An investigation of everyday entrepreneurship in a resource-constrained context.

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2022

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AN INVESTIGATION OF EVERYDAY ENTREPRENEURSHIP IN A RESOURCE-CONSTRAINED CONTEXT

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PHD 2022

AN INVESTIGATION OF EVERYDAY ENTREPRENEURSHIP IN A RESOURCE-CONSTRAINED CONTEXT

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ABSTRACT

Entrepreneurship has become an indispensable instrument for stimulating economic activities in the global economy. It is getting more attention because of the significant contributions of small businesses as key drivers to the growth and socio-economic transformation of nations. Recent entrepreneurship discourse has focused on entrepreneurial behaviour and motivation; this includes what entrepreneurs do, why and how they do it, and their decision-making logic, particularly at the start of a venture. Beyond conventional job and wealth creation arguments, the purpose for entrepreneurship seems to be linked to a much broader framework, consisting of enduring social values, everyday political realities, and cultural identity. This research explores and provides insights into how the entrepreneurial process is impacted by a resource-constrained context. In addition, the thesis critically investigates how everyday entrepreneurs navigate such challenging resource-constrained contexts.

An extensive review of the literature is provided on the diverse contexts of everyday entrepreneurship and the decision-making logic of entrepreneurs to refocus the process and context of entrepreneurship with insights from a sub-Saharan African economy. A qualitative research approach was adopted with indepth semi-structured interviews conducted to generate empirical data from thirty-one rural farmers in North-central Nigeria within their real-life settings. This approach provided a rare opportunity for the understudied entrepreneurial farmers to share their 'lived' experiences about their everyday farming activities in a resource-constrained context.

The research findings showed that the amalgam of insecurity, unemployment, limited infrastructure, poverty, and highly uncertain and unstable political institutions, did not completely stifle entrepreneurship. On the contrary, the challenging and uncertain business environment resulted in farm enterprises being created in the local communities to cope and adapt to the resource-constrained context. The entrepreneurial farmers relied on effectuation decision-making logic to plan and develop their enterprises in response to their challenging and changing context. Subsequently, the farmers' entrepreneurial process was shaped by their determination to maximise the available bundle of local resources and leverage their family, community, and other strategic alliances to start, survive in business, and expand the farm business. By leveraging on family and community interventions, including local social partnerships to access critical resources, the entrepreneurial farmers demonstrated that enterprise approaches might not be one of choice but more directly determined by the characteristics of the local surroundings. Social embeddedness was evident in the local farming community, expressed through social interactions, business mutuality and social responsibility. The entrepreneurial farmers demonstrated a strong community spirit to cope with social isolation by being and doing things together.

This research is important as it extends our knowledge of how entrepreneurship and context interact. Context refers to where entrepreneurship is enacted. Therefore, the context of entrepreneurship is not just a place where entrepreneurship happens; it includes the socio-cultural dimensions of the place, the local people and their lived experiences, and other multidimensional contexts entrenched in the place. The research provided numerous inferences for theory, policy and practice with recommendations and suggested areas for future research.

Keywords: Everyday Entrepreneurship, Effectuation, Resource-constraint, Entrepreneurial Farmer, Decision-making, sub-Saharan Africa

DECLARATION

Ι	hereby	declare	that	this	thesis,
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An Investigation of Everyday Entrepreneurship in a Resource-Constrained Context

To the best of my knowledge is entirely my work, and where any material points to the ideas of others, it is fully cited and referenced with appropriate acknowledgements given.

TIGAN DANJUMA DASPAN

July 2022

DEDICATION

Glory to Wudde Tebumi (Yeshua Hamashiach) for the gift of life and resources to study. This thesis is dedicated to my late Dad, Mr Danjuma Ahmadu Daspan and late uncle Mr Zakka Ahmadu Daspan. I wish you were both here...Thanks, Dad, for your inspiration and challenge over the years.

And to my loving wife, Turan Daspan, and my children, Tanai and Tidyel Daspan, your patience, unwavering support, and encouragement sustained me throughout this journey. You are simply the best ever, thanks!

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LIST OF ACRONYMS

APP Agricultural Promotion Policy

ASTC Agriculture Services Training Centre

FAO The Food and Agriculture Organisation

FMARD Federal Ministry of Agriculture and Rural Development

GDP Gross Domestic Product

GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit

ICT Information Communication and Technology

MSMEs Microenterprises and Small and Medium-Sized Enterprises

NASC National Agricultural Seed Council

NGOs Non-Governmental Organisations

RGU Robert Gordon University

RP Research Participant

PADP Plateau Agricultural Development Programme

SCF Standard Cubic Feet

SMEs Small and Medium-Sized Enterprises

UK GDPR The United Kingdom General Data Protection Regulation

UNDP United Nations Development Programme

YouWiN Youth enterprise with innovation in Nigeria

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CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction

This chapter introduces the research topic, the background of the research, the rationale for conducting the study, and the research aim and objectives. A brief overview of the methodology used in conducting the study is provided. The chapter concludes with a description of the significance of the study and an outline of the structure of the thesis.

1.2 Background to the Research

Entrepreneurship is capturing the attention of scholars and practitioners as a vehicle for creating economic and social activities in different communities and societies in the world (Steyaert and Katz 2004). For example, the creation of jobs, innovation, and welfare services in "organisation thin, rural regions" (Gaddefors, Korsgaard and Ingstrup, 2020, p 244) and the alleviation of extreme poverty (Sutter, Bruton, and Chen, 2019). However, as Jones et al. (2018) suggested, focused research on entrepreneurial behaviour and small business practice in Africa is sparse. This is partly due to the increasing emphasis on the more established westernised form of entrepreneurship, such as the globally recognised Silicon Valley model of entrepreneurship that negates the everyday entrepreneurial activities occurring in diverse contexts (Audretsch 2021; Welter et al., 2017). It is important to consider entrepreneurship in the African context because the African environment provides a unique context to explore the influence of entrepreneurship on several local communities with diverse and integrated cultures (Murithi, Vershinina and Rodgers, 2019). Anderson and Lent (2017, p 97) argue that "few contexts are more marginal than rural Sub-Saharan Africa." Jones et al. (2018) suggest that the challenge of resource availability in rural African regions impacts business sustainability and failure. Equally, Murithi, Vershinina and Rodgers (2019) highlight the many challenging influences of institutional void on local business activities in sub-Saharan Africa. Anderson and Ronteau (2017) call for more contextualised considerations on entrepreneurship from emerging economies to enhance our understanding of the many contexts in which entrepreneurship occurs. A contextualised study from a sub-Saharan African emerging economy provides interesting perspectives on the many contexts of entrepreneurship.

Similarly, there is increasing advocacy for research on entrepreneurship to shift from the global dominance of Silicon Valley model enterprises with billion-dollar investments, high growth and big data-backed capital ventures to the everyday actions of entrepreneurs in diverse contexts (Welter et al., 2017). The focus of mainstream entrepreneurship research on the globally recognised high capital back ventures such as Amazon, Apple, Facebook, and Google, creates a distorted picture of the primary goal of entrepreneurship (Audretsch 2021). More importantly, such narrowing of entrepreneurship to a select assembly of players within a legal entity negates the myriad of entrepreneurship behaviours appearing in the actions, social connections and exchanges in everyday life (Steyaert and Katz, 2004; Welter et al., 2017).

Entrepreneurship and small businesses are spatially and socially entrenched (Anderson, Warren and Bensemann, 2019). Small firms depend on the ideas and risk-taking initiatives of individuals – entrepreneurs – to start a business (Audretsch 2021). However, small firms are integral in transforming entrepreneurs' personal qualities, ideas, and ambitions into marketable products and services (Carree and Thurik, 2010). The profit-driven actions of these small firms and the evolving and emerging advancement in technology are major contributors to the increased economic activities and firm performance, resulting in economic growth at community, regional and national levels (Hunt 2011; Magagula and Tsvakirai, 2020). Therefore, the focus of entrepreneurship must be on the practice of entrepreneurship within small firms in a myriad of local contexts and what entrepreneurs do (Anderson and Ronteau, 2017).

The outcome of entrepreneurship in terms of wealth and job creation needs to be placed within the broader context of the values, purposes, and reasons for why and how entrepreneurship occurs (Welter et al., 2017). Additionally, the place and social contexts where entrepreneurship occurs influence entrepreneurs' ability to create opportunities, especially in resource constraints rural regions (Korsgaard, Ferguson and Gaddefors, 2015). Social embeddedness, being a part of the local structure of the business area, therefore, creates business opportunities, sustains

the business, and improves the firm's performance and profitability (Jack and Anderson, 2002).

