage bags, brushes and stationery; and other costs for other services.[41]

Another informal miller at Chilenje Market made this point: "We keep records and analyse all expenses regarding operations and maintenance so that we can calculate and periodically revise milling fees charged to consumers. In addition, maintenance records are also our only source of information for calculating profits and losses."[42]

In terms of survival in this sector, it is important, as evidenced from the material in the above section, that millers can service their hammer mills on their own and keep maintenance records. This helps them avoid

[39] Interview with hammer miller conducted at Soweto Market on 18th August 2016.
[40] Interview with hammer miller conducted at Soweto Market on 18th August 2016.
[41] Interview with hammer? miller at Garden Market conducted on 21st June 2016.
[42] Interview with hammer miller at Chilenje Market conducted on 20th August 2016.

being derailed by machine breakdowns and helps them to cut costs and remain competitive, while being able to survive in the competitive maize meal sector.

7.2.2.3 Safety issues in hammer mill operations

The other issue that emerged in the interviews with informal millers on operations and maintenance was that of safety. Informal millers were of the view that accidents that have happened before at hammer mills were frequently triggered by the power source or transmission. They were of the view that electrically propelled mills needed good-quality safe wiring, secure connection boxes, and correct fuses to avoid electrical calamities. For those using diesel and petrol engines, it was said that these can also have fuel leaks, and it is vital to have a protected fuel tank away from the mill in a different room.

An informal maize miller at Soweto Market had this to say: "Naked flames anywhere near the mill must be avoided. Petrol engines are more dangerous because of the greater flammability of petrol compared to diesel. So, we make sure we don't have naked wires that can cause a fire here."[43]

Another miller at Garden Market discussing the issue of safety and accident prevention in hammer mills had this to say:

> The transmission components of any mill need to be protected carefully by guards. We make sure that belts or driveshafts are always covered by guards. Not doing this is what causes many unnecessary accidents and damage to the hammer mill. We also keep the mills clean inside and outside, as dust in the air can be explosive. We make sure that the mill environment is a no-smoke [sic] zone.[44]

Understanding the issue of safety by informal maize millers is also key to their survival, as this helps them avoid accidents that would lead to the loss of their investments, thereby, putting them out of business since most of them have not insured their businesses.

Ensuring that the place is safe is very important for the survival of hammer millers. This is because, if safety measures are not put in place and properly adhered to, the risk of fire breaking out is very high, which can lead to the loss of investments and even life of hammer mill operators.

7.3 Maize grain product pricing

The process for negotiating prices for maize milling is an important aspect of a hammer miller's job. According to the participants interviewed, it was as if most of them had almost the same pricing systems. At Soweto Market, as of 2016, all the participants said that they charged not more than ZMK5 per tin (20-litre bucket), of breakfast mealie meal. Others said they charged ZMK3 for the roller meal, while some

[43] Interview with hammer miller at Soweto Market conducted on 20th August 2016.
[44] Interview with hammer miller at Garden Market conducted om 8th August 2016.

stated that they charged more than ZMK10 including maize from the mill operator. These prices are for the service of grinding the maize grain and not the price of the 20l container of maize. Informal millers further alluded to the fact that other products were quite difficult to price and that these varied from time to time and from quantity to quantity for products such as chicken feed, animal feed and maize bran. The complexity comes in because not all millers are specialised in feed production, but they mill it as an extra service when requested by some farmers. For most of them, their main production line is maize meal, so it is easy for them to make a price list on this product.

Almost all participants were agreed that pricing is one important determinant in the marketing of different products. According to an informal miller at Garden Market, "prices will either attract or chase away the customers. Good pricing will always attract customers."[45] Other millers interviewed from all the markets under this study were of the view that pricing was an important aspect in retaining their customer base. It was against this background that a miller at Chilenje Market said: "We consider the prevailing market conditions such as prices, demand, and supply of different milling products on the market as we go about our business."[46] However, there were a few participants who said that they did not consider the prevailing market conditions when pricing their products. For example, an informal miller from Garden Market said: "We don't really follow the trends in the market. We don't look at prevailing market conditions, we just price our products depending on what we feel should be the right price."[47] I also observed that the participants who said that they considered the prevailing market conditions, had quite reasonable pricing and had been shown to have more customers than those who never considered the prevailing market conditions.

There was another view expressed by some of the millers who deal in maize bran, a by-product of maize meal. Because of the high demand of maize bran both on the local and regional markets, some millers were not charging for milling maize meal but would ask customers to leave the maize bran once their maize was milled. Millers would then keep accumulating the bags of maize bran from different customers until they met their target. Once the target was met, they would then supply to companies and individuals who trade in this product. According to a miller at Soweto Market, "some customers we mill for them without charging them because we are interested in the maize bran. There is a lot of money in maize bran, my brother. Once I accumulate 100 x 50kgs of maize bran, I then supply to the show grounds where they buy at ZMK1.80 per kg."[48] Similar sentiments were repeated by some millers who were also engaged in the maize bran trade. This is a trend that is happening in most parts of the country, especially the

[45] Interview with hammer miller at Garden Market conducted on 9th June 2016.
[46] Interview with hammer miller at Chilenje Market conducted on 11th June 2016.
[47] Interview with hammer miller at Garden Market conducted on 9th June 2016.
[48] Interview with a hammer miller at Soweto Market conducted on 21st July 2016.

maize- producing regions like Eastern Province, but has also become a trend in Lusaka, as observed in some of the markets I visited. Maize bran fetches good money due to the flourishing poultry industry in the country, but also because of a good market, which is available within southern Africa, in general, and Botswana, specifically. Some interviewees highlighted the importance of the regional maize bran market during our interviews.

The period 2016 to 2019 saw a large increase in the price of commercially milled maize meal, something that resulted in an increased number of people resorting to hammer-milled maize meal, according to an informal maize miller at Soweto Market, and as observed during my time in the field. The pictures below show that a 25kg bag of breakfast mealie meal ranged from K60.00 to K70.00 for all mealie meal brands.

Figure 7.1: **Commercially milled breakfast mealie meal prices in Lusaka in October 2016**

Source: Author's own compilation.

As of 2019, the prices of commercially milled maize meal for all brands had escalated to a record high ranging from K150.00 to K200.00 for a 25kg bag of breakfast mealie meal in Lusaka, while roller meal ranged from K125.00 to K150.00 for a 25kg bag. This increase was attributed to low maize production in the previous season following a drought that affected most parts of southern Africa.

However, I observed that hammer-milled maize meal was cheaper in the same period compared to commercially milled maize meal. For example, in 2016, a 50kg bag of maize grain ranged between K60.00 and K70.00 in all the four markets sampled in this study. According to an informal maize miller at Soweto Market, "a 50kg bag of maize grain will produce two bags of roller maize meal (25kg each) while a 50kg bag of maize grain will produce one 25kg breakfast maize meal flour and one 12.5kg bag of breakfast meal."[49] This view was repeated by other informal millers that I talked to during my study. Compared to commercially milled maize meal, this is still very cheap, as the service price for milling a 50kg bag of maize grain is K20. From the narratives above on maize products pricing, it can be inferred

[49] Interview with hammer miller at Soweto Market conducted on 25th November 2016.

that hammer-milled maize meal remains cheaper compared to commercially milled maize meal. The point is that cheap mealie meal from *chigayo* makes the miller competitive, especially at the time when the prices are rising fast. This is very important to the survival of informal maize millers, as market is readily available for their services, as most people seek alternatives to escalating prices of the staple food. Another aspect to note in terms of survival of informal millers from the above paragraphs is that some specialise in the production of maize bran, which is more profitable due to the growing poultry and animal feed industry. From the aforegoing passages, it can be deduced that the informal maize millers are able to break even because they are able to produce different products from maize grain, which they sell. For example, after processing maize meal, they have maize bran as a by-product, which they supply to people who make stock feed.

7.4 Product diversification

I observed during my study that there was some form of specialisation in terms of production among informal maize millers. While the main products milled by most of the informal maize millers was maize meal in its different types and trade in maize bran as a by-product of maize meal production, some of them only specialised in feed production. They did this to target a growing group of farmers, who prefer to produce their own stock feed through these hammer mills rather than buying directly from the feed producing companies. Other millers, in addition to maize meal, also produced more of maize grit and samp. The production of these requires a special kind of sieve, which is owned by only some millers.

Asked what products they produce, most millers reported that they produce breakfast mealie meal, supper roller meal and roller meal commonly known as *mugaiwa*. Besides the production of maize meal, some millers produce other products, such as chicken and animal feed, maize grit, samp, cassava flour, millet, and sorghum meal. All the millers interviewed stated that they produced at least one or two other products in addition to maize meal. According to an informal maize miller at Garden Market, “we usually venture into production of other products because we want to remain competitive. If you just concentrate on maize meal alone, it’s possible to miss out on other customers.” [50]

Breakfast maize meal has historically been a symbol of status. According to an informal maize miller at Soweto Market,

> most of our customers who consider themselves well-to-do come to grind breakfast meal. They prefer breakfast to roller meal because breakfast meal gives them a status. This also can be seen to be a historic issue as most people in the past considered breakfast [meal] for the well-to-do and those who were less fortunate in society were the ones who went for

[50] Interview with hammer miller at Garden Market conducted on 9th June 2016.

> the cheaper alternative. So, this perception has remained in some people and they still like breakfast [meal].[51]

The statement by the informal maize miller demonstrates that breakfast mealie meal has its own class of people that usually purchase it and that the historical preferences associated with status continue to guide some people's preferences even today. The process of milling breakfast meal is also tedious compared to that of milling other maize meal products, such as super roller and roller meal. According to a miller at Soweto Market, *"breakfast* [meal] *is quite tedious to make compared to roller meal. This is because we first must grind it into samp to remove the outer parts and, once those are removed, that is when we grind into mealie meal."*[52] However tedious the production of breakfast meal is, there is always a group of customers, who prefer it to roller meal, so millers have to continue producing it to keep this category of customers happy. Keeping customers satisfied is key to survival, hence, informal millers make sure that they produce products that meet the specific need of their customers, in this case, the production of breakfast mealie meal.

The second product that is milled by informal maize millers is super roller meal. According to an informal maize miller at Chilenje Market, "super-roller meal is also popular among our customers and very close to breakfast mealie meal. This is usually a choice for those who don't want breakfast [meal] but are also not for the idea of mealie meal which is coarse. They choose the middle one."[53] For super roller meal, not all the outer part is removed before milling as in the case of breakfast meal. It retains some of its outer skin, hence, its being slightly coarse.

The third product milled by the informal maize millers is roller meal also known as *mugaiwa*. During the late 1980s and early 1990s in Lusaka, *mugaiwa* was the only type of maize meal one could get from a hammer mill. But with the advancement in hammer mill technologies, they have now progressed to producing different types of mealie meal, as highlighted above. According to an informal maize miller at Chilenje Market,

> *mugaiwa* is cheaper to produce compared to breakfast and roller meal. This is because nothing is removed from *mugaiwa*. It is also known to be rich in fibre and is highly recommended by specialists for people living with diabetes. With the increase in lifestyle diseases, we are seeing an increase in people going for *mugaiwa.*[54]

The aforegoing statement shows the increasing importance of *mugaiwa* among customers of informal maize millers.

[51] Interview with hammer miller at Soweto Market conducted on 25th November 2016.
[52] Interview with hammer miller at Soweto Market conducted on 25th November 2016.
[53] Interview with hammer miller at Chilenje Market conducted on 11th June 2016.
[54] Interview with hammer miller at Chilenje Market conducted on 11th June 2016.

Maize grit, also known as maize rice, is the fourth product produced by informal maize millers. This product is found across the nation, although, in the past, it was mostly used by the people of Southern Province of Zambia. It is the main ingredient in the brewing of *chibwantu*, a traditional energy drink, whose origins can be traced to the Tonga people of Southern Province of Zambia. An informal miller at Garden Market had this to say:

> In addition to maize meal, we also produce maize grit on demand. These women who sell *chibwantu* are our main customers for this product. But also, several Tonga people come to have their maize milled into maize grit for their home consumption and for their functions. As you know, *chibwantu* is a very common drink among the Tongas and, of late, it's very common to find women selling the drink in the streets.[55]

The statement by the informal maize miller above highlights an understanding of one's customer base but also brings in a gender perspective by stating that women, who sell the *chibwantu* energy drink, are the main customers. Having a good understanding of who the customers are is important in formulating strategies that can ensure survival of the business. The diversification of products is a form of hedging among informal maize millers. The various maize products are used to subsidise one another, thereby, keeping the informal miller constantly in business.

The fifth product milled by informal maize millers is samp. An informal maize miller at Soweto Market described samp in the following way:

> Samp is produced when maize grain is broken into pieces and the outer part of the grain, the skin, is removed. Samp is very common among most Zambian families from all parts of the country for breakfast. We receive a lot of orders for samp from boarding schools, hospitals, and prisons. These people come and procure in bulk, so we make a lot of money when we have such orders. Besides this group, just ordinary people also come to have their maize ground into samp.[56]

I deduce from the above statement that samp seems to be very common among government institutions, and these buy in bulk from the informal millers. In addition, during my field work, I observed one of the major supermarkets in Zambia taking maize grain to an informal maize miller for grinding into samp, which they repackage and brand for selling in their chain stores. The production of samp is also an important part of the survival of informal maize millers, as it has a readily available market among government and other institutions, who procure this product in huge quantities to feed a great many people. The big millers also produce samp and package it in small packets of 2.5kg and 5kg. This is usually very expensive, especially for institutions who buy in bulk, like the schools, hospitals, and prisons. For this reason, these institutions usually buy from suppliers, whom they select through public bids, and

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[55] Interview with hammer miller at Garden Market conducted on 9th June 2016.
[56] Interview with hammer miller at Soweto Market conducted on 25th November 2016.

these suppliers work closely with some hammer millers to produce samp in bulk and supply to these institutions. This mainly happens, as some of these institutions mainly deal with registered companies, and hammer millers are not formally registered, so they work with those registered companies, who get the tenders and supply through them. However, I must state that there are institutions which still buy directly from hammer millers. They will just ask the hammer millers to supply them with a certain number of bags and payments are done directly to the miller. Even for individual customers, buying maize grain and having it made into samp by the hammer millers is far cheaper than buying the small packages produced by big millers and stocked in shops. Against this background, hammer millers seem to have an advantage over the big millers on the samp product, and this is key to their survival. Even when they sell their products at a cheaper rate compared to the big millers, they are still able to make enough profits as most of the customers prefer buying samp from the small and not the big millers.

The sixth product produced by informal maize millers is chicken and animal feed. This has also increased in demand due to the rise in the poultry sector in the country. An informal maize miller at Soweto Market had this to say:

> We also produce chicken and animal feed. We have seen an increase in the number of people who come to have their chicken and animal feed made. They come with their own mixers and sometimes we provide maize bran when we have. With an increase in the prices of chicken and animal feed from the main suppliers, a lot of farmers have resorted to producing their own feed. This is one area which is growing, and we make a lot of money from this. This means that we need to have different hammer mills or components of a hammer mill to be able to produce mealie meal for human consumption and to produce chicken and animal feed.[57].

Another informal miller had this to say at Soweto Market:

> In addition to owning this hammer mill I am also a farmer. I grow maize and keep chickens. So, I do mill my own chicken and animal feed and provide a milling service to other farmers, who come here for a service. I do this in addition to milling maize meal. I have been doing this for over five yes. Farmers in the surrounding areas, such as Lusaka West and Chilanga, and other nearby farms come to have their chicken and animal feeds made from here. There is also an increasing number of people within Lusaka urban who keep chickens at home and are making their own feed, so our customer base for this product is expanding.[58]

The two statements from the informal maize millers above show that chicken and animal feed production is one activity that is increasing among the informal millers in Lusaka due to the increase in poultry and pig farming. This has an implication for the survival of informal maize millers, as it means an increase in the number of customers, who need maize bran, a key ingredient in the production of stock feed.

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[57] Interview with hammer miller at Soweto Market conducted on 25th November 2016.
[58] Interview with hammer miller at Soweto Market conducted on 25th November 2016.