In sub-Saharan Africa, the context of entrepreneurship is especially impacted by the limited availability of supportive resources and uncertain business environments. Khavul, Burton and Wood (2009) suggest that African entrepreneurs lean more strongly on family relationships and community influence to run their businesses. Atiase et al. (2018) claim that the African entrepreneurship ecosystem generally depends on available quality resources and critical markets, which are crucial for effective entrepreneurship. Additionally, conventional resources such as affordable finance, electricity, and good roads, are scarce (Eyana, Masurel and Paas, 2018). Equally, Cia et al. (2017) claim that the higher environmental uncertainties in emerging economies caused by underdeveloped institutional systems impart on new venture survival, performance, and growth. Within such a resource-constrained and uncertain environmental context, the decision-making logic that the entrepreneur employs is not based on choice but driven by the critical contingencies of the local business environment and relationships.

The interaction between family and business in sub-Saharan Africa stems from the culturally embedded social relationships that arise from the intrinsic ties between the extended family and local communities (Anderson and Lent, 2017; Murithi, Veshinina and Rodgers, 2019). In local business environments void of formal institutions that support the socio-economic activities in such communities, the family businesses serve as alternative formal institutions to the local business communities (Miller et al., 2013; Murithi, Veshinina and Rodgers, 2019; and Manolova et al., 2019). Therefore, in everyday life, entrepreneurs in resource-constrained contexts complement their entrepreneurial activities with their family life (Lent, 2020).

Randerson, Degeorge and Fayolle (2016 p2) suggest that opportunity has an objective and subjective side. Opportunity as an objective reality is identified or discovered. In contrast, an opportunity is created as a social construction emergent from the "interactions and confrontations between an individual and his/her environment". Shane and Venkataraman's (2000) classical 'opportunity-

individual nexus' construct lends more towards the objective reality view of opportunity, which recognises entrepreneurship as the identification, evaluation and exploitation of opportunity by individuals to create a product or service. However, such an objective conception of opportunity does not account for external conditions within a local area, such as institutional void and resource constraints that influence the decision-making process of entrepreneurs within the specificity of their social context (Korsgaard, 2007). Therefore, such traditional ideas of opportunity identification and exploitation provide an incomplete picture of how the entrepreneurial process occurs in a resource-constrained context. We cannot assume that conceptions of opportunity maximisation and optimum business modelling hold when resources are so tightly constrained. Thus, it is important to consider how the entrepreneurial process unfolds in everyday entrepreneurial activities dominated by "hands-on action and concrete practice for every good reason" (Jonannisson, 2018, p 392). This study addresses the increasing influence of personal relationships and human interactions (Butler and Williams-Middleton, 2014) and the power of the environmental context in the process of entrepreneurship, particularly in an area where these elements are more clearly applied. The next sections set out the study's foundation by providing an overview of the context of entrepreneurship and the heterogeneous nature of entrepreneurial activities in everyday life (everyday entrepreneurship) in the agricultural sector in Jos, in the Plateau State of Nigeria.

1.3 Rationale of Study

Entrepreneurship as a legitimate scholarly discipline is increasingly getting traction in the extant literature as a channel for explaining and addressing social, emotional and economic issues that enables or constrains our future realities (Zahra and Wright, 2011; Dodd, Anderson and Jack, 2021). Similarly, the contextualisation of entrepreneurship as a broad and diverse field has been developing for more than three decades (Welter, Baker and Wirsching, 2019). Drawing from prior research (Welter, 2011; Zahra and Wright, 2011; Gaddefors and Anderson, 2019; Welter and Baker, 2021), it is argued that the multidimensional contexts in which entrepreneurship occurs influence the process of entrepreneurship and the resultant outcome. For example, Müller and Korsgaard (2018) draw attention to the local spatial dimensions of entrepreneurship in rural regions by highlighting

the role that spatial context plays in shaping 'place-specific rural entrepreneurial practice', leading to economic development of local areas. Continuing on the theme of rural development, Gaddefors and Anderson (2018) see entrepreneurship as a change agent for the economic and social revival – 'the context as the means in which entrepreneurship is enacted'. Rural entrepreneurs are credited for enacting entrepreneurial opportunities in local areas (Korsgaard, Ferguson and Gaddefors, 2015). In addition, Gaddefors, Korsgaard and Ingstrup (2020 p245) submit that "entrepreneurship is essential for developing organisationally thin rural regions". By extension, entrepreneurship is vital for the socioeconomic development of rural regions and improving the living conditions of rural dwellers through job creation activities and innovation. Additionally, Korosteleva and Stępień-Baig (2020) suggest that entrepreneurship is an important channel for reducing poverty in transition economies through the job creation activities of business owners.

The everyday nature of entrepreneurship presented above is inherently about socioeconomic change. As such, entrepreneurship is seen as a social phenomenon that involves people, their lived experiences in their specific social and cultural settings, and their contributions to the local economy (Anderson and Starnawska, 2008, Steyaert and Katz, 2004). However, there are substantial variations in the economic performances of enterprises in urban settings backed by high capital, high consumption, big data, technology-driven and innovative systems supporting entrepreneurial activities, compared to the economic performance of enterprises in rural settings (Zahra, 2007; Welter, 2011; Welter et al., 2017). The availability of arguably better infrastructure and economic performance-enhancing structures in urban settings does not make urban entrepreneurs 'better' or more effective at 'entrepreneuring' than their rural counterparts. Notwithstanding, there are strong variations in the effect of the restricted and localised resources on entrepreneurs in developing economies than those in more developed economies (Müller and Korsgaard, 2018). The resource-constrained rural settings force rural entrepreneurs to consider more contextual factors such as: local partnerships, utilisation of effective local business traditions and localised innovative approaches supporting various entrepreneurship activities in the rural regions.

In addition, the diverse contexts in which entrepreneurship occurs within rural settings shape the different ways that the entrepreneurial processes happen and

the outcomes of the entrepreneurial activities. Equally, the social embeddedness of entrepreneurs in their local contexts influences their decision-making process (Jack and Anderson, 2002). For example, entrepreneurs' reliance on local partnerships and networks to access finite local resources for the enterprise (e.g., access to affordable finance and labour). Also, the decision-making process on what type of service or product to produce (e.g., food products, arts and crafts) and which competitive markets to sell to (e.g., local or non-local).

Beyond the context in which entrepreneurship occurs, there is a growing debate among entrepreneurship scholars on how best to identify entrepreneurs, either through their registered business, employment status or their entrepreneurial behaviours, processes and actions (Dimov et al., 2020; Dodd, Anderson and Jack 2021; Welter et al. 2017). Dimov et al. (2020) call for contextualised meanings to be attributed to the actions of entrepreneurs as a means of identifying entrepreneurs. Welter et al. (2017) argue for greater emphasis on the 'reasons, value and purpose' of entrepreneurship in the everyday activities of entrepreneurs, not just the outcome of their entrepreneurial activities. To elaborate on the argument of Welter et al. (2017), Dodd, Anderson and Jack (2021, p5) point to the repositioning of entrepreneurship "process, places, peoples, purpose and principles" to help explain the heterogeneity and transformative nature of entrepreneurship, existing in "multiple states regardless of the observer and the observation" (Gaddefors and Anderson, 2017 p 274). Thus, the diverse contexts of entrepreneurial activities challenge our preconceived notion of who an entrepreneur is and what entrepreneurship looks like.

An exciting dimension for a more comprehensive explanation of the diverse nature of entrepreneurship is a call to explore and understand "how entrepreneurs do contexts: how they interact with their environments to enact and construct the contexts in which they operate" (Welter and Baker, 2021, p2). It is conceivable that the severe resource constraints of rural settings offer a rich and interesting context to explain better how entrepreneurs do context, uncovering the 'who, where and when' and varieties of how entrepreneurial activities are created (Korsgaard, Ferguson and Gaddefors, 2015; Müller and Korsgaard, 2018; Welter and Baker, 2021). A contextualised study on everyday entrepreneurial activities within a sub-Saharan African economy offers an interesting opportunity to

understand some of the local spatial dimensions associated with rural settings. Fitz-Koch et al. (2018) suggest that focusing on a sector as a context of entrepreneurship research unveils many impactful characteristics of entrepreneurship. Given that the agricultural sector is an important sector globally recognised in entrepreneurship scholarship, an empirical study within a rural farming community context provides a better understanding of entrepreneurial farmers' contributions to their local economy.

Looking at the interrelatedness of population growth and food supply, Calicioglu et al. (2019) suggest that the rapid growth in the global population poses a challenge to global food security, with the increasing demand for food and nutrition outstripping the population growth rate. The Food and Agriculture Organization of the United Nations (FAO) identify the adoption of sustainable agricultural services as a prerequisite for providing sufficient and low-cost food supplies. The FAO's 'Transforming the world through food and agriculture' (2019) report calls for further investment in family farmers and the transformation of the rural sector. This calls for investment in food and agriculture and recognises the pivotal role of agriculture as the largest employer and economic engine of many countries (FAO, 2019).

In the same way, the Nigerian Federal Government and the Plateau State Government recognise the importance of agriculture to the national economy by implementing various intervention programmes to address the issue of food security, poverty and unemployment in the country (Adeyanju et al., 2021; Ogunmodede, Ogunsanwo and Manyong, 2020). The majority of these interventions are targeted at engaging the youth in agriculture, as they are seen as a vibrant and able force capable of transforming the local economy by creating sustainable jobs and quality agricultural products (Yami et al., 2019). However, there is a lack of evidence on the success or failure of these interventions and the important lessons learned to inform future programmes (Ogunmodede, Ogunsanwo and Manyong, 2020). It is important to understand the entrepreneurial process within the context that it occurs in Nigeria for the various interventions to take hold.

Geographically, Jos is the capital of Plateau state, situated in North-central Nigeria. Based on the 2006 census, it hosts a population of approximately 900,000 residents, spread over three local government areas. Many adults are involved in rudimentary farming (especially dry-season vegetable irrigation farming), street trading or engagement in the cycles of adding value within and beyond their local communities (Pasquini et al., 2004; Wuyep and Rampedi, 2018). Agriculture "plays an important role in supporting growth, creating jobs, food security and reducing poverty. It is a change and transformation agent, with roads, water, and electricity, among others, as stimulants that would be given equal attention in developing our rural areas" (Plateau State Government, 2020). The Plateau State Government provided a policy statement promising adequate infrastructure to support rural and agricultural development. The government further plans to invest in irrigation facilities for all-season agricultural enterprises and partner with the private sector to explore the possibility of building storage facilities to support the agricultural sector in keeping perishable products fresh all year round (Plateau State Government, 2020). Equally important is the renewed focus by the Plateau State Government to overhaul the economy of the state through the active advancement of entrepreneurial activities, including the resuscitation of the manufacturing sector.

Growing up in Gindiri, one of the rural villages in Plateau State, agriculture was and is, still the economic mainstay of the local area. Agriculture became an important part of our education and exposure to the culture and traditions of our community. Agriculture played an important role in connecting social and cultural conditions with business activities leading to the socio-economic development of the local area (Patten et al., 2019). Whereas Ratten et al. (2019) would describe the agricultural activities in my local community as subsistence entrepreneurship, characterised by illiterate individuals with fewer resources and short-term objectives focus, most of the local farmers choose to farm as part of the family tradition irrespective of their educational qualifications, as is the case of my father with a postgraduate qualification. Peasant and subsistence entrepreneurship is closely related to familial enterprise and solidarity (Smith, 2006). We all had to learn how to farm and play our part in the family farming enterprise to continue the family tradition.

The entrepreneur is seen as a coordinator of resources (Arroyo-López and Carcamo-Solis, 2011). There is no purer coordination of resources than farming from my experience growing up in rural Nigeria. Through entrepreneurial farming pursuits, farmers can navigate their challenging resource-constrained environments to add value to their families and the local community. My mother, for example, is an entrepreneur, creating jobs within our local community through her poultry and maize farms and is a creator of wealth augmenting the household income. The local farmers in our area are not entrepreneurs to avoid 'consumption' poverty' (Duttaa and Banerjee, 2018) or to meet their basic needs (Bruton, Ahlstrom and Si, 2015). On the contrary, the farmers are serving the local community that they are in through job creation and welfare provision leading to the socio-economic development of the local area.

My initial motivation was to study the effect of poor electric-energy supply on the economic growth of small businesses in Plateau State. My research interest was mainly to understand how appropriate investment in renewable energy can be a catalyst for small business development and economic growth in sub-Saharan Africa. However, after consulting the entrepreneurship literature, I became fascinated by the emphasis in the extant literature on entrepreneurship research to focus more on the many and varied contexts in which entrepreneurship occurs (Welter, 2011; Zahra and Wright, 2011; Korsgaard, Ferguson and Gaddefors, 2015; Welter et al., 2017; Anderson and Ronteau, 2017). My research interest changed to understanding the practice of entrepreneurship in multiple contexts. In particular, I became interested in how agricultural entrepreneurs negotiate with and navigate the various elements of their everyday contexts to add value to their families and the local community. A sub-Saharan African economy is an exciting context to understand the practice of entrepreneurship in the absence of crucial resources, such as finance, formal institutions, and governmental support. In addition, I am interested in the practice of entrepreneurship that goes beyond the economic dimensions of entrepreneurship in terms of opportunity creation, disruption and circulation of funds. I want to understand the many nuances of the sociocultural dimensions of entrepreneurship; the lived experiences of people, their values, culture and the several reasons why and how entrepreneurship occurs in a Nigerian rural agricultural community.

Given that agriculture is central to the socio-economic development of Plateau State, this study, therefore, seeks to identify and examine the entrepreneurial processes of the everyday entrepreneurs engaged in agribusinesses in Jos to understand the process of entrepreneurship within such a narrow context that transcends beyond the job creation, wealth acquisition and welfare argument. The research problem addressed in this study is as follows: how do rural farmers use entrepreneurial processes to navigate a resource-constrained context? The aim and objectives of the study will attempt to generate rich data to provide answers to the research question.

1.4 Research Aim and Objectives

The main research goal of the study is to critically investigate how farmers use entrepreneurial processes to navigate a resource-constrained context. Subsequently, the study seeks to address the following objectives:

- 1) To explore how micro and small-scale business owners start and sustain their businesses in a resource-constrained context.
- 2) To explore the factors that influence effectuation processes of entrepreneurs as they engage in entrepreneurial decision-making.
- 3) To evaluate the effects of social embeddedness on the entrepreneurial process.
- 4) To establish the coping strategies of Nigerian entrepreneurial farmers.
- 5) To identify the key social-cultural challenges of everyday entrepreneurship and make recommendations on entrepreneurship context and process in rural settings.

1.5 Overview of the Methodology

In addressing the research aim and objectives, an interpretive design is adopted to explore the entrepreneurial process and interaction of rural farmers in their diverse and changing contextualised settings. In order to facilitate this, qualitative methodologies were employed similar to other entrepreneurship studies (e.g., Engel et al., 2017; Murdock and Varnes, 2018; Dessi et al., 2014). In-depth semi-structured interviews with thirty-one Nigerian farmers were conducted between

July 2018 and September 2018. The interviews explored the motivations, learning outcomes, experiences, and attitudes influencing the decision to start or continue a small agricultural business in a resource-constrained and uncertain environment where everyday entrepreneurship occurs.

Theories of decision making and entrepreneurial practice are used in the study to help explain the logic and rationale of agricultural entrepreneurs when starting and growing their small businesses within a sub-Saharan African and emerging economy context. The qualitative data analysis software "NVivo" was used to manage, code, and generate a thematic analysis of the research data, consistent with the interpretive research philosophy. This approach ensures that the perspectives and experiences of the entrepreneurs on their everyday farming activities are fully captured, analysed, interpreted, presented and explained in the findings' chapters.

1.6 Significance of the Study

Entrepreneurship is not a "thing" but a channel for socioeconomic development that is centred on the subjective relationships and interactions of humans shaped by and existing in multi-layered contexts (Anderson and Starnawska, 2008; Butler and Williams-Middleton, 2014). Thus, the outcome of entrepreneurship and the context of becoming an entrepreneur and doing of entrepreneurship is vital in explaining how entrepreneurship happens. This study will make several important contributions.

First, it will contribute to the growing body of research on the everyday entrepreneurial activities of entrepreneurs in diverse contexts (Welter et al., 2017; Welter and Baker, 2021) by focusing on a narrow and specific agricultural community in a sub-Saharan African rural region. Such a narrow focus on the everyday entrepreneurial processes of these understudied populations complements the existing literature by moving beyond the mainstream established entrepreneurial models such as the Silicon Valley model to more contextualised settings where everyday entrepreneurs navigate their challenging contexts to add value to their local economy and community.