The seventh product produced by the informal maize millers is maize bran. Maize bran is a by-product of maize meal that consists mainly of outer skins, some germ fragments, and endosperm particles. This product is extremely important both in Zambia and in the Southern Africa region. According to a miller at Garden Market when asked what maize bran was;

> Maize bran is a by-product of maize meal or grits manufactured from maize grain, mainly, the coarse portion that is separated on sieving of the crushed maize grain, to yield fine maize meal in the making of breakfast meal. It is made from the outer skins of maize grain, some germ fragments, and endosperm particles. It is one of the most valuable feed ingredients. Maize bran can be used to feed almost every bird, livestock, and fish. Sir, when you look at the maize grain, you will see some layers of covering on the kennel of the grains. This is what is generally referred to as the bran. Experts say that these coverings are loaded with nutrients, insoluble fibre and soluble fibre, hence, its importance as the main ingredient in the making of chicken and animal feed.[59]

The miller went on to say:

> According to information I got from a workshop I attended on chicken feed making, the experts who were presenting to us said that maize bran, when combined with other feed constituents and additional feed ingredients, yields best results in quality of meat and eggs in birds, improved milk making in dairy cattle, as well as the superiority of fish meat. It is against this background that this product is very much high in demand in Zambia and in the southern African region. We sell ours in Botswana[60].

It is important to highlight from the above statement that maize bran seems to be a very important product among informal maize millers. This is because its importance and demand were echoed by various millers that were interviewed during this study.

The last aspect of informal maize milling that I observed while doing my field work was cassava, millet and sorghum milling. I saw people bring these grains and cassava for milling to the informal maize millers. According to an informal miller at Soweto Market,

> We have several people who bring cassava, millet, and sorghum for milling. Some people prefer this to maize meal while others go for it because of their doctor's recommendations. For example, some diabetic patients, who bring their millet here for milling have told me that millet meal reduces blood sugar and that it was recommended to them by the doctor to be an alternative to maize meal. Since Soweto Market is surrounded by these compounds, like Chibolya and Kanyama, where there is a lot of traditional beer brewing, we also have these people, who brew beer in the compounds, bring their millet and sorghum here for milling. This is because the two products are raw materials in the making of traditional beer popularly known as "*katata*" among the locals. *Katata*, I guess you know it. It is a local brew made of millet and/or sorghum.[61]

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[59] Interview with hammer miller at Garden Market conducted on 9th June 2016.
[60] Interview with hammer miller at Garden Market conducted on 9th June 2016.
[61] Interview with hammer miller at Soweto Market conducted on 25th November 2016.

The statements above shows that informal millers produce a range of products depending on the requirements of their customers and what the market demands. This aspect of informal maize milling seems to be another important part in their quest for survival, as they can meet the specific needs of their customers. Furthermore, by diversifying in other products, such as millet and sorghum, the informal millers have an alternative product that they can depend on when maize milling business is not doing well. In the next section, I will present empirical materials on the maize drink processing sub-sector and the supermarket chain stores.

7.5 Maize drink processing as a vehicle for survival of informal maize millers

In this section, I illustrate the importance of the connections between the maize drink processing sub-sector and the informal maize millers from whom they obtain the raw materials that are critical to the production of the *munkoyo* and *thobwa* drinks and show how this is important to the survival of informal maize millers. I do this using data from my observations during the period of field work. In recent years, the country has seen a rise in the food processing sector in general and the processing of maize drink, thereby, contributing directly to the growth of the food processing sector. *Munkoyo,* as commonly known in many Zambian languages, has been commercialised and is a source of income for many and not only a traditional social drink for the rural Zambians. With the increase of chain stores in Lusaka and other cities in the country, even the distribution of this traditional maize drink has also increased, thereby, increasing the customer base and providing a ready market for maize meal and maize grit, a raw material usually obtained from the informal maize millers. As I entered the various chain stores dotted all over Lusaka city during my field work to purchase groceries and food items, it was a common sight to see shelves full of different brands of this maize drink. Not long ago, it was unheard of to find this traditional maize drink in supermarkets and, crucially, in the foreign-owned chain stores, which is now a common feature in Zambia.

Munkoyo is a high energy drink that has become popular among many residents of Lusaka but especially the growing number of casual labourers and others involved in manual work. This is so because this drink provides the much-needed energy, which the workers require in order for them to do their work, but is also relatively cheap and an alternative to other expensive meals that one can have for lunch. Besides the stocking of this drink in the supermarkets, as one drives around the central business district of Lusaka city, it is common to see hawkers going around with packets of *munkoyo* on their heads selling this drink to the people in the vehicles at traffic lights and slow-moving vehicles in the traffic of Lusaka. Behind this burgeoning industry are the informal maize millers, who produce different types of maize meal and other grain flour, such as millet meal and sorghum meal, that are used in the production of different drinks.

Another variety of *munkoyo* that is being made in Lusaka and other parts of the country is *thobwa*. It is a traditional Zambian drink like *munkoyo,* and has also become very popular among the residents of Lusaka and other parts of the country. This one is thicker and, unlike *munkoyo,* uses a different ingredient, such as sorghum or millet. It is popular in the Eastern Province of Zambia although, like *munkoyo* it has also been commercialised and is found in different parts of the country. Just like *munkoyo*, *thobwa* is now being made and sold as a powder in prepacks and can be found in almost all supermarkets. With this ready-made *thobwa*, one need only add water ,and it is ready for consumption.

The commercialisation and increased consumption of *munkoyo* and *thobwa* beyond the traditional set-up has far reaching implications for the survival of informal maize millers, as it has created an additional market for products from informal maize millers. For *thobwa*, the raw materials are sorghum and millet, and these crops are drought resistant and so, even in times when the country is faced with severe drought and maize grain does not do well and therefore in short supply, informal maize millers can still maintain their businesses through the processing of sorghum and millet.

7.6 Strategies informal maize millers use to deal with competition from big millers

In terms of competition, I observed during field work that informal maize millers faced competition from the big millers. The big millers seemingly had an advantage over informal maize millers, as they did not only have the economies of scale, but also enjoyed a cordial relationship with government, which provided them with subsidised maize grain in times when maize grain was in short supply. Furthermore, the big millers have the capacity to borrow from the banks and reinvest in their businesses as compared to informal maize millers. However, despite all these advantages, informal millers have devised some strategies that give them an advantage and help them survive competition from the big millers: e.g.; they are self-managed, they provide cheaper pricing and a healthier alternative to mealie meal produced by large commercial millers, and lastly, they specialise in producing products that are not produced by large-scale millers, such as maize grit.

The first and most effective strategy that informal maize millers use to deal with competition from big millers is by providing tailor-made products to their clients. For example, while big millers only produce two types of mealie meal namely breakfast and roller meal, the informal millers can produce to the specifications of their customers. For maize products, they can produce *mugaiwa*, roller meal, super roller and breakfast mealie meal, maize grit and samp. Furthermore, they provide milling services for other grains, such as sorghum, finger millet and cassava. Big millers do not deal in these products.

The second effective strategy used by informal maize millers is taking advantage of the growing maize drink industry as elaborated in section 7.6 above. This industry, as highlighted, depends on the raw materials from the informal maize millers and this has helped them to remain in business, as demand is high for products such as millet meal which is key in *thobwa* production.

The third strategy (mentioned above) that is used to deal with competition from big millers is getting huge contracts to supply hospitals, prisons, schools, and other government institutions with samp. They do this indirectly by partnering with formal firms, which have contracts with government to supply samp. Hence, while informal maize millers are unregistered and do not stand a chance of getting into a direct contract with government institutions, they are still able to supply through these partnerships. However, there are some instances where the millers and institutions deal directly with each other.

Government institutions usually buy samp in large quantities through registered suppliers, as big millers do not deal in these products on a large-scale because they are not as profitable as mealie meal, and the demand is not big enough for the big millers. According to a former lead of market development and trade at Indaba Agriculture, Policy and Research Institute (IAPRI),

> [l]arge millers do not engage in large-scale production of samp because demand is not very high and it is not as profitable as maize production for them. Their entry into samp production would only be dictated by a huge demand and profitability, which is not the case at present. Informal maize millers, however, have higher flexibility to adjust their production based on the needs of customers. This is because customers usually come with their own maize grain and all they must do is provide the milling service. The big millers mill their own maize grain and, for this reason, they concentrate on products which will give them maximum profits.[62]

According to the above narrative, informal maize millers have an advantage over big millers in samp production because they do not suffer any loss in terms of raw materials since customers usually bring their own maize grain. Furthermore, as seen in the preceding sections, the by-products of the milling of maize grain mostly remain with the informal millers, which they repackage and sell, thereby, making additional profits. This unique advantage of the informal maize millers contributes to their survival.

7.7 Sources of maize grain and survival of informal maize millers

To have a deep understanding of the source of maize grain as a survival strategy for informal maize millers, I undertook to observe and interview those connected to the interlinkages that keep the informal maize business running. To this effect, I conducted interviews with farmers and maize grain traders in the markets in a quest to understand the maize grain trade, the interlinkages that exist in the informal milling sector, and how these are important to the survival of informal maize millers. Figure 7.2 below is a picture of the maize traders taken at Bauleni Market.

[62] Interview with former lead of market development and trade at IAPRI conducted on 17th December 2021.

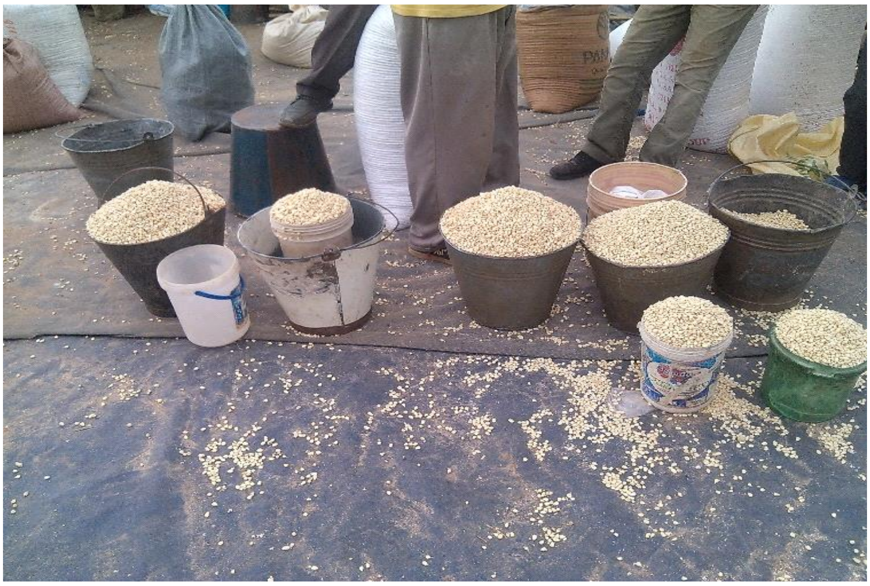

Figure 7.2: Maize grain traders at Bauleni Market

Source: Field photo by author

The picture above shows informal maize traders selling their maize grain to customers. They have different containers, which they use to measure the maize, and a customer can buy any amount they want in kilograms from 5kg, 10kg, 20kg to a 50kg bag. Informal traders and farmers contribute to the survival of informal millers, as they sell directly to the people and the informal millers themselves rather than the large traders, whose primary purpose is export. All in all, some millers have maintained a constant supply of maize grain by linking their supply network with the farmers and maize grain traders, who act as a link between the farmers and urban consumers. This is important to the survival of informal maize millers as it ensures that millers have a steady supply of maize grain and can meet the demand of their customers, even in the periods when maize grain is not readily available in the local markets.

7.7.1 Urban farming as a source of maize grain

During the period of my data collection and from my own experience as a Lusaka resident, I have, over the years, noticed an increase in urban farming in most parts of the country. Lusaka, in particular, hosts several urban farms on which some Lusaka residents grow maize as an alternative source of food for their households. According to a resident of Kwamwena residential area in Lusaka,

> I started growing maize in this area from the time that we came here about 14 years ago. I used to cultivate a bigger land of approximately 3 acres, but it has now reduced to an acre, since most of the people have now built their houses and very little land is remaining. I usually harvest about 15 to 20 by 50kg bags of maize grain from my field. This cushions us

> for most parts of the year, as we do not buy maize meal from the shops but take our own maize grain to the hammer mill for grinding.[63]

As seen from the reference above, urban agriculture plays an important role in providing a source of maize grain for some Lusaka residents. Other customers interviewed were of the view that escalating poverty levels and rising food prices in the city, combined with sluggish incomes, have caused household food insecurity and many urban households to turn to urban farming/agriculture as a complementary source of food for household consumption and for income creation. Furthermore, I observed that urban farming has surfaced as an informal entrepreneurial activity with the possibility of increasing household income and improving food security among residents of Lusaka city. The photo below shows some residents of Meanwood Kwamwena area in Lusaka district harvesting their maize from their field.

Figure 7.3: Residents of Meanwood Kwamwena area harvesting maize from their urban field

Source: Field photo by author

The above picture depicts a maize field on a land reserved for a school in Meanwood Kwamwena area. Meanwood Kwamwena is a newly developed area and still has several undeveloped pieces of land that

[63] Interview with female customer of informal maize millers held on 7th January 2023.

some of the residents utilise for their farming activities. This is in addition to the backyard gardens that they have at their homes.

Urban agriculture is not a new phenomenon in Lusaka. Growing up in Lusaka urban in the late 1980s and early 1990s, I witnessed the growth of urban agriculture, especially during the period of the structural adjustment programmes, when many people lost their jobs. Several households turned to urban agriculture, as they resorted to tilling any available pieces of unused land in the neighbourhood as a way of supplementing their daily food needs. This trend was so common that almost every household in the neighbourhood had a piece of land that they were using for farming. However, in recent years, most land was given out as plots for housing units leading to a shortage of land for urban agriculture in most parts of Lusaka. Consequently, the numbers of people practicing urban agriculture has somewhat reduced, but it is still common where land is available.

7.8 Conclusion

This chapter provided a detailed description of the strategies that informal maize millers use to survive competition. It has also highlighted the competition that informal maize millers face and concluded that informal maize millers continue to exist for a period of not less than five years, despite the competition and other adverse conditions they face. The chapter has made the following conclusions:

Firstly, the question of formalisation has implications for the survival of informal maize millers in that, for the informal maize millers to remain in business and make enough profits to be able to take care of their family needs, they must choose whether to formalise, partially formalise or remain informal. In this case, the informal maize millers choose to remain informal as a survival strategy, while a few others decide to partially formalise to reap some benefits that come with formalisation.

Second, in terms of survival in this sector, the chapter concludes that it is important, as evidenced from the material above that millers can service their hammer mills themselves and keep maintenance records. This strategy prevents them from being derailed by machine breakdowns and helps them to cut costs and remain competitive and able to survive in a competitive maize meal sector.

Third, maize products pricing is crucial for survival as hammer-milled maize meal remains cheaper compared to commercially milled maize meal. The point is that cheap mealie meal from *chigayo* makes the miller competitive especially at the time when the prices are rising fast. This is very important to the survival of informal maize millers, as market is readily available for their services, seeing that most people seek alternatives to escalating prices of the staple food.

Fourth, the chapter highlighted that informal millers produce a range of products depending on the requirements of their customers and what the market demands. This aspect of informal maize milling seems to be another important part in their quest for survival as they can meet the specific needs of their customers. Furthermore, by diversifying to other products, such as millet and sorghum, the informal millers have an alternative product that they can depend on when the maize milling business is not doing well.

Lastly, the chapter concludes that the commercialisation and increased consumption of *munkoyo* and *thobwa* beyond the traditional set-up has far-reaching implications for the survival of informal maize millers. This is because the materials needed to produce this drink are processed by informal maize millers and the increase in the consumption of the drink implies demand for the services of the informal maize millers. In addition, this also encourages growth among other players involved within the *munkoyo* value chain, such as small-scale farmers growing more of the crops that are used to produce this drink, as market is guaranteed, thereby, keeping the supply lines open. This then means that the informal maize millers will continue having customers, since the grain will be available on the markets for customers to buy and take to the informal maize millers. What is interesting is that, for *thobwa*, the raw materials are sorghum and millet, and these crops are drought-resistant. So, even in times when the country is faced with severe drought and maize grain does not do well and is in short supply, informal maize millers can still maintain their businesses through the processing of sorghum and millet.

In summation, this chapter has highlighted the survival strategies of the informal millers and showed that the millers do survive. The next chapter will prove this point by showing that most of the informal maize millers have existed beyond the threshold of five years. Their survival is anchored on their initial motivations when starting the business and the various strategies put in place. This conclusion is in line with the scholars who argue that the informal sector does survive competition.