Second, given that farmers play a vital role in job creation and food provision in their respective local communities, research on their entrepreneurial processes offers insights into how rural context impacts new venture creation, survival, and growth in rural regions (Korsgaard, Ferguson and Gaddefors, 2015). An in-depth understanding of the entrepreneurial processes in rural regions will contribute to developing policy initiatives aimed at engaging more young people in an agricultural business as a viable profession and contributor to rural development. The engagement of more young people in agriculture within rural regions will further control the increasing rural-urban migration and the depopulation of rural regions.

Third, this research will underscore the importance of empirical data in a real-life setting to supplement our understanding of the entrepreneurial process research from an emerging sub-Saharan African economy (Lingelbach et al., 2015; Eyana, Masurel and Paas, 2017) to complement already established westernised view of entrepreneurship. Having different perspectives and alternatives of who an entrepreneur is and what they do within their specific local contexts provides a holistic picture of what entrepreneurship is and how it occurs.

Fourth, the research will inform key decision-makers within governmental circles, policymakers, the private sector, the research community, and non-governmental agencies on ways to promote and support the growth and success of micro and small businesses, including agricultural enterprises. Complementary to this, the findings from this study can enrich the development and implementation of policies, projects and programmes aimed at the socio-economic development of rural regions in Nigeria.

1.7 Structure of the Thesis

Following this introductory chapter and overview of the study, the remainder of the thesis is organised as follows:

Chapter Two provides a synopsis of the socio-economic conditions in Nigeria, the business environment, a summary of the contributions of Microenterprises and

Small and Medium-Sized Enterprises (MSMEs) in Nigeria and the contribution of the Agricultural Sector to the Nigerian economy.

Chapter Three examines the theories used to describe and relate the key constructs of the study. This chapter further provides a review of the contextual approaches to the study of entrepreneurship to understand the nature and concept of entrepreneurship within a resource-constrained context. The theoretical analysis that informs the decision-making logic of our resource-constrained entrepreneurs is provided. The chapter looks at the theoretical perspectives that describe the everyday entrepreneurial processes in tightly constrained resource contexts and where the future business prospects are largely unpredictable.

Chapter Four examines the methods employed in the study. The research approach, design strategy, data collection method, sampling protocol, the method of data analysis and ethical considerations are discussed.

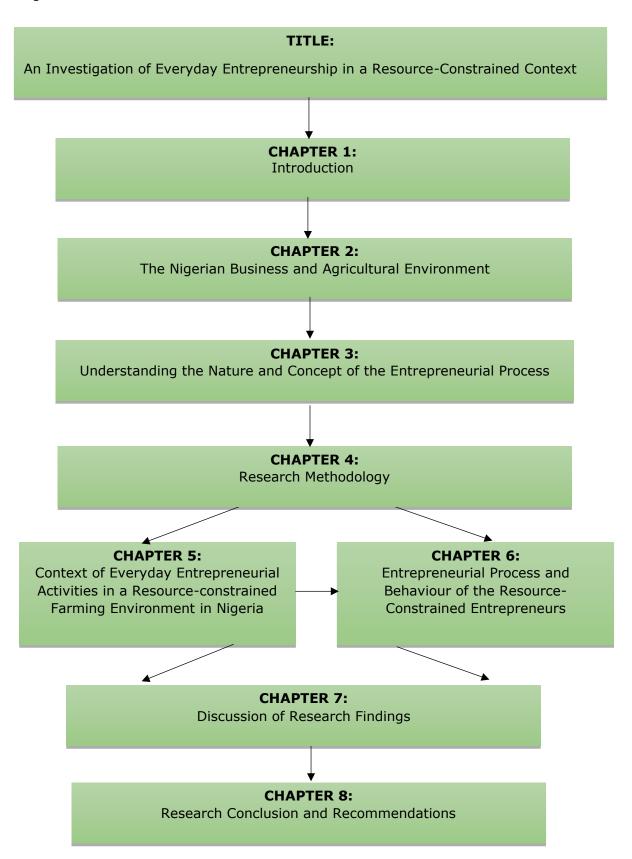
Chapter Five presents the analysis of the context of the everyday entrepreneurial activities of the farmers.

Chapter Six presents the analysis of the entrepreneurial process of the everyday entrepreneurial activities of the farmers

Chapter Seven discusses and interprets the key research findings set against pertinent literature to address the study's aim and objectives.

Chapter Eight concludes the thesis by addressing the research objectives. The chapter further outlines the key contributions of the study to theory, policy and practice and methodology. Finally, the study's limitations are discussed, with recommendations made for future research.

Figure 1.1: Thesis Structure



CHAPTER TWO: THE NIGERIAN BUSINESS AND AGRICULTURAL ENVIRONMENT

2.1 Introduction

A general overview of the research was presented in Chapter One. Chapter Two discusses the business and agricultural environments in Nigeria. The chapter begins with an overview of the socio-economic conditions in sub-Saharan Africa. Next, the Nigerian socio-economic profile is presented. A summary of the socio-economic contributions of microenterprises and Small and Medium-sized Enterprises (SMEs) to the Nigerian economy is also provided. The primary objective of the chapter is to highlight the important contributions of the Nigerian farmer and the agricultural sector to the Nigerian economy presented in the concluding sections of the chapter.

2.2 Overview of the Socio-economic Conditions in sub-Saharan Africa

In sub-Saharan Africa, many small businesses mirror the communities they evolved from, with set objectives that reflect the expectations of the local business area. While entrepreneurs in western developed economies may not place the societal values or expectations ahead of wealth creation motives for starting a business, in sub-Saharan African communities, the quest for individualistic moneymaking activity is balanced with the community-based values (Jackson, Amaeshi and Yavuz, 2008). The challenge entrepreneurs sometimes encounter in sub-Saharan Africa is the state of the business environment, such as access to affordable finance, effective business networks, and institutional void (Lingelbach et al., 2015; Eyana, Masurel and Paas, 2018). Xu (2011) argues that firms in countries with strong business environments tend to have higher wages (labour) and higher profit (for capital owners) compared to firms in countries with weaker business environments. Xu (2011) further identifies infrastructure as one of the key elements of the business environment necessary for productive investment. There is a wealth of new opportunities in emerging and developing economies for imaginative entrepreneurs to identify gaps in the market caused by unmet demands. However, the poor infrastructural facilities in some rural areas limit the entrepreneurs from taking full advantage of such opportunities to achieve their entrepreneurial goals. The challenging and uncertain business environments in sub-Saharan Africa force some rural individuals to migrate to urban areas to seek a better quality of life.

The quest for better living standards in education, improved wages, and better health facilities are why rural to urban migration is high in sub-Saharan Africa. The failure to address the structural differences between urban and rural areas only helps to intensify the draining of skilled and intelligent individuals from rural to urban areas (Bowen and Morris, 2019). The resultant impact of such migration is the neglect of rural communities, reduction in agricultural practices, the demise of the rich community and cultural base, overpopulation of urban areas, and overstretching of urban infrastructural facilities. Equally, the retention of many able men and women in the rural areas who can make better use of abundant land to ensure food security for the future is dependent on the provision of good infrastructural facilities in the rural areas.

Coker et al. (2017) claim that gender imbalance in socio-economic status in Nigeria limits access to crucial resources and impacts the productivity and competitiveness in crop production, especially in rural areas. Lent (2020) argues that research on women entrepreneurs in emerging or developing economies is still at the individual-level factors. The underreporting of the entrepreneurial activities of women entrepreneurs, either due to political influences or poor statistical systems, further fails to showcase the important contribution that women bring to their local communities. The underreporting of women entrepreneurs is not just a sub-Saharan African issue; Juma and Sequeira (2017) find limited studies dedicated to entrepreneurs' African-American women entrepreneurial processes achievements. In particular, they found limited studies on the important contributions of African American women entrepreneurs in creating viable job opportunities in their respective communities. Adam et al. (2017) also acknowledge the major role that women play in the agricultural sector in Africa, a major source of livelihood for the majority of the population in the continent. Therefore, a concerted effort is required by the various regional, national or local governments in Africa to support women entrepreneurs beyond production and fully engage in supply chain activities within the agricultural value chains (Adam et al., 2017).

Women are primarily responsible for providing care for children and other family dependents and general housework. Women find little time left for economic or entrepreneurial activity with such heavy domestic responsibilities. Equally, there is an expectation of women to be submissive to men in some sub-Saharan African cultures. In addition, some sub-Saharan African communities do not accord women entrepreneurs the same social legitimacy as they do to their male counterparts even where there is evidence of successful women-led enterprises, particularly in the agricultural and service sectors (Coker et al., 2017; Lent, 2020). The legitimacy issue, especially in rural communities, may limit the abilities of women to strongly contribute to the socio-economic development of their local communities (Amine and Staub, 2009). Block et al., 2013, cited and agreed with Shane (2009) that encouraging more people to become entrepreneurs is not sufficient; instead, it is the identification and support of entrepreneurs who take the risk to convert new knowledge into innovative services and products that is an effective policy. Therefore, the socio-economic characteristics of the women in their local business areas determine their eagerness to engage in an agricultural business effectively.

The state of institutions is a major factor influencing public policies to encourage more entrepreneurship within sub-Saharan African economies. A wide continuum of scholars has debated the effect of institutional context on entrepreneurial behaviour. For example, Walter and Block, 2016 argue that weak institutions lead to need-motivated entrepreneurship. On the other hand, Autio et al. (2014) see the relaxation of formal law as an incentive for entrepreneurship. Gielnik et al. (2015) focus on corruption and the uncertainty it creates as a disincentive to innovation and entrepreneurship. Corruption, poor regulatory systems, and an absence of the rule of law stifles economic and social development and breeds socially irresponsible businesses in developing economies (Azmat and Samaratunge 2009). However, understanding the weak law enforcement environment in many sub-Saharan African countries and the bureaucratic challenges within the business environment opens up viable opportunities for entrepreneurs to exploit the local institutional regime to create new ventures or Urban (2016) argues using evidence from South Africa that entrepreneurs closely monitor changes in the South African Government's laws and regulations, including the emerging trends in societal attitudes and values in their venture decision making processes. Similarly, Doblinger, Dowling and Helm (2016) suggest that changes in regulatory institutions influence entrepreneurial behaviour towards creating or improving a specific product, service, or technology.

2.3 The Nigerian Socio-economic Profile

Nigeria is endowed with abundant human, natural, mineral and energy resources. The country is well recognised for its oil and gas resources, ranked as one of the world's top 10 for confirmed oil and gas reserves with estimates of "36 million barrels, which is about 4.9 billion tons of oil equivalent...with more of natural gas than oil, with an estimation of 5210 billion m³ (187 trillion SCF) as of 2006" (Shaaban and Petinrin, 2014 p.73). The agricultural sector is also a big contributor to Nigeria's rich resources and economic opportunities. The Nigerian agricultural land and zones are some of Africa's most productive, stretching from the topical savanna in the north to the coastal rainforest in the south and the mangrove of the Niger Delta region. The tropical and semi-temperate climatic conditions in Nigeria are conducive to cultivating a wide variety of agricultural produce from vegetables, root crops, tree crops and exotic fruits. The resources mentioned above place the Nigerian economy as the largest economy in Africa over the last seven years with an innovative private sector, strong retail, media, entertainment, telecoms, manufacturing and financial service sectors driven by vibrant tech-savvy micro, small and small and medium-sized companies. The economy grew in 2018 by US\$21.1 billion, more than the combined GDP of the Niger Republic and Rwanda (Nigeria Investment Guide Factbook, 2020). The Nigerian Investment Guide (2020) provides key facts about the Nigerian economy, its resources, and its population, summarised in Table 2.1:

Table 2.1: Nigeria – Key Facts

Description	Fact	Additional Information
Location	sub-Saharan Africa	The largest economy in sub- Saharan Africa
Size	923,768 Km ²	Geographical landmass bigger than France and UK combined
Land	910,768 Km ²	
Water	13,000 Km ²	
Natural resources	Oil and gas; arable land, tin, iron, core, coal, limestone, niobium, zinc and more	These resources are available in commercial quantities across the six geopolitical zones
Financial	Naira	Official currency
Exchange Rate	₦360/US\$1	
GDP	\$469.3 billion	
Per capita	\$2,028.2	17.9% higher than Africa's average of \$1,720
Growth	1.9%	Projection of growth at a Compound Annual Growth Rate (CAGR) of 2.50% over the next five years
Population	196 million	54% under 25 years and fast- growing (2.7% + Year over Year (YoY)) and increasingly urban
Official Language	English	There are over 500 additional indigenous languages, including Hausa, Yoruba and Igbo
Administrative Divisions	36 states and 1 Federal Capital Territory in Abuja	Six Geopolitical Zones: North- central; North-east; North-west; South-west, South-south; South- east

Source: Nigeria Investment Guide 2020

The strong economic foundations presented in Table 2.1 provide an attractive and compelling case for a thriving business environment in Nigeria. Equally, with a population of over 190 million predominantly young, hardworking and enterprising individuals, it creates a talent pool for entrepreneurship and a ready-made market for innovative products and services. Nigeria shares land borders with Niger, Chad, Cameroon and Benin, making it a natural hub for trading in West Africa. Trading

is supported by an infrastructure of five major international airports (Lagos, Abuja, Enugu Port Harcourt, and Kano), Six major seaports (Lagos, Tin-Can, Rivers, Onne, Delta, and Calabar) and an improving road and rail networks (Nigerian Investment Guide, 2020).

The World Bank's 2020 'Ease of Doing Business' ranks Nigeria as 131st globally, with an overall score increase of 3.5% in 2020 compared to 2019. The topical change in score (% of points) shows an increase in 2020 compared to 2019 for Starting a Business (3.2%); Dealing with Construction Permits (14.6%); Getting Electricity (4.8%); Trading across Border (6.1%) and Enforcing Contracts (3.6%). These scores are evidence of the Government's recent reforms in business regulations to improve the business environment. The steady trajectory of Nigeria's business profile is projected to be ranked in the world's top 70 countries in the World Bank's 'Doing Business' league table by 2023 (Nigeria Investment Guide, 2020).

Figure 2.1: Map of the Federal Republic of Nigeria



Source United Nations Geospatial, 2020

As highlighted in Table 2.1, the socio-economic potentials in Nigeria are supported by an encouraging economic performance. On the contrary, Ogidan (2015, cited in Obokoh and Goldman, 2016) claims a 'budgetary gap of \$2.4 trillion in infrastructure allocation that impacted all aspects of the Nigerian Economy'. The deficiency in infrastructure is associated with decades of low investment in infrastructural development and negligence in infrastructure rehabilitation by successive Nigerian Governments. The quality and availability of infrastructure in a business environment increase entrepreneurs' economic activities, accelerating economic growth through job creation, reducing income inequality, and poverty alleviation.

Similarly, Obokoh and Goldman's (2016) study on the deficiency of infrastructure on the performance of Small and Medium-Sized Enterprises (SMEs) in Nigeria claims that the poor state of infrastructure in the country negatively impacts the performance and cost-effectiveness of small businesses mainly due to the high costs of private provision of electricity and the transportation of finished products. Also, Titus et al. (2013) argue that a conducive and enabling business environment positively impacts small business performance, leading to the economic growth of the business location. These authors identify access to affordable finance, appropriate technology, management skills and training, and rules and regulations as some of the factors that impede small business owners' profit-driven actions and negatively impact the business area's economic development.

The Nigerian Government at both Federal and State executive levels have a role to play in formulating effective policies and direct involvement in providing affordable microfinance, good infrastructure, and a conducive business environment for SMEs to thrive. Equally, the over-reliance of the Federal Government on the revenues generated from the Nigerian oil and gas sector stifles the productivity of the non-oil sectors. The diversification of the Nigerian economy can boost other non-oil sectors such as agriculture, manufacturing, retail, and financial services. These sectors complement the oil and gas sector's earnings and substantially drive the Nigerian economy with huge potential for generating substantial foreign exchange earnings.

2.4 Summary of the Contributions of Microenterprises and Small and Medium-Sized Enterprises (SMEs) in Nigeria

There is a recognition in entrepreneurship studies of the important role that microenterprises and SMEs play in the global economy, even with the numerous internal or external challenges they face to effectively survive and succeed in competitive local and global markets (Liñán, Paul and Fayolle, 2020; World Bank, 2019; Oyeniran et al., 2015). Although large local or multinational firms benefit from economies of scale and can generate better financial and technological resources than microenterprises and SMEs (MSMEs), MSMEs' flexible, dynamic, and easily adaptable decision-making processes give them an advantage over larger firms (Liñán, Paul and Fayolle, 2020). Irrespective of where economic activities occur globally, research has shown the substantial contributions of

MSMEs to the socio-economic development of rural communities (World Bank, 2019; Oyeniran, 2015). Oyeniran et al. (2015) also mentioned the importance of SMEs as the "drivers" of the growth and socio-economic transformation of any country. SMEs are the engine of economic prosperity, exploiting entrepreneurship to bring about economic growth in high-income economies while being a key driver of job creation in less developed economies (Oyeniran et al., 2015).