Chapter 8. Factors influencing the survival of informal maize millers

8.1 Introduction

This chapter builds on the previous one which presents the motivations for starting the business and strategies for survival among informal maize millers. This chapter delves into the question on whether informal maize millers survive in an industry dominated by large-scale milling firms. As stated in Chapter 2 of the study, I use the structuralist school of thought and the concept of survival to explore the question of whether informal maize millers survive competition. The chapter is divided into seven main sections. The first section presents data and discuss the linkages that exist between the formal and informal sectors and shows how this affects the survival of informal maize millers. The second section presents data and discusses the cash inflow and outflow as a factor for survival. The third section discusses remaining informal as a survival strategy. It shows that with all the costs associated with formalisation, informal maize millers choose to remain informal to avoid the costs of formalisation. The fourth section discusses competitive maize meal prices and the survival of informal maize millers. The section shows that the pricing of informal maize millers is highly competitive and because of this, they can retain a lot of customers. The fifth section discusses the role of institutions and associations in the survival of informal maize millers. The section shows that associations and institutions play a very important role in addressing the welfare of their members. Having discussed the above factors affecting survival of informal maize millers, the sixth section then begins to discuss the challenges faced by informal maize millers in their milling business. The seventh section discusses attrition and the factors behind this. Having discussed the seven factors, I then conclude by making an argument that informal maize millers do survive competition though some exit the businesses.

8.2 Linkages between the formal and the informal: a structuralist approach

This section discusses the connections that occur between the formal and informal sectors in the light of the structuralist approach. The structuralist approach has been discussed in detail in Chapter 2 of this thesis. I will provide examples to show how the two sectors have been complementary of each other and the effects of this phenomenon. As seen in the preceding chapters, in times of economic disaster, there is a steady upsurge in informal income-generating undertakings, as individuals either lose jobs or seek to complement their earnings through informal income generating activities. Historically, individuals have always been involved in informal economic undertakings in a pursuit of building a “hedge” against the wave of economic involution. In an analysis of the effects of SAPs in Zambia, Saasa (1996) debates the negative effect of the country’s economic deterioration on the populace in general, and, specifically, on helpless groups, such as women and the working class. As seen in Chapter 3 of this study, as the formal part of the economy went through enhanced negative growth during the period of SAPs, more and more individuals moved into the informal segment of the economy to survive. Additionally, some people worked in both the formal and the informal sectors (Chapter 6). Among the informal millers, who operate in both the formal and informal sectors, money made in the formal area of the economy is sometimes put into informal economic activities. This is one example of how the two sectors have been operating side by side.

Furthermore, as described in Chapter 7, some supermarkets take maize grain for grinding to informal maize millers, which they repackage and brand for selling in their chain stores. This scenario is in line with the structuralist school of thought, which views the informal sector as being connected by nature to the formal sector since informal businesses are perceived to be inferior to formal and bigger businesses and permit them to decrease expenses and upsurge competitiveness (Godfrey, 2011). Furthermore, as stated in Chapter 2 of this study, this infers that the informal economy is an inferior economic component comprised of micro-businesses and workers with the objective of decreasing input and labour expenses in the formal sector, and, thus, growing competition of large capitalists' businesses. Consequently, the means and methods of production in the formal and informal sectors co-exist and are mutually dependent on each other. The type of capitalist advancement, rather than a lack of growth, is what leads in the growing of informal production relationships (Porta and Shleifer, 2014). Compared to the dual economy approach, the structuralist approach used in this study emphasises that the informal and the formal are not two different, separate economies. On the contrary, they occur within an extremely segmented single economy. By illustrating the connections that are there between the formal and the informal, this study has shown that it is erroneous to think of the so-called informal as separate from the formal and that the informal is helped to survive through the capitalist nature of the formal sector.

8.3 Cash flow as a factor for survival

Cash flow refers to the inflow and outflow of money in a business. This enables the business to settle debts, reinvest in its business, pay expenses, and provide a buffer against future financial challenges. Having a positive cash flow signifies that more money is coming into a business than going out. This aspect of a business is just as important as profit when it comes to determining one's business performance. It is important to note that one might have a high overall profit, but if cash flow is low, then there may still be problems, like overspending or ordering too much stock. For this reason, it is important to keep an eye on cash and cash flow. Against this background, the first factor for survival as brought out by the millers was their cash inflow and outflow. For example, a miller at Soweto Market stated:

> On a good day, we make about ZMK2000 if business is good. I can put an average that I make a day at ZMK1000. We make the ZMK2000 a day when we are operating at maximum

> capacity. In terms of expenditures, I spend a ZMK20 on lunch every day and pay ZMK5 market fees. My electricity costs are ZMK400 a month. I pay my two employees ZMK900 each a month. I pay above the minimum wage.[64]

Another miller at Garden Market said that he makes between ZMK500 and ZMK700 in a day. He stated that, "depending on how good the day is, we make between ZMK500 to ZMK700. But sometimes it's bad we can only make maybe ZMK300 or less. My worker gets ZMK700 a month. My electricity bills are around ZMK300 a month and we pay a market levy of ZMK3 every day".[65] Several other millers interviewed said that they made about ZMK1000 in a day while others categorically stated that they made ZMK700 a day. As will be seen in the next paragraph, this shows that informal millers make more money than they spend. In terms of costs, informal millers interviewed said they paid their staff ZMK1000 a month and for those who employ two or three people the cost would come to ZMK2000 and ZMK3000, respectively. In terms of electricity costs, three categories emerged from the data: that is, ZMK500, ZMK700 and ZMK1000 per day, depending on the workload for each miller. The market levies were at ZMK5 per day.

From the aforegoing, it is clear that, since the monthly income for the informal millers is much higher than the expenditure, this allows them to spend money on household needs, which is the rationale behind the majority of millers venturing into informal maize milling. The point here is that they have a healthy profit margin, which they achieve by reducing the cost of production, as seen in the preceding paragraph and in Section 6.6.4, which enables them to continue in business. For example, for those who stated that they make ZMK1000 a day, it means that in 20 days they make ZMW20,000. The total cost of labour, electricity and market levies was at ZMK1705. Subtracting ZMK1705 from ZMK20,000 gives ZMK18,295 as profit. This is what I refer to as a healthy margin. This was the general trend I observed in all the markets I visited. In addition to the money made from milling services, some millers venture into maize bran, which is an even more profitable business, given the growth of the poultry and animal feed sector in Zambia in the recent past. So, they earn money through the milling service and through the selling of maize bran. The average expenditure per month is K3150 inclusive of workers' salaries, electricity, servicing of hammer mills and market levies. As explained by one of the informal maize millers interviewed:

> The money I make through this business is enough to keep us going as a family. I can provide food for my family, pay school fees and other bills. I am probably even doing better than some of the people in formal employment. As you know, most civil servants in Zambia get about K5000 a month but for me I can make double this amount a month[66].

[64] Interview with hammer miller at Soweto Market conducted on 15th July 2016.
[65] Interview with hammer miller at Garden Market conducted on 12th September 2016.
[66] Interview with hammer miller at Garden Market conducted on 12th September 2016.

Several other informal millers interviewed said that the money they made was enough to sustain their livelihoods and have been surviving on the same for a long time. From the aforegoing, most of the informal maize millers interviewed survive on the income they make from their milling business, and this factor alone keeps them going. Furthermore, because of their competitive nature, the hammer millers can attract customers, as seen in Chapter 6, and this helps them have a steady flow of income. For this reason, remaining competitive in terms of pricing is key to their survival as it not only helps them maintain their customer base but also make enough income to attend to their daily needs and keeping the business operational, thereby, ensuring their survival.

Consequently, the issue of cash inflow and outflow is key in understanding the survival of informal maize millers. This is because it determines whether the informal millers make enough money to keep them going in their operations, while, at the same time, having enough to provide for their families.

8.4 Remaining informal as a survival strategy

As highlighted in Chapter 2, in the informal sector literature, there are four schools of thought that explain the existence of the informal sector and why it survives. In this literature, the ability to remain informal is seen as an important aspect of survival (Djankov et al., 2003; Heidenreich, 2007). As Djankov et al. (2003:66-67) put it:

> The main benefit from staying informal is the avoidance of (some) taxes and burdensome government regulations. Regulations impose both a direct cost in terms of fees or bribes to officials, and indirect costs measured in the entrepreneur's time spent on fulfilling various requirements and submitting documents. These costs differ enormously across countries.

The above statement is part of the legalist school of thought, which is of the view that, "informal firms choose to be informal to avoid the burden of taxes and regulations" (Ali and Najman, 2015:196). Some of my data agree with the above statement, as most informal maize millers would rather remain informal with the view of avoiding some taxes and burdensome government regulations (see Section 7.3). Within this school of thought,

> it is believed that the informal sector is willing to formalise if the government provides them property rights and alleviates registration procedures, and for this reason, they are not considered as a threat to formal firms. However, the voluntarist school of thought considers informal firms as a threat because they intentionally choose to be informal and are not willing to formalise, unlike the Legalist School (ibid).

It is against this background that these informal firms cause unfair competition and can take inefficiently executed market shares from more productive formal firms (ibid). However, as stated in Chapter two of this study, I use the structuralist school of thought, as I see the informal sector as complementing the formal. As seen in Chapter two of this thesis in terms of forward linkages, the formal sector in Zambia uses goods and services produced by informal workers and businesses as an input in their own production. For example, it was highlighted in Chapter 3 that big formal milling companies usually buy maize grain for stocking from several informal maize grain traders, who buy maize from the remotest parts of the country for supply to the millers. Consequently, I am of the view that the nature of capitalist development makes informal relationships inevitable. Evidence from my study (Section 7.3) supports the structuralist school of thought as some informal maize millers voluntarily choose to be informal due to the benefits it offers.

Some of the benefits of operating informally are that;

> profitability may be because one is avoiding paying direct and indirect taxes (mainly income tax and VAT), as well as social contributions Consequently, cost savings from tax evasion may allow informal businesses to sell at lower prices, making them more competitive with formal sector businesses. For this reason, some informal sector scholars often look at entrepreneurs' decision about whether to join the formal or the informal sector as rational profit-maximising behaviour. The rate of informality is likely to be higher when the benefits from operating in the shadows outweigh the costs (Fallah, 2014:187).

For this reason, Fallah (2014) “takes this argument further by observing that joining the informal sector is a strategic decision that also depends on competitors' reaction. The likelihood that an entrepreneur will formalise decreases if competitors tend to operate informally.”

Furthermore, several scholars have measured the effect of tax burden on the size of the informal segment. For example, Fallah, (2014, “using data for 14 Latin American countries, established that tax burden is positively associated with a larger informal sector”. In the same vein, Fallah (2014) highlights “evidence of a similarly positive tax effect using U.S. data, finding that increasing the income tax rate by one per cent expands the size of the informal sector by 1.4 per cent”. All these studies are in line with my findings as presented in Section 6.9 of this study.

Studies on the informal sector in Zambia are settled on the fact that the cost of doing business in Zambia is high compared to other countries in the region (CTPD, 2016; Mwango, 2019). With formalisation comes several taxes and other statutory regulations that are supposed to be paid to keep the business afloat and these businesses usually do not have the resources needed to sustain this (see Section 6.9). For example, as a matter of fact, once businesses are formalised/incorporated they are expected to submit returns and accounts regularly to the Zambia Revenue Authority, while this is not the case with informal businesses. Furthermore, “where necessary, audits by the tax office are carried out to verify the amounts in the accounts and returns” (ibid). Otherwise, for those that remain informal, costs are mainly associated with production and do not involve paying statutory obligations except for market levies, which are minimal. Consequently, most of the informal maize millers would rather remain informal and avoid these legal obligations that come with formalisation and keep their businesses operating (Section 7.3). This is in line with Porter (1979:301), who argues that, by "occupying strategic niches, small firms need not grow for them to survive but can remain small and avoid being confronted by a lower likelihood of survival through occupying a strategic niche". While government policy, as explained in most of the policy documents, is to move the informal sector towards formalisation (Mwango et al., 2019), it is clear from my study that, for some informal maize millers, remaining informal is a strategy that they are using to survive competition and remain in business (see Section 7.3).

8.4.1 Counter-views on remaining informal

Alternatively, while remaining informal is a survival strategy for most of those in the informal sector, there is some literature that highlights the negative consequences of remaining informal. "Conceptually, costs of informality represent the forgone benefits that businesses reap when joining the formal sector" (Fallah, 2014:89). Naturally, access to credit is important to entrepreneurship. This is "because it is necessary to finance day-to-day business activities, expand to new markets, help sustain long-term investment, and facilitate exchange via short-term credits" (ibid). Several scholars highlight the fact that informal businesses have challenges accessing loans (Fallah, 2016; Mwango, 2019). Informal businesspersons generally are not able to borrow from banks (Chapter 7), since this means presenting trustworthy credentials about business processes, financial declarations, and business permits, as well as, perhaps, information about dealers and customers, documents that they do not readily have.

Informal entrepreneurs in Zambia are struggling with business financing (CTPD, 2016). According to studies on the informal sector in Zambia (CTPD, 2016:56), "limited access to finance or loans limits the informal entrepreneurs' business operations. Still, informal entrepreneurs have weak links with financial services." In the Zambian case, this is exacerbated by a lack of a deliberate policy framework to guide the operations of the informal sector.

The aforegoing paragraphs show that avoidance of becoming formal is a strategy that most informal entrepreneurs, in general, and informal maize millers, in particular, use to remain in business. Against this background, I argue that some informal maize millers use informality as a survival strategy that keeps them in the business and facilitates continued operation and provision of services to the communities they serve, while providing employment to the owners and a few workers that they employ. However, informality has its own risks that threaten the survival of informal maize millers if not properly addressed.

8.5 Institutions and associations in the informal sector

In this sub-section, I discuss the institutions and associations operating in the informal sector and highlight their importance to the survival of the informal sector in general and informal maize millers. I define an association as a support system, in this case, as a business network or grouping of like-minded businesses that provides information and advocacy and attends to the general welfare of its members. My study established that informal maize millers operate in an environment, where they have no specific association to represent their specific interest as hammer millers which makes them very vulnerable. In all the markets visited during the study, there was no product specific association found that represented the hammer millers. In most cases, the market chairperson represented all traders in the market and, usually, the main pre-occupation of these officials was collecting levies from the marketeers and not much of taking care of their interests.

The role of institutions and associations in supporting the performance of the informal sector cannot be overemphasized. Through the process of snowballing, I came to learn of an association called Alliance for Zambian Informal Economy Associations (AZIEA) the purpose of which is to represent the interests of workers in the informal economy (IE) in general. However, in this sub-section, I argue that, while these general institutions and associations are important to the survival of the informal sector in general, product-specific associations are more effective and ably represent the plight of their members. This research outcome is in line with the findings of Mwango et al (2019), who are of the view that the product-specific associations played a critical role in representing the welfare of the informal workers in contrast to what AZIEA was doing. Furthermore, in emphasising the above point, Mwango et al. (2019:17) are of the view that

> [i]n addition to these national membership Organisations, vendors in Lusaka who trade in the same product join commodity-specific 'sections' (for example, the 'banana section' or 'cabbage section') to deal with product specific challenges. In discussions, vendors said they felt sections are much more effective for dealing with issues of common concern than associations. Surprisingly, these sections were not mentioned in the survey as a means of collective organisation. This could be because vendors avoid using a term that may link them to the highly politicised associations.

The above quotation highlights the point that product-specific associations are more effective in handling the needs of their members than general or national associations that purport to represent the affairs of all informal sector players. For example, in Sub-section 8.6.2 below, I have demonstrated how AZIEA represents the affairs of the informal sector, in general, but falls short of meeting the needs of the informal milling sector.

In summation, I have shown that social institutions and associations in the informal sector, in general, and informal maize milling are important in

> organising activities of the sector as they play vital roles. Like all institutions, informal sector institutions and relations have intended and unintended outcomes, are a basis for solidarity, have a degree of adaptability, are spaces of activism and are transformative. The challenge this section

poses to policy and practice is how to build on these important elements of informal sector institutions and relations, instead of imposing formalisation (ibid).

I end this section by stating that the informal social relationships and groups are the establishments of faith for the informal sector players in general and informal maize millers in particular for their capacity to organise markets and coordinate society through invention, reorganisation, and changing activities but add that product- or commodity-specific associations are even more effective.