The growth of online business transactions, aided by the advancement in innovative technology and the role social media plays in creating connected networks, has revolutionised consumer taste and behaviour across the globe. Demand for newer and smarter electronic devices for entertainment, communication, and general household comfort increases. This emerging consumer taste and behaviour trend create an opportunity for various entrepreneurial activities in both developed and developing economies through new business start-ups, innovative activities, or business mergers or acquisitions. Entrepreneurs in economies with lower disposable income, such as Nigeria, are taking advantage of this new trend to create new products and services to meet the changing market conditions in their local business areas, characterised by consumer taste and behaviour changes.

The commitment of the Nigerian Government to build support systems for encouraging and supporting entrepreneurs influences the way the entrepreneurs maximise opportunities available within the business location. The political system supports entrepreneurship through: the provision of efficient and adequate infrastructure; introduction of effective entrepreneurship policies; favourable taxation procedures and system; the provision of productive incentives and subsidies; affordable and accessible finance; and promoting and ensuring the integration of various sectors of the economy - e.g., agricultural and manufacturing/industrial sectors, capital intensive and labour-intensive technology, modern and traditional social structures, and small and large-sized enterprises (Autio and Fu, 2015; Block, Thurik and Zhou, 2013; Bula, 2012).

The Nigerian Government has, over the years, introduced several initiatives and programmes aimed at encouraging entrepreneurship by providing access to credit and loan facilities to the unemployed youth and disadvantaged groups in the

country to set up their small businesses. Access to finance is being promoted through the establishment of several micro-lending institutions. These include the Youth Enterprise with Innovation in Nigeria (YouWiN) Programme, the National Economic Reconstruction Fund, Community Banks, the Nigerian Bank of Commerce and Industry, the Nigerian Export and Import Bank, and the People's Bank of Nigeria, a few. The expectation of the Government is for "SMEs to contribute 34% (the ratio of the gross value of manufacturing to GDP) to the national product and to generate 60-70% of total employment with sustainable yearly growth" (Egbabor, 2004, cited in Oyeniran et al., 2015, p. 2). Successive Nigerian governments have, over the years, put in place various interventions and initiatives to promote entrepreneurship with the sole aim of positioning small businesses to be a major contributor to total employment, leading to economic and regional development. The next section examines the contributions of the agricultural sector to the Nigerian economy.

2.5 The Nigerian Agricultural Sector

Magagula and Tsvakirai (2020) suggest that there has been less focus on agricultural entrepreneurship research in the past, especially in emerging and developing economies. Although much has been written about rural entrepreneurship in the extant literature, Dias et al. (2019) argue that there are limited studies on agricultural entrepreneurship considered a sub-domain of rural entrepreneurship. The invaluable contributions of the agricultural sector and farmers to their local communities cannot be neglected, especially in the areas of economic transformation (Jayne, Chamberlin and Benfica, 2018), youth participation and engagement (Magagula and Tsvakirai, 2020) and primary source of livelihood (Adam et al., 2017). Uduji, Okolo-Obasi and Asongu (2019) opined profitable commercial agriculture ventures to be drivers of faster development and sustainable growth in sub-Saharan Africa.

Ogunmodede, Ogunsanwo and Manyong (2020), in their study on the impact of the 'N-Power Agro Employment Program in Nigeria', listed several different initiatives by successive Nigerian governments aimed at agricultural development. These include the Directorate of Food, Road, and Rural Infrastructure in 1985; The Nigerian Agricultural Policy in 2001; The National Special Program for Food

Security in 2002; The Agricultural Transformation Agenda Policy in 2011; The Agricultural Promotion Policy in 2016; and N Power in 2016 coordinated by the office of the Vice President. The main objectives of these policy initiatives are to improve rural livelihood, provide employment, ensure food security, rural development and sustainable use of natural resources. Ogunmodede, Ogunsanwo and Manyong (2020) conclude that the N Power empowerment program in the Southwest Nigeria inspired youth to engage in agriculture and venture into agribusiness using entrepreneurial training they received before and after participating in the program. However, the challenge of start-up capital, poor infrastructure, rudimentary farming technology, and the lure of other non-farm job opportunities affects the continuous engagement of the youth in agribusiness. The result is a high rate of unemployment and food insecurity in the country (World Bank, 2019).

The National Fadama Development Project is a laudable initiative by the Nigerian Government. The Fadama Development Project, now in its third phase, started in 1990 and is being implemented in all 36 states of Nigeria, including Abuja, the Federal Capital Territory. The Fadama project series is an agricultural development approach driven by the local communities using local development plans and innovations to improve the livelihood of farmers and the sustainable use of rural land and water resources. Locating the Fadama offices in local councils helped involve local farmers in the planning processes and supported the Nigerian Ministry of Agriculture and Rural Development in implementing and coordinating the local development plans with relative success (World Bank, 2019). The following sections present the Nigerian Entrepreneurial Farmer and the contribution of the Nigerian Agricultural Sector to the Nigerian economy.

2.5.1 The Nigerian Entrepreneurial Farmer

Suvanto, Niemi and Lähdesmäki (2020), from their study on Finnish 'farmer's protein crop cultivation choices', differentiate an entrepreneurial farmer from a food producer based on the increasing expectation of the entrepreneurial farmer to be competitive and operate as an innovative and risk-taking business owner. The Nigerian entrepreneurial farmer engages in everyday entrepreneurial farming activities to generate income from the farm to provide for their immediate family

and the wider local community. The lack of affordable finance, farming inputs, mechanised farming equipment, and government support through the services of agricultural extension workers impacts the efficiency of the entrepreneurial farmers and the productivity of their farms. Navigating the resource-constrained context requires innovative farming methods and practices to cater to the needs of their respective families and the local community. Figure 2.2 describes the Nigerian crop-producing farmer's common farming operations where rudimentary farming tools are employed to cultivate the farmland.

The absence of mechanised farming equipment and practices does not deter entrepreneurial farmers from large-scale farming operations. As shown in Figure 2.2, strong, able men and women are employed to cultivate hectares of land over time. The patriarchal nature of farming is changing with more women actively engaged in farming operations and contributing to the rural development of their communities.

In some cases, only men are employed to cultivate the land, as shown in Figure 2.2, and the women usually cook and bring food to the farm. Women and children sow seeds and motivate the men through singing and dancing in the background, a communal effort.

Figure 2.2 Manual Farming Operations



Greenhouse farming is gradually replacing dry season irrigation farming in some rural areas of Nigeria, e.g., Jos Plateau. The entrepreneurial farmers that can afford the greenhouse farming technology can now engage in all year vegetable farming.

Figure 2.3: Greenhouse Farming



Source: Author's collection (Fieldwork photographs)

Figure 2.3 shows a greenhouse farm with tomatoes and bell peppers. Cucumber, aubergine and other vegetables are also grown using imported greenhouses or locally fabricated greenhouses. The location of greenhouses closer to the entrepreneurial farmers' homes reduces the cost of travel to farmlands around the rivers to engage in dry season farming. The greenhouses further control the loss of farm produce to herders' invasion of farms and other farm thefts.

The entrepreneurial farmer engages the services of family members or other community members during the harvesting seasons. Youth groups, and community groups are employed and paid at a day rate to assist the entrepreneurial farmer in harvesting their farm produce, as seen in Figure 2.4.



Figure 2.4: Harvesting Tomatoes

Source: Author's collection (Fieldwork photograph)

The reliance on family and community support in the farming operations cannot be overemphasised. The Nigerian entrepreneurial farmers use their local support network to reduce the cost of production. As seen in Figure 2.4, during the harvesting period, the employment of seasonal workers helps some of the younger members, including their parents, generate some much-needed finances to augment school fees payment.

In the north-central region of Nigeria, for example, in Jos Plateau, poultry farming is a major preoccupation of many entrepreneurial farmers, either as full-time poultry farmers or adding the poultry farm business with crop production or livestock farming. Figure 2.5 shows an early morning collection from a farm in Jos Plateau.



Figure 2.5: Early Morning Egg Collection

Source: Author's collection (Fieldwork photograph)

Some civil servants engage in poultry farming using available land or structures in their residential homes. The eggs and poultry meat from the farm are good protein sources and vital in generating additional income for the civil servants to augment their household income. Everyday entrepreneurial activity on the farm

creates opportunities for the Nigerian entrepreneurial farmer to provide food for the family, generate household income, create jobs in the local community, and contribute to the local and national economy.