8.6 Challenges in the informal milling sector

This section presents challenges that informal maize millers face in their day-to-day operations. The informal millers were asked to describe challenges they faced in their businesses. Several challenges came up, but the following were the ones that impacted on the survival of the informal maize milling sub-sector. Lack of access to FRA maize threatens the survival of informal maize millers in periods when maize is scarce. Secondly, a lack of business networks/associations is a threat to their survival, as they do not have anyone to represent them in their areas of concern. The third challenge is inadequate storage facilities, which make it difficult for most informal maize millers to buy maize in advance and store it for future use. Failure to reinvest in their businesses due to not making savings was also a challenge for most informal millers, except for those who were in formal employment. This is because most of them lived on a hand-to-mouth basis. The negative perception of the sector by the government officials affects its survival in that they are not able to fully access proper incentives from government, as is the case with the large-scale milling firms.

8.6.1 Lack of access to FRA maize grain

The millers highlighted several challenges but prominent among them was the failure of the FRA to grant them access to maize grain so that they can be able to buy and stock it themselves. According to a miller at Garden compound,

> [t]he main problem we have is that we do not have access to FRA maize so in times when grain runs out in the local markets where our customers buy the maize from, our business goes down. On the contrary, the big millers are given access to FRA maize, and it is usually subsidised so they can mill as and when they want. There is a period when maize is not easily accessible in the markets from November to March. During this period, our business goes down while the FRA concentrates on the large millers. There ought to be some fair play in all this.[67]

This view was repeated by several other millers who were concerned with government's biased approach in maize marketing. They felt that they were being disadvantaged by FRA's lack of fairness in the

[67] Interview with hammer miller at Garden Market conducted on 12th September 2016.

distribution of maize grain. For example, another informal maize miller at Chilenje Market alluded to the fact that

> FRA does not consider us in their plans. We provide an important service to the people, yet we are not given a chance to procure subsidised maize from FRA like the big commercial millers do. Our friends have access to subsidised maize grain and can afford to be producing even at a time when there is no maize on the market. It would be good if we can also be given priority to access maize from the strategic national reserves. Interestingly, even when big millers access maize grain from FRA, there is no reduction in the prices of maize meal as they keep increasing.[68]

It can be seen from the above quotations that the issue of access to maize grain from the strategic reserves under FRA is controversial, as most informal maize millers feel left out. This threatens the survival of informal maize millers, especially in times when maize is in short supply and only large-scale milling firms can access it through FRA. The informal millers cannot access the maize grain from the FRA as government strategy of reducing mealie meal prices over the years has been exclusive to the other group and is meant to provide subsidised maize grain to the big commercial millers, which they hope in turn will translate into cheaper mealie meal, even though this has not been realised. These agreements are usually signed between the FRA and the Millers Association of Zambia, an association, which is a grouping of big commercial millers. For this reason, these agreements do not consider the interests of informal maize millers.

Notwithstanding the above narrative, participants from the FRA narrated government's introduction of community sales. Community sales are meant to sell maize directly to households. Each household can purchase a maximum of two 50kg bags of maize grain. Ideally, the Food Reserve Agency (FRA) community sales are meant to help in mitigating the high prices of maize meal. Instead of complaining about the high prices and mealie meal shortages in supermarkets, most people would access maize grain from FRA and take to a *chigayo*. It's much cheaper and it would mean supporting the survival of this very important category of millers. However, the challenge is that these community sales are coordinated by District Commissioners and these commissioners are political appointees and usually partisan. Some participants complained that most of the maize grain under this scheme is sold to the ruling party loyalists, leaving out most of the people who are not connected politically.

8.6.2 Lack of specific business networks/associations

Another issue identified was a lack of specific business networks/associations, which could provide a support system to the informal maize millers. While informal maize millers have other social networks which they utilise, they do not have product-specific associations, which, according to my observations

[68] Interview with hammer miller at Chilenje Market conducted on 13th September 2016.

and the views offered by millers during our interviews, were crucial in supporting the agenda of their members. While other businesses had associations in the markets that I visited during data collection, such as the tomato traders' association, onion traders' association, banana traders' association and cabbage traders' association, which dealt with specific challenges unique to their groups, there was no similar association for the informal maize millers. In the course of my data collection, I also observed that several other traders had organised themselves into associations ,and these associations dealt with the issues affecting their members, which, to some extent, lightened up the burdens that members could be facing. For example, in the case of multiple levies in the markets, the association can stand in for its members and advocate for fair play. However, as for the informal maize millers, they face all challenges on their own, as they are not organised into an association. According to a miller at Chilenje Market, "we have no one to speak for us. We are basically on our own, we do not belong to any associations or grouping of similar minded businesses."[69] In all three markets where I went for interviews, I did not come across any association for the informal millers. This, according to the informal maize millers, disadvantaged them, as they could not approach issues affecting them with one united voice. An informal maize miller at Soweto Market stated:

> We are different from our friends who sell tomatoes and these other products. They have associations that help them out in their day-to-day operations. For example, these associations take care of the issues of pricing. They also help in dealing with the middlemen who are a problem in this market. In the case of any eventuality like funerals or any other emergency, the association comes in to help. On the contrary, us, we do not have any association to represent us. We operate as individual entities and face challenges on our own. It's just on issues of prices that we consult each other.

The statement above highlights the fact that the informal maize millers have no specific association to take care of their needs. The lack of an association was a common feature among informal maize millers in all the markets that I visited and a threat to their survival, as they do not have anyone to represent them in their areas of concern. This challenge applied to all the categories of hammer millers. Even the well-resourced ones operated on their own without forming or joining any existing networks.

While AZIEA claims to speak for all the specific associations in the various markets of the country, in all the markets I visited there was no single association for informal maize millers that could affiliate to AZIEA. To shed more light on AZIEA, it is a national alliance of associations working in the informal economy. The "members of AZIEA consist of street vendors, market vendors, agriculture/fishery workers, carpenters, visual artists, cross border traders, stone crushers, tinsmiths" (WIEGO, 2017:5). The main objective of AZIEA is to protect and promote members' interests and organise the unorganised. It also

[69] Interview with hammer miller at Chilenje Market conducted on 13th September 2016.

organises “all associations engaged in the informal economy in Zambia. It promotes a spirit of unity and solidarity among members and negotiates for better working environment with Local and central government. It has a vision to promote the full recognition and protection of informal economy workers in community and National development” (ibid). Furthermore, according to WIEGO (2017), the strategy AZIEA is using to execute its objectives is to ensure they organise all IE workers into one formidable organisation. However, AZIEA faces several challenges as it tries to realise its objective. Some of these challenges, as explained by the participants are: difficulties in convincing government of the necessity to have guidelines and rules that are encouraging to the informal workforce. and to enable the members to participate in national programmes and develop their businesses and they are usually left out of the planning process. The respondent from AZIEA was asked what some of the problems were, which were faced by their members in the areas they operate from. The response was that the absence of services in markets and other places of work, non-consultative decision-making practices, and harassment by officials; dearth of security, appreciation, exemplification, and unfriendly laws worked against the welfare of the informal workforce. Furthermore, the respondent stated that, in 2004, the Zambia Congress of Trade Unions (ZCTU) accepted the AZIEA as an associate member. The interviewee was of the view that “AZIEA’s membership in the ZCTU has given the informal economy a higher profile and has provided AZIEA with a critical link to the government.”

From the aforegoing, AZIEA plays an important role in lobbying for the rights of its members through its advocacy engagement with government as well as its affiliation to the Zambia Congress of Trade Unions. The sad reality, however, is that, in all the markets, where I conducted this study, informal maize millers had no single association and did not report any links to AZIEA, which disadvantages them, as their issues are not included in the advocacy campaigns that AZIEA conducts with government and other relevant institutions. This, in turn, threatens the survival of informal maize millers, as they have no platform to air their grievances or seek support in times of need. For those informal traders dealing in other food stuffs and having associations. which are part of AZIEA, there are benefits through technical support offered in seminars organised by AZIEA. What AZIEA does is to bring experts from various institutions, who come to give business talks to their members, and not having an association that can affiliate to AZIEA means that the informal maize millers are losing out on the vital information and training that can help to grow their businesses.

8.6.3 Lack of storage facilities

Inadequate storage facilities also emerged as a major challenge among informal maize millers in Zambia. While a few informal millers interviewed had storage facilities, which could accommodate 100 x 50kg bags, the majority of those interviewed did not have any storage facilities. The millers either kept the maize bags brought by the customers within the same room of operation or they kept them outside, as they waited to have them milled. A miller at Chilenje Market was of this view:

> We do not have a separate storage facility except for this one where we are milling from. As you can see, we have all this maize that needs to be worked on in here and the other bags left by customers are outside. They will come and pick [up] them in the evening. If we had proper storage, we could be buying maize as well in advance and stock it so that our customers can be buying from us, a sort of one-stop-shop. But for now, we cannot do that because we have no storage.[70]

The complaint on storage kept on coming from other informal millers interviewed. I observed from a few from Soweto Market, who had the makeshift storage facility, that they were able to stockpile maize bran in large quantities for export to Botswana.

Through from my observations, the informal millers have been surviving even without adequate storage facilities as evidenced by the number of years they have been operating. This seems to be a risk to their continuance in business because they are always at the mercy of market forces since they cannot buy and stockpile products for long periods. So, even in periods, when maize grain is cheap, they cannot buy in advance. The next section will highlight the lack of trained personnel to run the hammer mills.

8.6.4 Lack of formally trained personnel to run the hammer mills

This section highlights the lack of formally trained personnel to run the hammer mills. Almost all the informal millers interviewed said that their staff had no prior training in handling the hammer mills, but it was on-the-job training. So, even when it comes to servicing the hammer mill, the operators had no training but still went ahead and did the servicing as they were expected to be doing this as part of their duties. For example, when asked whether he had received any form of training to carry out the servicing of the hammer mills, an informal maize trader at Soweto Market stated: "I did not have any training. These are things that we learn to do by ourselves though it is very difficult to figure out what the problem may be with the machine sometimes."[71] This challenge was common among all informal maize millers in the three markets that I visited for data collection. The millers took this direction as it was cheaper for them to hire these people compared to getting well trained and experienced staff.

From my observations in the field, though lack of formally trained personnel emerged as a challenge, it did not affect the informal maize millers very much in terms of survival, since the on-the-job training seemed to be very effective as evidenced from the testimonies of the informal millers themselves. What I observed was that, as these unskilled people grew on the job and became skilled with experience, there

[70] Interview with Hammer miller at Chilenje Market conducted on 13th September 2016.
[71] Interview with hammer miller at Soweto Market conducted on 2nd September 2016.

is now a reservoir of skilled operators ready to take up newer challenges in the informal milling sector. Consequently, though lack of formally trained personnel was a challenge, it has had some positive effects, as it has had the unintended effects of producing a reservoir of skilled hammer mill operators over time.

8.6.5 Lack of savings and access to finance

Failure to make savings from the money realised from the business was another serious challenge. It seemed that most of these businesses were a hand-to-mouth type of business, which made it difficult to expand. This seemed to be a very big issue for most of the hammer millers except for those, who were in full employment and running hammer mills as well, or those who were operating at a slightly higher level than the rest. Hammer millers were of the view that their growth in the sector is hampered, as they utilise all the money they make to buy basic needs at home instead of reinvesting the money. The following was the response from an informal miller at Garden Market when asked how they use the money realised from the hammer mill:

> I make enough to help me get by. It is this same business that feeds us as a family so whatever I make money we use it to buy food at home and to educate my children. I don't manage to save anything as the money is not enough for us to get enough food and save at the same time. Otherwise, I am grateful because this business is making us live a decent life, otherwise it would have been worse.[72]

However, it can be seen from the data above that, although hammer millers interviewed fail to grow their businesses due to what they called "hand to mouth", they are still able to survive and remain in business, as what they make has so far proved enough to provide for their daily needs and keep the business running.

Another informal maize miller at Chilenje Market said:

> Life is tough, my brother. We must struggle to make ends meet. This same hammer mill is what helps me and my family to meet our daily needs. The money I make from here is the one we use to pay school fees for our children, buy food and other necessities at home. At the end of the day, you can't remain with anything to save. This business, though, I must say, has really helped us in this hard economy.[73]

These challenges were common with most of the informal maize millers across the different markets from where the study was conducted. This is a risk to the continued survival of informal maize millers as there is no proper reinvestment being done by most of them due to what they described as hand to mouth. The following section will present the perceptions of government officials on the informal sector.

[72] Interview with hammer miller at Garden Market conducted on 12th September 2016.
[73] Interview with hammer miller at Chilenje Market conducted on 13th September 2016.

8.6.6 Perceptions of government officials of the informal sector

The last challenge affecting the sector, as observed through my interactions with government officials and the informal millers and through the interviews, is that the government does not have a deliberate strategy to support operations of the informal milling sector. Besides the lack of a deliberate strategy, the government officials also seemed to have a negative view of the informal sector in general, which I concluded was a big risk to the informal millers remaining in business.

The first government office to be interviewed was the Ministry of Agriculture (MAO), which was chosen as one of the participants from among government ministries because of its primary role in designing and implementing government policies and programmes in the agricultural sector. Specifically, the Director of Agribusiness was interviewed. The activities of the informal maize millers and traders are directly linked to this ministry because the traders are engaged in the sale of agricultural products, in this case, maize grain. When asked what incentives the ministry has for informal maize millers to make them competitive, the Director of Agribusiness had this to say:

> The operations of this ministry are guided by the Second National Agricultural Policy which is reviewed in the policy framework section. It is the desire of the ministry to see that agribusiness produces and commercialises in an environment with clear rules that are predictable and stable, relegating government's role [to that] of facilitator and a provider of an enabling and supporting environment through the provision of incentives for productive activities. However, it is very difficult to include informal traders in the incentive structures in place, as they are not known. For instance, when there is a shortage of maize grain during the lean period and the government through the Food Reserve Agency (FRA) offloads maize to millers to stabilise prices, the focus is on the large well-established millers and not the hammer millers who are not registered and [whose] location is unknown.[74]

Considering the above narrative, the focus of the Ministry of Agriculture is on the big millers and not informal maize millers. This threatens the survival of informal maize millers especially during the lean period when there is shortage of maize grain and government only offloads the FRA maize to well established big millers.

In addition to the Ministry of Agriculture, the Ministry of Commerce, Trade and Industry (MCTI) was also selected among the participants, as it is the principal government body for administering national policy for private sector development. The key informant from the ministry was asked what the view of the ministry was in terms of the informal sector, in general, and informal maize millers, in particular. The following was her response:

> The Ministry is in the process of 'formalising' the informal sector by creating a Simplified Registrations System (SRS) aimed at capturing information on informal sector players

[74] Interview with the Director of Agribusiness at Ministry of Agriculture conducted on 25th April 2017.

> including informal food traders. This system is aimed at capturing basic information about the trader including their location (market) and the types of commodities engaged in. This exercise is supposed to include all traders in the markets and not just informal maize millers. As a ministry, we see this as a significant step because of the challenges we encounter when it comes to planning for informal traders. The informal traders 'are not known'. For us to be able to provide any form of intervention to this segment of the economy, there is need to know how many people are involved. For example, one of the recent events I can cite is where several markets across the country were burnt down and it was difficult to compensate the traders due to the challenges associated with ascertaining who was genuinely trading in those markets. Therefore, as a ministry we believe that with the SRS in place, it would be much easier to handle the informal sector.[75]

It can be noted from the above quotation that the MCTI views the sector as one which needs to be formalised for it to be well accounted for. However, some informal maize millers see formalisation as a threat to their survival in business. Remaining informal is more of a survival strategy for them as they avoid the payment of so many fees, which come with formalisation. For example, an informal maize miller at Soweto Market had this to say when asked if he would love to formalise his business: "As a small business, I am more comfortable operating informally. I don't have to bother myself with the annual renewal of licences with the Patents and Registration of Companies (PACRA) or annual tax returns that are required for most formal businesses."[76]

Lastly, in a quest to assess the government's revenue collection from the informal sector and how this affects the survival of informal maize millers, the Zambia Revenue Authority (ZRA), which is a semi-autonomous agency established under the Zambia Revenue Authority Act, Chapter 321 of the Laws of Zambia for purposes of revenue administration, was also approached for an interview. The authority was represented by Senior Economist-Revenue Policy and Coordination. The respondent was asked what strategies or programmes they have in place for the informal sector. The following was his response:

> As a nation, we have undertaken several tax reforms since the early 1990s with a view to broaden the tax base. The informal sector was identified as one of the key avenues to raise tax collection though it remains a challenge to adequately tax this sector due to its informal organisational structures and the formal means used by government to capture the revenue. In 2004, informal sector taxation was introduced, starting with the Presumptive Tax on taxis and minibuses and the Turnover Tax on small-scale enterprises. After some time, a Base Tax on marketeers, the category under which the informal maize millers fall, was introduced covering the bulk of informal food traders. The revenue collected from the informal economy has been very minimal compared to the contribution of the formal sector.[77]

Furthermore, the respondent stated that the informal sector in Zambia presents many challenges for tax collection. Some of the key challenges highlighted were low tax registration compliance: "Most players

[75] Interview with Ministry of Trade, Commerce and Industry conducted on 20th April 2017.
[76] Interview with hammer miller at Soweto Market conducted on 18th July 2016.
[77] Interview with Senior Economist-Revenue Policy and Coordination at ZRA conducted on 25th April 2017.

among the informal sector in general and informal maize millers in particular are not registered for tax implying that they are breaking the tax law," stated the respondent. He went on to say that "even those that are registered, tax compliance levels are low". Lastly but not least, the respondent was of the view that "the authority also faces language barriers in conducting effective tax education for the informal sector players due to high illiteracy levels among this group."[78] Consequently, most of the government departments do not have a favourable view on the informal sector, in general, and informal maize millers. This is a threat to the survival of informal maize millers, as the likelihood of government coming up with plans or policies to stifle the growth of this sector is high, as seen from the plans to formalise the sector.