2.5.2 Contribution of the Agricultural Sector to the National Economy

Nigeria is fortunate to have 78% of the land suitable for agriculture, with fertile soil and abundant water resources, although only 40% of the land is cultivated (World Bank, 2019, Omorogiuwa, Zivkovic, and Ademoh, 2014). The sector contributes 30% of Gross Domestic Product (GDP) in comparison with manufacturing, which contributes 11% to GDP (Sertoğlu, Ugural and Bekun, 2017), and over 60% of employment (The World Bank, 2019). The key agricultural activities in Nigeria centred around crop production and the rearing of livestock animals. Other sub-sectors include piggery, fishery, forestry and food processing. Successful governments have introduced many initiatives at the Federal, State and Local governments to improve the low productivity in the Nigerian agricultural sector, a crucial source of rural household income and economic growth in Nigeria.

Food insecurity and malnutrition should not be a major concern for such economies, particularly where farming is the primary source of employment for most of a given population. However, Africa is the "world's most food-insecure region of the world, with relatively low levels of agricultural productivity, low rural incomes, high rates of malnutrition and a worsening food trade balance...[and] a daunting prevalence of poverty despite progress in recent years, and an urgent need for jobs" (Jayne, Chamberlin and Benfica, 2018, p.784). Similarly, a recent World Bank report on Nigeria's systematic country diagnostic paints an austere picture of the constraints that the Nigerian agricultural sector faces: "Difficult access to quality and affordable technologies, the inefficiency of advisory services, limited access to markets... unsecured land tenure, high cost of finance, geoprocessing, and marketing logistics undermines the rapid growth of commercial agriculture and agricultural SMEs" (World Bank, 2019, p.89). These constraints are partly due to successive Nigerian governments' over-reliance on the oil and gas sector and the neglect of the non-oil and gas sectors such as manufacturing and agriculture. The restrictive foreign exchange and trading policies make it even harder for agricultural SMEs to export goods and services and survive in business.

The agricultural SMEs sometimes resort to operating within the 'value chains of large corporations' to survive in business (World Bank, 2019).

In the 1960s, the agricultural sector was the mainstay of the economy, the driver for growth and development. The sector accounted for the export of produce and crops with export value such as groundnut, ginger, cotton, oil palm cocoa, hides and skin and rubber and a host more (Sertoğlu, Ugural and Bekun, 2017). The increased focus on oil revenues in the 1970s did not translate into the diversification of the Nigerian economy and the development of the non-oil and gas sectors of the country. Instead, it gradually transitioned from rural areas to major cities, searching for non-farm activities and a 'better lifestyle'. The annual growth rate of the agricultural population from 1998 to 2008 shows a decline of -0.43%. The rate of unemployment as of 2014 is 25.1% (FAO, 2020). The declining population of young adults in rural areas increases the rate of unemployment in urban areas. In contrast, Igwe et al. (2020), in a study of Nigerian Igbo ethnic entrepreneurs, argue that the Igbos use the high unemployment rate in Nigeria as an 'economic weapon' to create jobs and a better future for their children in both rural and urban areas of the country. Nevertheless, the impact of the rural-urban migration reduces the share of the agricultural sector in the total Gross Domestic Product (GDP) even as the overall value of farm output continues to grow.

2.5.3 Rural Development

The absence of quality infrastructure and institutions in rural Nigeria affects the national economy. Kolawole and Ajila (2015, p. 131) describe rural development as a crucial platform for enhancing the livelihood of people living in "relatively remote and sparsely populated communities". The authors identified entrepreneurial development and employment generation through community-led initiatives as instrumental in poverty alleviation, addressing inequality, promoting community development and improving rural livelihoods. Similarly, the Nigerian Government has a strategic role in engaging with the rural communities to initiate specific rural policies and programmes to support entrepreneurial activities in the rural parts of the country. Active engagement and promotion of community-led initiatives will help to curb the increasing rural-urban migration, the decline of economic activities in the rural areas in Nigeria, and to "foster the building of virile

local institutions, which would serve as the engine for driving rapid community development" (Kolawole and Ajila 2015, p. 132).

The poor quality of rural infrastructure is a barrier to attracting private investment into rural areas where most farming occurs. Therefore, aggressive but sustainable rural infrastructure planning and investment are needed to construct rural roads to reduce the risk of commuting and improve local communities' security. Shaaban and Petinrin (2014) suggest that the rural parts of Nigeria are endowed with abundant renewable energy resources. Provision of affordable and reliable electricity through solar, hydro, biomass or other renewable sources of electric power generation is vital in preserving perishable farm produce. Primary processing of perishable farm produce, e.g., fruits and vegetables, controls food shortages outside the farming seasons and ensures that the food items are available all through the year at affordable prices to the rural and urban population. Having locally processed food available in the shops reduces the over-reliance on expensive imported food products and encourages local farmers to go into large scale food production.

When farmers have appropriate infrastructural facilities in the rural areas and are actively engaged in economic activities at the rural level, it drives the rural economy by creating jobs, improved security, poverty alleviation and sustainable rural development. Investment in quality infrastructure and the security of rural areas will attract private sector-led investment in the provision of affordable and accessible credit facilities through the services of microfinance banks with products tailored to the specific needs of farmers at the various stages of the farming operations. Private sector-led participation in rural areas can further access tractor-hiring services, veterinary services, farming-related consultancy services, and competitive markets in rural communities. Private sector-led investment in rural Nigeria is also required to provide insurance services, modern irrigation methods and equipment, gas supply to homes and businesses, and Information Communication and Technology (ICT) connections, devices and services that support community-based development efforts. As suggested by Uduji, Okolo-Obasi and Asongu (2019), good and reliable mobile telephone network services in rural areas provide local farmers with access to modern agricultural inputs and research channels to improve the farmers' productivity.

2.5.4 Socio-cultural Dimensions

Eijdenberg et al. (2018) identify the cultural, political and economic activity as institutional enablers influencing entrepreneurial activity. Marriage is a cultural enabler that creates many social activities within the rural farming community, including giving agricultural produce to celebrants as wedding gifts. Some farmers tend to expand their farming activities in the year of a major wedding to augment the family income to cover the costs of the wedding ceremonies. Marrying into a rich farming family further unlocks crucial resources to the entrepreneurial farmer, with in-laws providing capital or labour to the farmer free of charge or at a substantially reduced day rate and interest rate for the loaned capital. The sociocultural context of the everyday farming activities of the Nigerian entrepreneurial farmer is further provided in Chapters Five and Six.

2.6 Chapter Summary

The opportunities and challenges within the Nigerian business and agricultural environments were provided in Chapter Two. Successive Nigerian governments, over the years, put in place various interventions and initiatives to promote entrepreneurship with the sole aim of positioning small businesses to be a major contributor to total employment, leading to economic and regional development. Similarly, several policy initiatives were introduced in the agricultural sector to improve rural livelihood, provide employment, ensure food security, rural development, and sustainable use of natural resources. However, the chapter highlighted the challenging impact of poor infrastructural facilities, the ineffectiveness of policies and regulations, and security entrepreneurship, socio-economic development and sustainable rural development in Nigeria. Nevertheless, the contributions of the Nigerian farmer and the agricultural sector to economic development cannot be neglected, especially in food provision, entrepreneurial education, job creation, poverty reduction, and rural development.

Chapter Three follows with the review of relevant literature underpinning this research. A Conceptual Model is proposed to support the collection of data and analysis of the data to aid our understanding of the entrepreneurial process of

Nigerian farmers within a resource-constrained and uncertain business environment.

CHAPTER THREE: LITERATURE REVIEW: UNDERSTANDING THE NATURE AND CONCEPT OF THE ENTREPRENEURIAL PROCESS

3.1 Introduction

This chapter focuses on the lenses scholars from diverse transdisciplinary approaches have used to deliberate and conceptualise the field of entrepreneurship and the process of entrepreneurship. A critical analysis of the discourse on entrepreneurship within a sub-Saharan African economy is explored to establish further the relevance of the contribution of everyday entrepreneurial activities to the local economy.

Section 3.2 explores the wide-ranging definitions of an entrepreneur, and the field of entrepreneurship, while Section 3.3 presents an overview of the entrepreneurial process. Section 3.4 briefly explores the contextual approaches to the study of the entrepreneurship process, and Section 3.5 furthers the discourse through the lens of Effectuation theory. Finally, Section 3.6 articulates the theoretical analysis and outline of the study, and Section 3.7 summarises and concludes the discussions in the chapter.