Considering the above narratives, it can be inferred that the negative perceptions of government officials of the informal milling sector affects the competitiveness of the sector and, therefore, puts them at risk of dying, as they are not able to fully access incentives from the government as is the case with the large-scale milling firms.

8.7 Competition from the big millers

As highlighted above and in the preceding chapter, informal maize millers face stiff competition from the big millers, who buy and produce in bulk and, thereby, enjoy economies of scale. Additionally, the playing field between the informal and the big millers is not level, as the big millers enjoy support from the government through the FRA, where they are able to access subsidised maize meal. It has further been highlighted in the preceding chapter that the big millers are able to access funding from the banks to invest in their businesses, a privilege that informal maize millers do not enjoy. All the privileges stated above highlight the fact that the big millers operate at an advantaged level s compared to the informal maize millers. However, despite all these advantages by the big millers, the informal millers survive because of the factors highlighted in the preceding chapter and discussed above.

8.8 Survival in the informal milling sector

As seen in Chapters 6 and 7 of this study, attrition among informal maize millers is low, as most of the informal millers survive through several different strategies. These strategies, which have been discussed in Chapters 6 and 6 ensure that the informal millers are able to compete with big millers and remain in business. The informal maize millers interviewed during field work said that they had existed beyond five years, while some were still within the five-year window period. Table 8.1 below shows the informal millers from the selected markets and the years they have been in business:

[78] Interview with Senior Economist-Revenue Policy and Coordination at ZRA conducted on 25th April 2017

Table 8.1: Informal maize millers and their survival status

Sampled markets	Informal millers' participants	Year when business started	Status of business	Survived or not
Soweto	Interviewee 1	1998	Grown	Survived
	Interviewee 2	1996	Grown	Survived
	Interviewee 3	2005	Grown	Survived
	Interviewee 4	2010	Grown	Survived
	Interviewee 5	2010	Declined	Survived
	Interviewee 6	2012	Declined	Survived
	Interviewee 7	2009	Grown	Survived
	Interviewee 8	2017	Ongoing	Was still within window period at the time of data collection.
	Interviewee 9	2016	Ongoing	Was still within window period at the time of data collection.
	Interviewee 10	2018	Closed in 2020	Failed
	Interviewee 11	2019	Closed in 2021	Failed
Chilenje	Interviewee 12	2012	Declined	Survived
	Interviewee 13	2012	Declined	Survived
	Interviewee 14	2003	Declined	Survived
	Interviewee 15	2002	Grown	Survived
	Interviewee 16	2006	Grown	Survived
Garden	Interviewee 17	2009	Grown	Survived
	Interviewee 18	1999	Remained the same	Survived
	Interviewee 19	2007	Remained the same	Survived
	Interviewee 20	2012	Remained the same	Survived
	Interviewee 21	2011	Declined	Survived
	Interviewee 22	2001	Grown	Survived

Source: Author's own compilation.

The table above shows that eighteen of the twenty millers interviewed had gone beyond the five-year survival window, while two were still within the window period. This understanding is in line with what I observed and what I was told by participants while doing my field work; that there is very low attrition in the informal milling sector in the targeted markets. For example, during my field work in Lusaka, I took time to find out from the existing millers and other marketeers whether there were any millers, who started doing the milling business in the market but stopped within five years. Five years was the benchmark set for survival of informal maize millers in this study, as highlighted in Chapter 2 of this thesis. The responses were negative in all the markets I visited, except for Soweto Market where I was told that two millers operated for only a year. I asked the respondent whether he had any contacts for these millers who stopped, but said no and any further attempts to find the contacts with the view of interviewing these millers were unsuccessful. Consequently, I asked the respondent at Soweto Market whether he had any idea why the two millers stopped operating, to which he replied that he did not know.

Furthermore, I asked the respondent at Soweto Market why there seemed to be low attrition among informal milling businesses in the market and his response was as follows:

> Milling business is very good because people always need to eat. If there is maize grain available in the markets, we always have customers. This encourages us to remain in business, since this is what makes us provide for our families. In my understanding, this is what I think explains why very few businesses stop operating.

The narrative above explains why the attrition levels are so low in the informal milling sector as seen from the evidence collected during field work. It can be seen from the narrative that informal millers make enough to sustain their families, hence, they continue to operate if they are able to make some money to meet their daily needs. Over 90% of the millers interviewed survived the first five years of operations and this is attributed to the profits that they make from the business. Furthermore, as highlighted in Chapters 6 and 7 of this study, the informal maize millers have devised strategies that have made them very competitive and able to weather harsh conditions. In terms of the survival of informal maize millers, this is important in that it shows that informal maize millers can make enough from their businesses to take care of their families.

8.8.1 Attrition in the informal milling business

Though the study found that most informal millers survive, there were a few who did not make it beyond five years of existence in the business. The first reason to which the failure could be attributed is poor quality of hammer mills. Some interviewees alluded to the flaws of their hammer mills as reasons for closing their businesses. For example, an ex-informal maize miller at Soweto Market but now involved in vegetable selling at the same market stated:

> My hammer mill was giving me problems. Probably it was of poor quality. It had defects and shortcomings that meant that we were running our businesses at minimal profit levels and eventually at a loss. Basically, this is because of the hammer mill being an old design. The type of mill we owned was like those which were first invented and manufactured in Britain and the United States of America in the early 1930s and brought into Africa by the settlers. There has not been any significant improvement in their designs or means of processing. For me, the use of old-fashioned hammer mills by millers, who cannot afford to buy the latest designs, which are very expensive, constitutes the biggest obstacle confronting the

> informal millers with low capital. Additionally, a friend of mine who is more familiar with hammer mills told me that the hammers for my hammer mill were made with inferior raw material and, thus, lack the required technical properties. He further told me that the recommended material used to produce contemporary hammer mill hammers is called austenitic manganese steel.[79]

The above reference shows that inferior hammer mills are a contributing factor to some of the informal maize millers dropping out of business. Some of these hammer mills are made right in the local markets using cheap recycled materials obtained from scrap metal, while the more durable ones are stocked in big agrobusiness shops, but are usually expensive and beyond the reach of some of the informal millers with low capital. The use of these low-quality hammer mills results in failure of these millers to effectively compete and eventually not being able to continue with the business.

The second reason for failure was attributed to lack of sound business knowledge among some informal maize millers. According to a miller at Soweto Market,

> [d]ue to a lack of competent employees, productivity can decrease and result in slower production times, heightened operation expenses, and other implementation issues. In addition to that, the skills gap can impact an informal miller's capability to stay viable in the market.[80]

It can be seen from the above quotation that a lack of sound business knowledge contributes to the failure of informal maize millers, as productivity decreases, leading to other operational challenges. Furthermore, after reviewing some of the common reasons that some informal maize millers failed to go beyond the five years threshold, I summarised the most common reasons, which might help to prevent many informal sector enterprises from failing. Some of the issues that emerged from the interviews are related to learnable entrepreneurial skills; others relate to individual attributes, customs, or self-damaging beliefs, which are difficulty to alter, apart from through training or other self-improvement work. Below is a summary of the reasons that some informal maize millers failed to survive:

1. **Confusing a business for leisure:** Just because you love something does not mean you should transform it into a business. Very frequently businesses fail because the proprietor feels their enthusiasm is shared by others. They do not research their business ideas and make sure they

[79] The exceptional properties of Hadfield's austenitic manganese steel with configuration 1.2% carbon and 12-14% manganese is great power and extraordinary durability, resistance to depreciation and substantial impact loading that makes the steel very valuable in many applications, such as crusher jaws, impact hammer, rail roads and grinding mill liners (Ajuwa et al., 2014).
[80] Interview with former informal miller at Chilenje Market, female aged 50, on 23rd January 2023.

are viable before embarking on them. For example, do others want or need what you are selling at the price you want to sell it?

2. **Disorganization:** Many informal maize millers did not have business plans to guide their operations, and this affected the way they worked. A business plan is important in any business operation. It can be a simple three-page plan or a huge 40-page plan. One must look at all the features of the business and must be prepared to manage troubles when they occur. The business plan helps in focusing on the goals and vision, as well as developing plans to accomplish them.
3. **Not diversifying products:** Too often, the informal millers who failed had just one product, one service, or one type of client. They held on tightly to this one thing because it brought in good income. But what if the one thing faces challenges or disappears? Variety and diversification will cushion them against the ebb and flow of business tides, but these millers did not have this.
4. **Poor record keeping and financial controls:** This was another challenge identified as having affected the businesses that failed. They did not keep financial and business records and did not review their revenue and expense report each month.
5. **Wrong location:** The millers who failed also attributed their failure to location. They argued that their location was not convenient to their customers, hence, this affected their business. They had challenges with things, such as traffic patterns and parking, which resulted in many customers failing to access them.
6. **Competition:** This was mentioned as one of the major challenges that affected the millers who failed. Mainly, clients will go where they can find the best products and services. It's important for millers to know who their competition is, what they have to offer, and what makes their own products or services better. However, millers who failed did not understand this aspect.

8.9 Conclusion

In conclusion, the chapter has proved that informal maize millers do survive competition from large-scale milling firms. It has done this by illustrating that eighteen out of 20 millers interviewed had been in existence for more than five years, while the other two were still within the window period of five years. The chapter identified several factors that affect the survival of informal maize millers.

Firstly, the chapter has shown that the informal sector is connected to the formal sector since informal businesses are subordinated to formal and bigger businesses and allow them to lessen expenses and upsurge competitiveness. Compared to the dual economy approach, the structuralist approach used in this study emphasises that the informal and the formal are not two different, isolated economies. On the contrary, they occur within an extremely segmented unitary economy. By illustrating the relationship that exists amongst the formal and the informal segments, this study has shown that it is erroneous to think of the so-called informal as separate from the formal and that the informal is helped to survive through the capitalist nature of the formal sector.

Secondly, cheap mealie meal from the hammer mill makes the informal millers competitive, especially at the time when the prices are rising fast. This is very important to the survival of informal maize millers, as market is readily available for their services, since most people seek alternatives to escalating prices of the staple food. Third, cash inflow and outflow. The issue of cash inflow and outflow is important in understanding the survivability of informal maize millers. This is because it determines whether the informal millers make enough money to sustain their operations, while, at the same time, having enough to provide for their families.

Fourth, the avoidance of becoming formal is also a factor that enables most informal entrepreneurs, in general, and informal maize millers, in particular, to remain in business. For this reason, it argues that some informal maize millers use informality as a survival strategy that keeps them in business and, hence, able to continue operating and providing services to the communities they serve, while providing employment to the owners and a few workers that they employ. Nevertheless, the chapter notes that informality has its own risks that threaten the survival of informal maize millers if not properly addressed.

Fifth, removing government interventions, especially FRA trade regulations, would invite additional ventures into the informal maize sub-sector value chain, including manufacturing, transport, warehousing, and milling. Once this procedure is clearly managed and sustained, it is expected to lead to price steadiness, which benefits both customers and farmers, at very low cost to the national treasury. This is very critical to the survival of informal maize millers in that they would be guaranteed of the availability of maize grain to the consumers and therefore guarantee availability of business to the informal maize millers, while keeping prices low to the advantage of the customers. The consequence of FRA's actions on the informal segment when left unchecked can result in suffocating the informal millers and driving them out of business. This is because, by FRA securing much of the available excess and suppling it at subsidised rates to a few privileged large-scale milling companies, the informal segment, which consists of small-scale traders, retailers, and hammer millers, are effectively thrown out of business. This results in the milling sector being dominated by large scale companies, who increase their prices without the fear of losing out on business to their informal counterparts. Consequently, several vulnerable customers are deprived of a source of less expensive mealie meal in times when commercial maize meal prices escalate.

Sixth, the social institutions and associations in the informal sector, in general, and in informal maize milling are important in organising undertakings of the sector as they play vital roles. Informal sector organisations and affairs have planned and unplanned consequences, are a foundation for unity, have a grade of flexibility, are places of engagement and are emancipatory. The test that this chapter presents to procedure and practice is how to work on these vital rudiments of informal organisations and relationships, as an alternative to forcing formalisation. The chapter further shows that the informal social relationships and links are the foundations of optimism for the informal segment, in general, and informal maize millers, in particular, due to their capacity to organise markets and coordinate society via fabrication, reorganisation, and emancipation undertakings, but adds that product- or commodity-specific associations are even more effective.

Seventh, I argue that the informal millers are faced with numerous challenges, such as lack of storage facilities, negative perceptions from the government, lack of access to FRA maize grain, and lack of informal milling associations which are a risk to their continued existence as small, informal businesses. In conclusion, the informal sector, on the whole, survives competition, while there are a few businesses that don’t survive because of the challenges mentioned. In the next and final chapter, I will be discussing the insights emerging from the study before developing the overall thesis argument and conclusion.

Chapter 9: Informal maize millers in Zambia: Beyond survival?

9.1 Introduction

This chapter presents the key findings and conclusions of the study. It also discusses the implications of these findings in the broader debates on the informal economy and the informal maize millers. It briefly returns to the focus of the study, particularly its objectives and location within scholarly debates on the informal sector and survival. The main findings of the study are, firstly, that informal maize millers survive competition from the big millers; secondly, that informal maize millers have adopted various strategies to survive as business enterprises; third, that informal millers have unique advantages over big millers; fourth, that informal maize millers cater for different categories of customers (low-, middle- and high-income customers); fifth, that informal maize millers choose to remain informal as a survival strategy in the business environment; sixth, that unsupportive regulatory and policy environment pose a risk that would lead to attrition in the informal sector if not addressed; and lastly, that informal maize millers are diverse. The last part of the chapter provides the overall conclusion to the study.

9.2 Focus of the study

The study sought to provide insights regarding practices of the informal sector in a competitive environment using concepts of informality and survival. The study specifically looked at informal maize millers in Zambia's Lusaka District of Lusaka Province as a case study. Though the subject of the informal sector has received much attention in recent years from both academics and non-academics (Chapoto, 2012), much of the academic literature has concentrated mainly on the traders, street vendors and other retailers (ibid). Scholars that have attempted to do some work on the informal maize sector have focused mainly on maize traders, and between small-scale producers and large millers (Burke et al., 2011). It is against this background that this study entered the broader informal sector debates by focusing on whether informal maize millers survive in an industry dominated by large millers. No comprehensive studies have been published on the informal maize millers and how they survive competition from large millers, thus making this study timely. The study examined the reasons that lead to survival or lack of survival for the informal maize millers by engaging business owners, employees, informal milling associations, government officials, and customers of informal maize millers. The study sought to address the following main research questions:

1. What is the long-term survival rate of informal maize millers in the presence of competition from large-scale milling firms, and what are the key factors contributing to their survival or exit from the industry?

2. How do the internal characteristics, such as operational efficiency, management practices, and access to resources, influence the survival and sustainability of informal maize millers in a competitive industry?

3. What are the external factors, including market conditions, regulatory environment, and customer preferences, that significantly impact the survival prospects of informal maize millers in an industry where large-scale milling firms hold a dominant position, and how do informal millers adapt to or mitigate these external pressures to ensure their continued presence?

In response to the questions above, this case study demonstrates that informal maize millers do survive competition from the large-scale milling firms and that the majority of them continue to exist for more than five years after initial entry into the market. However, the study also found that two of the twenty-two informal maize millers interviewed did not survive competition and their businesses died within five years of operations. In the next section, I discuss the key findings emerging from the study.

9.3 Key findings

This section examines each of the findings as outlined in the chapter introduction above.

9.3.1 Informal maize millers survive competition.

The most important finding of this study and one, which directly responds to the main research question, is that informal maize millers survive competition from the big millers. As seen in Section 8.8 of the study, the 18 of the informal millers interviewed had gone over the five-year survival window, 2 were within the window period, while only 2 had failed to go beyond 5 years. This scenario is very high and unique in the informal sector, where the attrition rate is high, 75 to 90 per cent in the first five years, as shown in Chapters 2 and 3 of this study. As explained in Section 8.8, the survival rate in the informal milling sector is high, since maize meal is Zambia's staple food and most of the people consume it, thereby providing a consistent market for the informal millers. Furthermore, as discussed in Chapters 7and 8, informal millers have adopted various strategies, which has led to high levels of survival in the informal maize milling sector. Subsequent findings discuss factors that explain the high levels of survival.

9.3.2 Informal millers have adopted various strategies to survive in the business.

The second finding of this study is that informal maize millers have adopted various strategies to survive in a competitive environment.

9.3.2.1 Understanding operational needs

The first strategy is that understanding of operational needs contributes to the survival of informal maize millers. As such, the study found that close owner supervision, knowledge, and skills on servicing of the hammer mills played a key role in the survival of informal maize millers. It was further found that to remain operational, hammer mill operators or the owners must be conversant with the servicing of the hammer mills. As presented in Section 7.2.2.1 of the study, the informal maize millers need to continuously monitor different aspects of the milling process for them to reduce costs and ensure maximum utilisation of the available resources, thereby reducing on the operational costs. The study further found that, for instance, informal maize millers who knew how much diesel is needed for a given tonnage of mealie meal to be produced were more efficient in their operations than those who did not know (section 7.2.2.1). Furthermore, the study found that even those who use electricity in their operations should be able to monitor the load shedding schedule and the use of electricity units so that they can properly plan for their production without risking the hammer mill stopping unexpectedly or overcommitting to customers. These informal maize millers mastered this process very well and were able to plan their activities according to power cuts, thereby, being able to survive during a very difficult period of load shedding. They were able to do so because of spending most of the time at the hammer mill and observing how operations were going. These findings are like those of Kozan et al. (2012), who found that owner's sacrifices, such as spending time on their business, was important for survival.

This study showed that owners, who understood the safety or hygiene needs of their business, were more likely to implement preventive measures and survive than those who did not (section 7.2.2.3). This safety is not only in terms of operations but also the products being produced. It was found that those, who operated in a clean environment and properly stored their maize products, attracted more customers, who considered safety when taking their maize meal for milling (section 7.2.2.3). The study found that this aspect alone increased the customer base of these millers compared to their colleagues, whose surroundings were not considered very hygienic by the customers.

Concerning the operational safety issues, such as avoiding accidents through leakages and unsafe connections (7.2.2.3), the study shows that understanding safety issues by informal millers is important to their survival, as this helps them avoid accidents that would lead to the loss of their investments, thereby, putting them out of business, since most of them have not insured their businesses.

Consequently, I demonstrate that ensuring that the place is safe through constant maintenance is very important for the survival of hammer millers. This is because, if safety measures are not put in place and properly adhered to, the risk of fire breaking out is very high, which can lead to the loss of investments and even life of hammer mill operators. Fire breakouts are a common occurrence in the informal markets, and strict adherence to safety measures is what has been helping most of the informal maize millers to avoid these accidents.

9.3.2.2 Networks

The second strategy is that business networks were a contributing factor to the survival of informal maize millers. These networks make it possible for some of the informal millers, who are well connected, to access business from government and other big institutions, such as schools and hospitals, to supply them with different types of maize products. As highlighted in Chapter 7 of this study, some informal maize millers indirectly supply their products to government through their connections, who are registered and have links with these government institutions. In other words, they supply through registered entities, with whom they have agreements, and they do not have to produce any legal documentation, as these are covered by the organisation, with which they are partnering. This scenario is an example of a structural system. As stated in Chapter 2 of this study, the structuralists admit not only that the informal and formal economic happenings co-exist, but that the association is one of interdependence of the diverse practices of production (Tamukamoyo, 2009). That is, big capitalist businesses, which are capital and technology concentrated, contract out some of their undertakings to much smaller labour-intensive businesses (Castells and Portes, 1989; Tamukamoyo, 2009). Appointing informal labour is perceived by formal initiatives to cut on labour and other associated expenses, and it is contended that it leads to the dropping of industry wage standards (ibid). Evidence does demonstrate that there has been an upsurge in the quantity of domestic workers, who are contracted by big businesses in Australia, Britain, India, and South Africa, among others (ibid).

Furthermore, some features of the informal maize millers, such as their differentiated nature, enhance their capacity to form and utilise business networks as strategies for survival. For example, although informal maize millers are mostly operating in the same place (the markets), they are highly differentiated. Their various socio-economic backgrounds, such as education, lead them to utilise business connections differently. The study found that those informal millers, who have some education, find it easy to interact with and make connections with people in government institutions compared to the millers who are not educated. For example, in Section 5.5.3 of this study, it shows that informal maize millers, who are educated perform better than those who are not. This finding is like findings of other studies, which show that education gives advantage to those informal traders, who have it compared to those who do not (Mwango et al., 2019). This finding is in line with the conceptual framing of survival in Chapter 2 of this study, which states that the informal sector highlights three important areas affecting the survival of informal sector businesses: (1) firm characteristics; (2) owner characteristics; and (3) contextual or external factors, which may mean the environment in which the owners and businesses operate (Raj and Sasidharan, 2014). The issue of an educated owner falls under the category of owner characteristics. Furthermore, as highlighted in Chapter 6, this study found that educated informal maize millers were doing better than the less educated informal millers. Specifically, the study found that the owners with secondary level education and above are more literate, including financial literacy, and this contributes to the positive way they handle their business operations and finances. On the one hand, educated owners could attend business workshops and read different literature concerning how they can improve their businesses and they were able to negotiate with much easy with other stakeholders. On the other hand, the less educated business owners are limited in what they can do due to low literacy levels.

The other type of business connections is political in nature as seen in Chapter 6 of this study. The study found that those with political connections were more advantaged compared to their colleagues, who did not have political connections. For example, those with political connections in the PF government accessed maize grain from the FRA under the community sales programme since the programme was being run by District Commissioners, who were seen to be politically inclined to the ruling party. Furthermore, the study found that these politically connected individuals were also able to get business opportunities from the government institutions, which enabled them to supply maize products in large quantities (Chapters 5 and 6). This gave them competitive advantage over their colleagues, who had no political connections, as this provided them with a very huge market for supplying of products. These findings are like those of Kashiwa (2016).

9.3.2.3 Competitive product pricing

The third strategy is that competitive product pricing is an important aspect in the informal sector. It was found that this is what makes the informal sector attractive to most of their customers, who happen to be the people from low-income areas (Section 6.4). This finding is in conformity with other studies that have found that the informal sector provides a cheaper source of food to the poor, who cannot afford the high prices in chain stores and other supermarkets (Mwango et al., 2019). The study found that customers spend more when they buy and consume commercially milled maize meal compared to when they buy and consume hammer-milled maize meal. This finding is in line with IAPRI (2016), who found that the cost of a repackaged 1 kilogram of maize meal (*pamela*) which is a common feature in the low-income areas is actually even more expensive than buying a 25 kilogram of the same commercially milled maize meal, which is more expensive when compared to hammer-milled maize meal (Section 6.4).

As highlighted above, the informal maize millers help in bringing down the prices of mealie meal, thereby, making the staple food accessible to most of the poor people. However, this study found that government continues to subsidise the big millers leaving out informal millers despite the evidence, which shows that the latter contribute to lowering prices of maize meal. Targeting large millers with subsidised maize does not help the poor, most of whom cannot afford to buy a 25 kilogram bag of commercial mealie meal (Section 6.4). Most of the people in low-income areas prefer buying maize grain and taking it to the hammer mills for grinding. Alternatively, they consume re-packed commercial mealie meal and end up paying a higher price. For this reason, subsidising large-scale millers in the hope that maize meal prices will come down has proved to be problematic, as prices have continued escalating in the face of these subsidies (section 6.4). On the contrary, informal maize millers offer a better alternative for targeting the poor. However, informal maize millers usually reduce the scale of their operations during the period November to April due to low grain availability in communities. In addition, the study found that concentrating on policies that favour large-scale millers, while neglecting informal maize millers, results in significant price volatility. For this reason, removing government interventions, especially FRA trade regulations, would attract more investment into the informal maize sub-sector value chain, including production, transportation, storage, and processing (Section 7.4.1). The study found that, when this process is transparently managed and sustained, it brings about price stability, which benefits both consumers and producers, at very low cost to the national treasury.

9.3.2.4 Accessing maize

The fourth strategy involves how informal maize millers access maize grain products. The study found that some of the informal millers provide free milling services and, in turn, ask the customers to leave the maize bran (maize milling by–product), which they stockpile and repackage for selling to the poultry industry. This was said to be more profitable than charging for maize meal milling. Furthermore, since some of these informal millers in their capacity as informal grain traders buy maize grain from the remotest parts of the country, where big millers do not reach, they have access to cheaper maize and are able to supply to the big millers and keep some for their own use at their milling plants.

All in all, the study found that making maize grain accessible to informal maize millers, consumers and grain traders in the markets is critical to the survival of informal maize millers in that it guarantees the availability of maize grain to the consumers and, therefore, guarantees availability of business to the informal maize millers, while keeping maize meal prices down for the benefit of the consumers (Section 7.4.1).

9.3.3 Advantages of informal maize millers over big millers

The third key finding of the study is that informal maize millers have comparative advantages over big millers in relation to customer loyalty, which contribute to their survival. The study found that the informal maize millers had customers, who were very loyal to them. These customers were from all the three categories identified in this study (Chapter 6). Firstly, some customers from the higher-income group prefer maize meal from the informal maize millers, because it is tastier and does not stay on the shelves for long compared to maize meal flour from big millers. Furthermore, the loyalty also emanated from the fact that this type of customer produces their own maize grain and only take it to the hammer millers to turn it into maize flour. This finding is also important to the survival of informal maize millers, as they are guaranteed of business from this group of customers. Another aspect that makes this group loyal to the informal maize millers was that they perceive hammer-milled maize meal to be very healthy compared to that from the large-scale milling firms (Chapter 6). The health dimension of the informal millers lies in the fact that they mill the whole grain; they produce unrefined maize meal flour, which has health benefits. The big millers focus on refined maize flour, and, because of this, the small millers have an advantage, especially among the growing middle class that is now emphasising eating healthily (Chapter 6).

Secondly, the middle-income group are very loyal to informal maize millers. Customers in this category expressed similar views that highlighted the cost effectiveness and the health nature of hammer-milled maize meal as a reason for them preferring hammer-milled maize meal to mealie meal from large-scale millers. The loyalty of this group also plays a role in the survival of informal maize millers because the millers have customers who believe that getting maize meal flour from them is much cheaper than buying mealie meal flour produced by the big millers.

Third, the customers from the lower-income bracket were loyal to the informal maize millers. Chapter 6 shows that 63 per cent were of the view that hammer-milled maize meal was cheap while 36 per cent thought the pricing was fair. The implication of this is that the informal millers are assured of business as a huge number of their customers believe that their products are affordable. Therefore, they are assured of retaining the loyalty of these customers, a key element of the survival of informal millers. The study found that assurance of continued business through customer loyalty was an important ingredient to the survival of the informal maize millers. Chapter 6 shows that almost 100% of informal maize millers' customers feel the maize meal is affordable and this makes them loyal to the informal maize millers. This is also one of the reasons that informal maize millers continue to operate even when faced with numerous challenges. They have a group of customers, who believe in their products as being of good quality and affordable, and this guarantees business for them.

Lastly, another loyal group of customers were those involved in buying and selling of maize bran (Chapter 6). The study found that maize bran had a double effect in that it was beneficial both to the hammer miller and the customer. Maize bran trading was found to be central to the survival of informal maize millers due to the high profits involved and the readily available market. The study found that, though commercial millers produce maize bran as well, it remains a lucrative business venture for hammer millers, as it is in high demand due to the growing poultry and animal stock feed industry in the country. The commercial millers fail to meet this demand on their own. For this reason, the informal maize millers are assured of business from this category of customers, who are loyal to them.

All in all, customer loyalty was found to be important to the survival of informal maize millers. This finding is in tandem with other studies, which show that having a good share of the market is important in sustaining the business of the milling firms. In this case, the informal maize millers are assured of this market share through a group of these customers who are loyal to them.

9.3.4 Wide customer base for informal maize millers

The fourth key finding of this study is that, whereas most customers for the informal maize millers are from the low-income areas, the informal maize millers play a pivotal role in terms of maize meal access to all categories of urban dwellers, as it is an important source of food to all of them. This finding is like the findings of other studies, such as Mwango et al. (2019) and IAPRI (2016), which found that informal markets are key to food access in urban areas. For example, as seen in Chapter 6 of this thesis, all the informal markets sampled housed informal maize millers, and different categories of customers were observed accessing maize meal from these millers. The analysis of the customers of informal maize millers in Chapter 6 brought to light three different categories of customers: namely, those from the high-income group, middle-income group and low-income group. This categorisation of informal maize millers' customers has proved that the informal maize millers attract customers of various statuses who access their maize products for various reasons. With this pool of customers readily available, the study found that the informal maize millers can survive, as they have a ready market.

Furthermore, contrary to other studies, which found that informal maize milling activities are mainly found in the informal markets situated in low-income areas, this study found that informal milling activities have expanded to medium- and high-income areas. This fact is presented in Chapter 6 of this thesis. This finding is very important, as it shows that informal milling activities have grown to encompass even high-income areas. So, instead of waiting for customers from high-income areas to follow them to the informal markets in low-income areas, some informal maize millers have taken the initiative to establish their businesses in high-income areas to cater for this market. A common trend in this case is that, in most of the middle- and high-income areas, the informal maize millers have found some space in which to establish their milling businesses. It's important to note that, as stated in Chapter 5, this is a new trend. This changing pattern highlights the important role that informal maize millers play in the lives of the urban population. This is a very important finding in terms of survival of informal maize millers, as it shows the growing demand for the millers among the different residents of Lusaka urban, thereby, ensuring that they continue to operate and survive competition.

The findings from the study illustrated the importance of different segments of society to the survival of informal maize millers. Results from this case revealed that, in limited cases, these links with high-income areas were also used to maintain continuous operations even in times when business was at its lowest. While the informal markets in low-income markets are, evidently, more important because of their major contributions in terms of customers, the role of this newly found market in high-income areas cannot be underplayed. This unique contribution of informal millers and the informal sector, in general, is missing in most informal sector studies, which focus largely on the informal sector in poor urban settlements. The next finding, as presented in the following section, is that informal maize millers choose to be informal to survive competition.

9.3.5 Informal maize millers choose to be informal to survive competition.

The fifth key finding is that informal maize millers choose to be informal to survive competition. This is contrary to the proponents of formalisation, who see the formal sector as the goal of all those in the informal sector. This study found that informality is a conscious decision made by those that engage in it and that, for many in the sector, it is what enables them to survive competition and continue operating. Chapters 7 and 8 brings to view various reasons that the informal sector players engage in this type of business. However, the study found that once operational, the informal sector chooses to remain informal in their operations with a view of maximising the profits that come with informality. For example, as seen in Chapter 6, the informal sector is not subject to various taxes that those in the formal sector pay. Furthermore, they are also not subject to various legislation that affect formal firms. As a result, the study found that informal sector enterprises decide to remain informal to continue enjoying these privileges. Additionally, even in cases where government has tried to introduce various taxes with a view of broadening the tax base, as seen in chapter 7, enforcement of this is problematic and so, most of the informal sector remain untaxed, therefore, providing an incentive for many informal enterprises to continue operating informally.

While the above scenario has led to some critics questioning the role of the informal sector in national development due to its low or non-contribution to the country's GDP, the informal sector's contribution to poverty eradication cannot be ignored. As this study found, the informal milling sector has increasingly become attractive to many entrepreneurs, who see it as a profitable venture that can lead them out of poverty. It is for this reason that it was a fall-back plan for most of the victims of the SAPs in the 1990s and has continued to be a source of livelihood to most of them (Chapter 6). This finding agrees with the findings of other studies on the informal sector, which have concluded that the informal sector acted as a buffer for those who were left out of the formal sector and that it has continued to be a source of livelihoods for many people who work in the sector (Armansyah et al., 2019).

The findings from the study further illustrate that the informal sector is a survival strategy in which its members enter to survive the harsh economic conditions (Section 6.2). Results from this case revealed that, in limited cases, some enterprises partially formalise. While partial formalisation was preferred for some enterprises, more importantly, informality emerged as a key element that ensures that there is survival for most of the informal enterprises.

9.3.6 Unsupportive regulatory and policy environment a contribution to attrition in the informal sector

The sixth key finding of the study is that the unsupportive regulatory and policy environment posed a serious risk to survival in the informal milling sector, in general, and the informal milling sector. Contrary to the pronouncements in the seventh National Development Plan, which claim to leave no one behind in terms of the development agenda, the informal sector has not been well supported through regulation and policy. The findings of this study are like the findings of Chapoto (2019) and IAPRI (2016) which found that government policy through the activities of the FRA negatively affected the activities of the informal milling sector.

Furthermore, the study found that none of the government ministries and departments interviewed had favourable words for the informal sector. The attitude of government officials towards the informal sector was more one of tolerating it than seeing it as a vehicle for economic development and poverty eradication. For this reason, as highlighted in Chapter 7 of this study, the government, as explained by the MCTI, is to work towards the formalisation of the informal sector and not provide incentives that will promote informality. Furthermore, because of this negative view of the government on the informal sector, the study found that there were no deliberate incentives to help with supporting the informal sector in the markets. This finding is like that of Mwango et al. (2019) which found that the government had no deliberate policy to support the growth of the informal sector. Notwithstanding the above narrative, the study found that the focus of the Ministry of Agriculture is on the big millers and not informal maize millers as evidenced by a number of policy pronouncements issued in support of offloading maize grain to large-scale millers (Chapter 7). The study found that this practice by government threatens the survival of informal maize millers, especially during the lean period when there is shortage of maize grain and government only offloads the FRA maize to well established big millers (Chapter 7).

However, it is important to note that not all regulation was found to be against the informal sector. The study found that the government's deliberate policy through the FRA of selling one bag of maize grain to each household was found to be a progressive policy. This is because it made maize grain available to the individuals who would then take the maize for grinding to the informal maize millers. However, critics of this policy have argued that it did not benefit the intended people as it was being administered by the District Commissioners, whose positions, though being civil servants, are political in practice as most of these DCs are appointed from among the ruling party cadres (Chapter 7). All in all, this section has highlighted a big risk to the survival of the informal sector which will be highlighted in the section for recommendations.

9.3.7 The informal sector is diverse.

The last key finding of the study is that the informal sector is diverse. The study found that informal maize millers differ in their production capacity and in their ability to interact with the various institutions because of their different educational and political backgrounds. These differences impact them differently in terms of survival. Firstly, the study found that there was a group that produced 1,800 tonnes and above a year (Chapter 6). As seen in Chapter 6, informal maize millers in this group were working in government as senior officials and some had political connections. These informal maize millers even access some maize grain from the Food Reserve Agency (FRA) due to their political connections, and their production is high compared to others, as they can produce 100 by 50 kilograms bags everyday (Chapter 6). Furthermore, as highlighted in Chapter 6, their connections are not only as a result of their political affiliation, but also the fact that they hold government positions, which gives them an upper hand in terms of knowing which opportunities are available within the government system. In this category, it was found that the number of workers is between three to five, including the owner. This number was found to be slightly higher than the other categories because this group's production capacity is also higher and they usually supply their products to government institutions with whom they have contracts, again bringing to the fore the issue of connections, which has already been explained above.

The study found that the second distinct group of informal maize millers was composed of those who mainly produce a tonnage of between 900 and 1,800 per year (Chapter 6) The study found that, when at full capacity, millers in this group produce about 50 by 50kg bags of maize meal in a day. It was also found that these usually have two hammer mills with two employees operating them. This group was mainly found to be made up of retirees and other individuals, who have either not found an opportunity in the formal sector or prefer to engage in an informal business for a living. Lastly, the study found that informal maize millers in this category do not have access to FRA maize except 1 or 2 bags under FRA community sales, which is also embroiled in political opportunism. It was also found that the informal millers in this category fund/support their business through their retirement packages or money made from other sources for those who were not retirees, but decided to pursue informal maize milling as a business.

The last distinct group found was that of those with the production capacity of less than 900 tons of maize meal a year. The study found that this group also does not have access to FRA maize except what they get through community sales (Chapter 6). This category of informal maize millers was found to have a serious challenge to finance their business as most of them did not have any other source of income and depended solely on their hammer mills. The study found that most of the millers in this category established their businesses through the money they were given by relatives, or they had made some savings after doing seasonal jobs. In comparison with the other two groups, the study found that the survival of these informal maize millers is at risk as they do not re-invest their profits into their businesses (Chapter 6.). It was found that these millers use the profit made from their sales to buy household needs and pay for other bills, such as school fees, while leaving capital to keep the business running. This is how they have been surviving for a long time, but this was found not to be sustainable, as any challenge out of the ordinary would lead to failure. For example, the study found that, during the period of the COVID-19 outbreak, some of the informal maize millers in this category were strongly affected, as they used part of their capital in addition to profits they had made to provide for their families during the period of the lockdown. As highlighted in Chapter 5 of this study, a few will need to access government funds for them to start operating normally after the lockdown.

Understanding that informal maize millers are not a homogeneous group is crucial to understanding the dynamics affecting their survival in their own unique way. For example, as seen in Chapter 6, it may be that some of the informal maize millers are surviving through their connections in government or feeding on money obtained from other ventures. Therefore, understanding their operations and perspectives is important as it has helped us to understand the survival of informal maize millers in an industry dominated by large-scale milling firms and other competitors of their kind.

9.4 Discussion

Considering the key results of the study, in this section, I locate the insights within the wider arguments concentrating on survivability and informality. These are common concepts, which have been seriously critiqued in academic works. In this study, the concepts have been used in the context of informal maize milling, particularly in understanding how informal maize millers survive in an industry dominated by large-scale milling firms. The findings in this study highlight the following key points on the debate about informal maize meal sector: (i) informal employment is a vehicle for distinct and social deeds that echoes economic creativity and business possibility, and(ii) the informal sector is a survival strategy into which its members enter to survive the harsh economic conditions. Consequently, I argue that the informal sector survives competition.

9.4.1 Informal employment as a vehicle for singular and social deeds that reflect economic creativity and business possibilities

As earlier alluded to in Section 3.3 of this thesis, the debate surrounding informality, which has serious ramifications on how we study the informal sector and how we view it, and which also relates to the development and execution of public policy, has more to do with the type of informal employment. For this reason, this study views informal employment as a vehicle for distinct and social deeds that echoes commercial creativity and business possibilities. This position is situated within broader debates where some scholars have wondered whether informal employment is an indication and, simultaneously, a generative and continuing influence of instability, disparity, besides communal and singular poverty. Or whether it is a vehicle for singular and communal deeds that echoes commercial creativity and business possibility, which, when properly channelled and nurtured, could greatly add to societal and economic change and, consequently, to the decrease of disparity and deprivation. (Temkin, 2009). My study, therefore, supports the latter position. As seen from Chapter 3, on the one hand, there are some scholars, who view economic informality as a remaining wonder, meaning a diverse and budding group of unbalanced and negligible labour actions resultant from absence of capability of the official economy to include unemployed workforces (ibid), while, on the other hand, emphasising the delicate type of informal work. There are also scholars who see economic informality as a result of developments happening in the formal segment of the economy, particularly, from formal businesses' efforts—under national and international force—as a means to decrease their labour charges and grow their competitiveness level (ibid). Furthermore, as seen in Chapter 3 of this thesis, in the first argument, the informal segment is mainly composed of people who have been provisionally or completely moved from the official sector, whereas in the second one, it is made up progressively of informal employees who are hired directly or indirectly by formal businesses as a function of a string of unfair but useful relationships (ibid). All the same, according to the two perspectives of informality as a survivalist reaction, an increasing number of people are compelled, because of their low status in the socioeconomic formation and low degrees of human capital, to choose low-paying informal employment. Additionally, some scholars argue that informality, for the self-employed, must be understood as a means of private enterprise on the part of individuals with fewer means of revenue and less schooling, who would, instead, choose the freedom and creativity that are allegedly linked with informal trade and invention than working for low wages and being subordinated to superiors in the formal sector firms.

As highlighted in Chapter 3, this viewpoint looks at "informal work as an uncontrolled sector in emerging nations, which is like the deliberate entrepreneurship of micro businesses in the developed nations" (Temkin, 2009:163). Here the picture that is portrayed is that of people that select to situate themselves in the informal sector because of the relative benefits it provides, plus reasonably high earnings (De Soto, 1987, 2001; Maloney, 2004; Temkin, 2009). My study agrees with this picture, as seen in Chapters 6 and 6. Furthermore, one of the issues emerging from the debates and that has been explored further in this study, is the function of the informally self-employed or self-account employees, who are seen and conceptualised by many scholars as the key characters of this alleged voluntary free enterprise. Evidence from this study, as presented in Chapters 6 and 7, agrees with this perspective. The study engaged the informal maize millers as a case study, to discover which of the two opposing views, as set out above, provides a more precise identification of the characteristics of informal employment and of informal self-employment.

As already stated in Section 3.3, the study identified several fundamental principles and ideals held by informal personnel and owner-workers in the informal maize milling sector, such as education of owners, owners' sacrifice, determination and resilience, and innovation, with a view to assessing the degree to which those principles and ideals are related more to a description of informality that emphasises entrepreneurship, or to vagueness. Having analysed the above values, I agree with the argument which looks at informality as entrepreneurship. I argue that informal employment is a vehicle for distinct and social activity that reveals economic creativity and business possibility and not an indicator or a generative and enabling cause of instability, unfairness, and of societal and individual deprivation.

9.4.2 The informal sector as a survival livelihood stratagem

This study postulates that the informal sector is a survival stratagem into which its members enter to survive the harsh economic conditions. As seen in Chapter 2 of this study, the informal sector acts not only as a refuge for those who enter into it, but also, as an additional source of revenue for those in formal employment. Evidence from the preceding chapters also shows that the informal sector acts as a survival livelihood strategy for many of the people operating within it. This insight agrees with the scholars who view the sector as a survival livelihood strategy (Armansyah et al., 2019). The informal sector is mostly seen as a livelihood strategy because it provides manageable supplies to meet the essential needs (ibid). Its elements are capacities, deeds, and properties (ibid), involving the accrual of personal or family possessions (Sunito et al., 2014). Evidence emanating from the preceding chapters shows that the informal sector was used as a survival livelihood strategy by those who could not find space within the formal sector. For example, some evidence from Chapter 5 shows that informal maize milling increased in the aftermath of the structural adjustment programmes, as most people lost their jobs, and many ventured into informal maize milling as an alternative. Others started informal maize milling after losing their partners who were breadwinners and sought for answers in the informal sector in general and informal maize milling, in particular. My arguments are in line with Armansyah et al. (2019:106), who state that, "in a time of crisis, the informal sector appears as the survival livelihood strategy undertaken by layoff victims and unemployed persons because it enables them to create opportunities to earn incomes". My views are also in line with Ranyane (2015:217), who views survivalist entrepreneurs as "more prone to be influenced by a combination of mainly the structuralism perspective, which looks at the survivalist business formation as expanding rather than contracting, due to the emergence of the deregulation (neo-liberal) open world economy that affects the current labour standards".

This "neo-liberal perspective simply means that the survivalist entrepreneur would choose his business as an alternative to the formal business. In other words, they are pushed into their business as an alternative to formal employment due to the shrinking formal employment and remain in business through the five factors explained above" (ibid). In addition to the general argument that the informal sector is a survival strategy, which entails the survival of informal maize millers, I add that remaining informal, providing cheap products and the use of various strategies play a key role in the survival of the informal sector and informal maize millers.

Using a structuralist approach, I conclude my discussion by reaffirming the point made in Chapter 2 that “there has been an increased recognition that the informal economy is linked to the formal economy and contributes to the overall economy, and that supporting the working poor in the informal economy is important for reducing poverty and inequality, just as supporting working poor women in the informal economy is important for reducing gender inequality” (ILO, 2018:194). This can be seen from the finding above (9.3.2), which has shown that some informal maize millers supply their products to government through their connections who are registered and have links with government institutions. In other words, they supply through the registered entities whom they have agreements with and do not have to produce any legal documentation themselves, as these are covered by the organisation with which they are partnering. This point is in tandem with the description of the structural school of thought that the informal economy is a subordinated economic unit of micro firms and workers with the objective of reducing the input and labour costs and, thereby, increasing competition, of large capitalists’ firms. For this reason, my study confirms the arguments of the structural school of thought and sees the informal sector as complementing the formal and, consequently, that it survives competition, as seen in Chapter 8. This is contrary to many observers who hold the view “that the informal economy in developing countries is peripheral and not linked to the formal economy or to modern capitalist development and would disappear with economic growth or modern industrial development” (Chen, 2012:265).

9.5 Towards a framework for survival and competitiveness of informal maize millers

I end the discussion on survivability and informality by developing a framework for survival and competitiveness. I utilise empirical data presented in Chapters 6, 7 and 8 to develop a framework. Developing a framework for the survival and competitiveness of informal maize millers in Zambia requires a comprehensive approach that addresses various aspects of their operations and challenges. Below is a multi-dimensional framework that focuses on key areas:

9.5.1. Technical Enhancement:

Using insights from Chapter 7, technical enhancement of informal millers should be encouraged through adoption of more efficient and modern milling equipment to improve processing speed and quality. Furthermore, they should be provided with technical training on operation of equipment, maintenance, and food safety standards to enhance their skills. Lastly, quality control measures should be implemented to ensure consistent product quality, adhering to national food safety standards.

9.5.2. Business Management:

As seen in Chapter 8, businesses that failed had poor record-keeping and financial controls. In this regard, offering training to millers on basic financial management, including budgeting, cost analysis, and pricing strategies is key to ensuring survival and competitiveness. Furthermore, millers should be assisted in understanding consumer preferences, demand trends, and potential market niches. Lastly, diversification is vital and should be encouraged through offering value-added products, such as maize flour blends, fortified flours, and packaging options, to attract a wider customer base.

9.5.3. Access to Resources:

The importance of access to resources is highlighted in both Chapters 7 and 8 of this study. The study shows that informal millers need to be enabled with access to microfinance institutions for loans to invest in equipment upgrades and business expansion. Furthermore, there is a need to promote the formation and registration of associations as cooperative groups among millers to pool resources, negotiate better prices for inputs, and share knowledge. Lastly, informal millers should establish partnerships with farmers or aggregators to ensure a consistent supply of high-quality maize grain.

9.5.4. Legal and Regulatory Compliance:

In Chapter 8, the study shows that informal millers choose to remain informal to survive competition. However, by doing that, they miss out on the benefits that come with formalisation. Informal millers should be assisted with understanding the benefits of formalising their businesses, such as access to support programs and improved credibility. In addition, they should be offered regulatory support. This should be done in collaboration with relevant government agencies to simplify registration processes and ensure that informal millers comply with necessary regulations.

9.5.5. Market Access:

To guarantee consistent market access for informal maize millers, there is a need to facilitate platforms for millers to connect with suppliers, buyers, and other stakeholders in the maize value chain. The study also shows that market linkages are important in the survival of informal millers by showcasing how established connections with local retailers, wholesalers, and food processors ensure a consistent market for millers' products.

9.5.6. Knowledge Exchange and Training:

In Chapter 6 of this study, it has been established that businesses of the informal millers, who are educated, perform better than those who are not educated. To bridge this gap and ensure that everyone in the sector is informed on latest trends, this study supports capacity-building programmes, such as workshops, seminars, and knowledge-sharing sessions on best practices, innovation, and market trends. Furthermore, the study promotes mentorship where experienced millers should be paired with newcomers to provide guidance and mentorship, fostering a culture of continuous learning.

9.5.7. Advocacy and Representation:

The study has shown in Chapter 8 that associations are important in advocacy and representation work. However, informal maize millers lack industry-specific associations. Consequently, the study supports the formation of specific associations that can advocate for the interests of informal maize millers and provide a unified voice on policy matters. Specifically, the specific associations should collaborate with relevant government bodies to ensure that policies and regulations are conducive to the interests of informal millers.

In summation, the success of this framework depends on collaboration between various stakeholders, including government agencies, non-governmental organisations, financial institutions, and the informal millers themselves. For its effectiveness, regular assessment and adjustment of the framework based on feedback and changing conditions are essential.

9.6 Study contribution to the body of knowledge

Having analysed and discussed insights emanating from this study, in this section, I highlight key contributions to scholarly debates on the informal economy and survival. The contribution is twofold: it contributes to the debates surrounding the survivability of the firms operating in the informal economy, and also provides some policy implications for the states to consider.

The study has contributed to knowledge by demonstrating that informal maize millers survive by adopting various strategies. This contribution has been made by presenting empirical evidence showing the different strategies these businesses adopt to survive in a competitive environment. In addition, the study has shown that besides the low-income areas, high-income areas are also important to the survival of informal maize millers. Results from this study have shown that, in limited cases, these links with high-income areas were also used to maintain continuous operations even in times when business was at its lowest. While the informal markets in low-income areas are, evidently, more important because of their major contributions in terms of customers, the role of this newly found market in high-income areas cannot be underplayed. This unique contribution of informal millers and the informal sector, in general, is missing in most informal sector studies, which focus largely on the informal sector in poor urban settlements. The study has demonstrated that the informal maize millers are located in high-, middle- and low-income areas and provide milling services to these areas. This is in addition to them being found in the markets dotted around the city. This is a very important contribution, as it shows that the informal maize millers attract customers from all categories of people (low, middle- and high-income customers), hence, they have a huge customer base, which contributes to their survival.

In addition, the study has shown that the lack of specific associations weakens the informal maize millers' ability to negotiate for better conditions for themselves. For example, as seen in Section 8.6.2, other businesses in the markets that I sampled had product specific associations which enabled them to handle their issues in a more effective way. These were the tomatoes traders' association, onion traders' association, banana traders' association and cabbage traders' association, which dealt with specific challenges unique to their groups. Through this, the study has demonstrated that a lack of product-specific associations for the informal milling sector weakens their ability to negotiate.

Furthermore, despite the contribution of the informal food sector to employment creation, poverty reduction, food access and nutrition, as well as livelihoods, public perception and government policy are largely informed by assumptions rather than evidence. Many a time policy is built on the assumption – or hope – that the large-scale milling firms, once subsidised with maize meal, will somehow share the benefits with the consumers, thereby reducing the prices of maize meal. However, this assumption has been exposed in this study as having no basis. While the informal food sector is poorly understood and unappreciated compared to its importance and central role in society, this study, through assessing informal maize millers as a case study has shown that the informal sector is resilient and key to national food security and, therefore, forms part of the evidence on which government can build policy. Lastly, the study is a contribution to several other recent studies that have started to paint a more comprehensive picture of the informal food sector in Zambia, from the economics of the market to the purchasing patterns of households.

9.7 Areas that require further research

Future research should explore the informal sector's contribution to GDP in Zambia to have the exact figures showing the informal sector's contribution.

9.8 Overall conclusion

With empirical insights from the case of informal maize millers, in Lusaka, Zambia, this study assessed the survival of the informal sector in a competitive environment. The study engaged in debates with scholars, such as Shah (2012), who have written on the performance of the informal sector and have argued that they do not survive competition, and OECD (2009), who contend that they do survive. Getting back to the research questions posed at the beginning of this topic, it can now be said that analysis of data revealed that the informal sector survives competition. In doing so, the case study demonstrated that informal maize millers exist beyond five years of being in business.

Informal maize millers have adopted various strategies to survive competition. The strategies include understanding of operational and safety needs as key, social connections, comparative product pricing and reliance on customer loyalty.

Informal maize millers cater for different categories of customers (low-, middle- and high-income customers). The study has demonstrated the importance of different segments of society to the survival of informal maize millers. Results from this study have shown that, in limited cases, these links with high-income areas were also used to maintain continuous operations, even in times when business was at its lowest. While the informal markets in low-income areas are, evidently, more important because of their major contributions in terms of customers, the role of this newly found market in high-income areas cannot be underplayed. This unique contribution of informal millers and the informal sector, in general, is missing in most informal sector studies, which focus largely on the informal sector in poor urban settlements.

This study has further illustrated that the informal sector is a survival strategy into which its members enter in order to survive the harsh economic conditions. Results from this case revealed that, in limited cases, some enterprises formalise. While formalisation was preferred for some enterprises, more importantly, informality emerged as a key element that ensures that there is survival for most of the informal enterprises.

The study showed that informal maize millers are not a homogeneous group. This is key because this understanding is crucial to understanding the dynamics affecting their survival in their own unique way. For example, as seen in Chapter 5, some of the informal maize millers are surviving through their connections in government or feeding on money obtained from other ventures. Therefore, understanding their operations and perspectives is important, as it has helped us to understand the survival of informal maize millers in an industry dominated by large-scale milling firms and other competitors of their kind.

Lastly, I have illustrated that the unsupportive regulatory and policy environment is a contributory factor to attrition in the informal sector. The unsupportive regulatory and policy environment contributed to the failure of some of the informal maize millers. Due to lack of support, some informal sector enterprises have failed to go beyond the 5 years' threshold set in this study for survival.

Overall, in response to the main research question, this study has demonstrated that the informal sector survives competition. Using informal maize millers as a case study, it has contributed to the debates in academic literature on whether the informal sector can survive competition by using the case of informal maize millers in an industry dominated by large-scale milling firms.

9.9 Recommendations of the study

- Authorities in Zambia should invest in fiscal and human resources in the stimulation and support of the incipient private enterprise that apparently describes informal self-employment. Furthermore, public funds should be utilised to grant loans to informal small businesses in a quest to make them even more competitive.
- The study likewise proposes that the state must eliminate the laws and guidelines that are stifling the significant expansion and innovation likelihood of informal business persons and of their micro and small enterprises. For example, government should consider stopping the policy of providing subsidies to large millers at the expense of informal maize millers and should also work on reducing the cost of registering a business to encourage those businesses that may want to formalise to do so without fearing being taxed out of business.

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Annexures. Data collection tools

1. **Survey questionnaire for customers**

Survival Strategies Among Informal Economy Businesses: The Case of Small Maize Millers in Zambia.

Introduction

I am a PhD student at the University of Cape Town in the Department of African Studies. I am conducting research for my thesis on how informal maize millers survive or fail to survive in a competitive environment.

Informed Consent for the Survey

This survey is part of my PhD research aimed at collecting data for purposes of writing a thesis. Your help in answering these questions is very much appreciated. Your response will be kept completely confidential. If you choose to participate, you may refuse to answer certain questions, or you may stop participating at any time. Your responses will be summed up together with those of roughly 200 other customers in Garden and Mandevu townships, and general averages from analysis will be reported. You indicate your voluntary consent by participating in this interview: may we begin?

Household Demographics and Social Economic Overview (Please tick were applicable)

1. Sex of respondent? 1= Male 2= Female

2. Which of the following best represents your age group? 1= less than 20 years of age 2= Aged between 20 and 29years 3=Aged between 30 and 39years 4= Aged between 40 and 49 years and 5= Aged 50 and above.

3. Where do you live? E.g. within Garden compound, Kabulonga etc.

4. Which one of the following best represents your educational level? 1= Grade 9 or below, 2= Grade 12, 3=Some college, 4=Bachelor's degree and 5= Master's degree or above

5. What is your marital status? 1=Single, 2=Married, 3= Widowed and for Divorced

6. What do you do for your livelihood? 1= Formal employment, 2= My own business and 3= Other, explain

7. Which one of the following income categories represents your annual income? 1= K30,000 or less, 2= 30,001 – K50,000, 3= K50,001 –K70,000, 4=K70,001 –K90,000 and more 5= More than K90,000

Information on Maize Meal Preferences

8. How often do you bring your maize for hammer milling?

1= whenever we run out of mealie meal, 2= It is a one off, 3=When we don't have enough money to buy commercially milled maize?

9. What are your mealie meal preferences?

1= Hammer milled maize meal (*Mugaiwa*), 2=commercially milled Breakfast mealie meal and 3= commercially milled Roller Meal.

10. How do you respond to mealie meal price fluctuations?

1=Resort to using hammer mills, 2= Resort to buying smaller commercially milled bags, 3=Resort to buying repackaged bags in 1kg bags known as *pamela* and 4= Continue buying commercially milled maize at the new rates

11. What specific type of maize meal has your household primarily used in the past 30 days?

Commercially Made Consumer made via taking to grinding mill Vendor made via grinding mill

1= Breakfast 3= *Mugaiwa* (Super roller) 6= *Mugaiwa* (Super roller)

2=Roller 4= *Mugaiwa* (Breakfast) 7= *Mugaiwa* (Breakfast)

5= *Mugaiwa* (roller) 8= *Mugaiwa* (roller)

12. For the specific type of maize meal primarily used in the past 30 days, why do you consume maize meal mostly in this form rather than one of the other forms? Choose up to three reasons in order of importance.

1= It is comparatively cheaper 2= It is more convenient 3=It is more nutritious/healthy 4= Tastes better 5= It feels up the stomach better 6=Habit 7= We get maize meal from rural areas, so we do mainly our custom milling 8= It is more hygienic/clean 9= Very white 10= The hammer mill is very far from home 11=We produce our own maize, so we do mainly our own custom milling 12= Can't source maize grain, so must use packaged meal 13= It mixes faster 14= You need to use less mealie meal when cooking Nshima with this type of maize meal 15= Others (specify)……………………………………………………………………………………………..

13. Are there months of the year when your household would wish to buy maize grain to mill into mealie meal, but grain is not available in this area to buy? 1= Yes 2=No
14. If yes to question 9, what are the most common months when maize grain (for milling in to meal) is not available in this area when your household would want to buy?

1= Jan, 2=Feb, 3=Mar, 4=Apr, 5=May, 6=Jun, 7=Jul, 8=Aug, 9=Sep, 10=Oct, 11=Nov, 12=Dec

15. During the past one year, in the months when maize grain was readily available, how much did a 20 litre bucket of maize grain cost? …………………………..
16. During the past one year, in the months when maize grain was scarce in your area, how much did a 20 litre bucket of maize grain cost? …………………………..
17. During the past one year, in the months when maize grain was readily available, how much did a 25 kg bag of commercially milled breakfast cost? …………………………..
18. During the past one year, in the months when maize grain was scarce in your area, how much did a 20 litre bucket of maize grain cost? …………………………..

THANK YOU

THE END

2. **Interview guide for informal millers**

Survival Strategies Among Informal Economy Businesses: The Case of Small Maize Millers in Zambia.

Introduction

I am a PhD student at the University of Cape Town in the Department of African Studies. I am conducting research for my thesis on how informal maize millers survive or fail to survive in a competitive environment.

History of the Hammer Mill

1. When did you start your operations?
2. Who started it?
3. What influenced you to invest in the milling business?

Employment Information

4. What type of employees do you have?
5. How many are they?
6. How long have they been working for you?

Hammer Mill Operations

7. What range of products are produced by the Milling Company?
8. What is the total milling capacity in Mt per day/week/Month/Year for your products?
9. In trying to understand the seasonality in terms of maize grain milled, I would like to get the quantities in MT of maize grain milled in the 2015/16 marketing season in each of the months indicated.

#		***2015/16 Maize Marketing Season***	
		2015	2016

		May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	March	April
1	Quantity in MT maize grain milled in												

	each month												

10. Average wholesale selling price in ZMW per 25kg of each type (breakfast and roller) of mealie meal (ask about the *chigayo* charges if miller only mills grains brought to it by customers)

Mealie meal type	What was/has been an average wholesale selling price of 25kg for each year by month											
	months											
	May	**June**	**July**	**August**	**Sept**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**March**	**April**
Breakf												

a s t												
R o l l e r												

11. All things being equal, what is the potential production capacity of your hammer mill?
12. How are your prices negotiated?
13. Do you sell maize grain to customers? Yes 2) No
14. If yes to 13 above, what is your total grain storage facility?
15. Type of grain storage facility(not applicable if millers only mills grains brought to it by customers):
16. a) Open slab b) closed warehouse c) Grain Silos d) Other Specify………………………………………………
17. What is the capacity of each of the storage facilities? a) open slab……………MT b) closed warehouse …………..MT c) Grain Silos…………..MT
18. d) Other Specify………………MT
19. What challenges do you face in your operations?

Financial Information

20. How did you finance your initial investment?
21. How do you finance your ongoing operations?
22. What are your future investment plans for your business?
23. Are there challenges that you face with your investment? Please explain.
24. What opportunities are there in this line of business?

25. What maintenance costs do you face? Please elaborate.
26. How much income does your business generate in a day?

Interaction with Customers

27. Who are your customers?
28. Where do your customers come from?
29. Why do your customers buy hammer milled maize meal and not the commercially produced maize meal by large millers?
30. What are the perceived benefits of your mill to the community?

Competition Information

31. Who are your competitors?
32. How have you managed to survive competition and continue operating?
33. How do you describe your relationship with competitor's especially large scale milling firms?
34. How do the operations of large millers affect your business?
35. What would you say gives you competitive advantage?

Information on Government Policies

36. How has your business been affected by government policies in the milling sector?
37. What is your perception of the FRA participation in the grain and milling sectors over the years?
38. What should be the role of government in enhancing the operations of the hammer milers?

Rules and Regulations

39. What rules and regulations govern your operations?
40. How do these rules affect your operations?
41. Do you have any association that represent you? If yes, what role does it play? If no, why?
42. Any recommendations?

3. Interview guide for informal economy associations

Survival Strategies Among Informal Economy Businesses: The Case of Small Maize Millers in Zambia.

Detailed Interview Guide for the informal economy association

Introduction

I am a PhD student at the University of Cape Town in the Department of African Studies. I am conducting research for my thesis on how informal maize millers survive or fail to survive in a competitive environment.

1. Who are your members?
2. What were the reasons behind the formation of the association?
3. What services/ help do you give to informal maize millers?
4. What is the role of your association in maize grain marketing?
5. What role do you play in negotiating prices for maize meal prices?
6. Are there any rules and regulations that govern the operations of informal maize millers in Zambia?
7. Does your association engage the government to discuss the welfare of your members? If yes, how do you do it?
8. How does the policy environment in the milling sector affect your members?
9. What hinders potential of informal maize milling in Zambia?
10. What funding opportunities are there for your members?
11. What can be done to improve investment opportunities in the informal milling sector?
12. How does the government's establishment of the government run solar powered hammer mills affect business for your members?
13. How can government make the milling sector competitive?

14. What challenges do your members face?
15. Do you have any recommendations on how informal maize millers can be helped to survive, become competitive and thrive?

4. **Interview guide for government officials**

Survival Strategies Among Informal Economy Businesses: The Case of Small Maize Millers in Zambia.

Detailed Interview Guide for Government Officials

Introduction

I am a PhD student at the University of Cape Town in the Department of African Studies. I am conducting research for my thesis on how informal maize millers survive or fail to survive in a competitive environment.

1. How important are informal maize millers to Zambia's milling sector?
2. What is the position of government on informal maize milling in Zambia?
3. Is there any government policy guiding the operations of informal maize millers in Zambia?
4. Does government have any plans of empowering the informal maize millers? If yes, how?
5. How would you describe the role of informal maize millers in Zambia?
6. How does government contribute to the trading endeavours of informal maize millers?
7. Why has government continued ignoring the potential of informal maize millers while providing support to large millers?
8. Why does government subsidize large millers' directly or indirectly and not informal maize millers?
9. How do consumer preferences influence government policy in the milling sector?
10. How does government ensure the accessibility of maize meal to the majority of consumers who cannot afford higher prices?

5. **Interview guide for customers**

Survival Strategies Among Informal Economy Businesses: The Case of Small Maize Millers in Zambia.

Introduction

I am a PhD student at the University of Cape Town in the Department of African Studies. I am conducting research for my thesis on how informal maize millers survive or fail to survive in a competitive environment.

1. Where do you reside?
2. Why have you brought maize for grinding at the hammer mill instead of buying commercially milled maize?
3. Where do you source your maize?
4. How accessible is maize grain in your area?
5. How would you describe the role that hammer millers play?
6. What are the advantages of using hammer milled maize compared to commercially milled maize meal?
7. How would you describe the services offered by hammer millers?
8. How do government policies in the milling sector affect you as consumers? E.g. operation of FRA?
9. How can government make the milling sector competitive?
10. Kindly comment on any aspect of hammer mill operations that we have not discussed so far
11. Do you have any recommendations on the operations of hammer mills?