3.2 Defining the Entrepreneur and the field of Entrepreneurship

The study of entrepreneurship is multidimensional, viewed from social, economic, political and academic perspectives (Fayolle et al., 2016; Audretsch et al., 2015). In addition, the term 'entrepreneurship' is an extensive concept that is sometimes used interchangeably with the term 'entrepreneur' as an agent for job and wealth creation. Varied perspectives are used by scholars from different disciplines in defining the field of entrepreneurship for their specific purposes (Wiklund, Wright and Zahra, 2019). For example, Dodd, Anderson, and Jack, 2021, p.6) present an ontological perspective of entrepreneurship that concerns "Connectedness". They believe entrepreneurship is a "mechanism for and of change...by connecting things, ideas, people, and processes" across the transitional space upon which the becomes connectedness Cele and Wale an enterprise. (2020)entrepreneurship as the combination of critical factors and resources supporting the creation and growth of new ventures. The premise that entrepreneurship is all about wealth and job creation was challenged by Welter et al. (2017). They argue that the context in which entrepreneurship happens, including the reasons, purposes and values for why and how it emerges, is an essential consideration in understanding the concept and practice of entrepreneurship.

Welter et al. (2017) argue that entrepreneurship is a provable and logically comprehensible formation of relationships in everyday activities. Gaddefors and Anderson (2017) see entrepreneurship as the process or practice of new venture creation, new or better service provision, or improved community welfare. Alternatively, Sutter, Bruton and Chen (2019) suggest entrepreneurship as a solution to extreme poverty, particularly among those living at 'subsistence levels' in developing and emerging economies. In addition, Dodd, Anderson, and Jack (2021, p.20) identify "creativity, risk-taking, adaptation, flexibility, unorthodox perception, and, most of all, change" as descriptive qualities of entrepreneurship. Thus, the place and context where entrepreneurship occurs are seen not only as benefiting from the outcomes of what entrepreneurs do, but equally constitute a part of the process of entrepreneurship (Korsgaard, Ferguson and Gaddefors, 2015; Gaddefors and Anderson, 2018).

Some scholars have defined entrepreneurship as the critical role that the entrepreneur plays in the formation and subsequent growth of the firm (see, Beugelsdijk, 2010; Caree and Thurik, 2010; Minniti and Levesque, 2010). For example, Beugelsdijk (2010) sees the entrepreneur as a significant factor in creating new firms or starting something new, either in finding new productmarket combinations or using local social conditions to drive innovation. Minniti and Levesque (2010) identify alertness to opportunities and the willingness to incur an upfront cost as critical features of an entrepreneur. Engel et al. (2017) claim that an understanding of the different cognitive nature of individuals is vital in advancing our understanding of the approaches that entrepreneurs make when starting a new venture. Additionally, other scholars (Anderson and Ronteau, 2017; Welter et al., 2017; and Steyaert and Katz, 2004) focus on what entrepreneurs do, how and why they do it, or, as Perry, Chandler and Markova (2012) point out, the actual thoughts and behaviours of entrepreneurs when starting a new venture. Understanding the cognitive priorities of individuals is vital in advancing our understanding of the differing approaches entrepreneurs take when starting a new venture (Engel et al., 2017).

The decision-making logic of the entrepreneur during the entrepreneurial process that occurs organically, planned, or as a consequence of past experiences has received increased spotlight in entrepreneurship scholarship (see, Sarasvathy, 2001; Baker and Nelson, 2005; Servantie and Rispal, 2018). The decision-making process leading to becoming an entrepreneur is never seen as a career choice between self-employment or paid employment or driven by necessity or opportunity motivations (Kautonen et al., 2013; Adom, 2014). Thus, understanding the decision-making process that leads to creating a new venture provides valuable insights into the motivational basis for achieving the desired entrepreneurship outcome and subsequent behaviour of the entrepreneur (Shirokova et al., 2017). Therefore, most studies on entrepreneurship focus on understanding the mental process the entrepreneur goes through, leading to a decisive action – in most cases, either starting a new business or becoming entrepreneurial (Dodd, Anderson, and Jack 2021).

The diverse scholarly perspectives and debate on entrepreneurship reflect the diverse intellectual origins of entrepreneurship as a field (Zahra and Wright, 2011). Welter et al. (2017) convincingly conclude the debate by repositioning entrepreneurship scholarship away from the restricted "singular meaning of entrepreneurship" to instead "fully embrace heterogeneity and differences". This assertion is equally relevant to understanding who an entrepreneur is, a shift away from the western-centric 'Silicon Valley' stereotyped entrepreneur model to more local "heroes of many kinds: of their own lives, families, communities, and myriad other contexts." (Welter et al., 2017, p.317). The contributions that entrepreneurs make to the economic growth of the local business area can no longer be neglected. Ribeiro-Soriano (2017), observes that extensive literature on small businesses shows that new start-up ventures, drive economic prosperity and can transform and develop the local economy.

3.2.1 Subsistence and Peasant Entrepreneurship

Subsistence entrepreneurship has a long and established body of literature which is centred on the transformative societal benefits that small businesses provide to improve the living conditions of individuals at the bottom of the poverty pyramid in lower-income communities (Arshad, Ramírez-Pasillas and Hollebeek, 2020).

Smith (2006) argues that although peasant and subsistence entrepreneurship are most often associated with developing or emerging economies, they are both integral parts of the socio-economic development process of developed economies. Recognising that subsistence entrepreneurship is evident in contexts with high consideration for sustainability and social goals, the emphasis on corporate entrepreneurship in mainstream literature limits subsistence entrepreneurship studies (Ratten et al., 2019).

Si et al. (2020) define subsistence entrepreneurship as "ventures in settings of poverty in which a new venture offers little in terms of the potential to significantly improve the entrepreneur's life, or that of the entrepreneur's family and subsistence entrepreneurs engage in entrepreneurial activities out of necessity." (Si et al., 2020, p 8). Other Scholars (Viswanathan, Sridharan and Ritchie, 2010; Viswanathan et al., 2014; Bruton, Ashlstron and Si, 2015; Venugopal and Viswanathan, 2021) all seem to agree with Si et al.'s (2020) definition by suggesting that subsistence entrepreneurship are those entrepreneurial efforts in settings of extreme poverty that create little substantial value to improve the entrepreneur's life or that of the entrepreneur's family or that of the society.

The focus of subsistence entrepreneurship is to meet the basic needs of the individual entrepreneur, usually at the base of the poverty pyramid, who is barely making a living (Viswanathan, Sridharan and Ritchie, 2010). In addition, Ratten et al. (2019) view subsistence entrepreneurship as the practices of subsistence entrepreneurs in producing affordable products and services through their cultural and social activities. Similarly, Rashid and Ratten (2021, p7) suggest that subsistence entrepreneurs originate from 'disadvantaged backgrounds with low-income and lack of education.' Access to crucial resources and support in business comes from their support systems, culture and human capital. Thus, subsistence entrepreneurs are embedded in poor communities with poor customers and operate in environments marked by debilitating formal institutional void and uncertain market conditions (Viswanathan et al., 2014).

In the absence of formal institutions and governmental support, subsistence entrepreneurs living at the bottom of the poverty pyramid learn from their surroundings to address the poverty problem in lower-income communities

(Viswanathan et al., 2014; Si et al., 2020). Subsistence entrepreneurs, are mostly consumers who turn into entrepreneurs due to the paucity of job opportunities within their rural settings. The family becomes the dominant provider of crucial resources to the subsistence entrepreneur. Therefore, subsistence entrepreneurs are essential in connecting social and cultural conditions with small business activity, leading to local communities' socioeconomic and environmental development (Ratten et al., 2019; Arshad, Ramírez-Pasillas and Hollebeek, 2020).

Several anthropology and criminology studies have been seen to influence the literature on peasant entrepreneurship. Peasant entrepreneurship is the source of and arguably the origin of the "entrepreneurial spirit of individual ethnic groupings." (Smith, 2006, p 44). The rural form of subsistence entrepreneurship in Scotland's rural fishing communities from the 1930s to 2000 is a variant of peasant entrepreneurship based on 'making do' with and not 'making good' with available local resources and opportunities. This form of subsistence entrepreneurship is different from the heroic narrative of successful high capital-backed entrepreneurs we are accustomed to in extant literature. The social ties of communal living, work, and shared life experiences in rural settings accentuated by the monotonous, cyclical nature of everyday work provides an interconnected pattern to communal existences (Smith, 2006).

3.2.2 Everyday Entrepreneurship

Welter et al. (2017) challenged the excessive emphasis in entrepreneurship literature on high growth, high capital, and technology backed businesses as the kinds of entrepreneurship that produce better job and wealth creation outcomes – the heroic "Silicon Valley" model of entrepreneurship. The authors advocated the placement of entrepreneurship outcomes within a broader context of the 'reasons, purposes and values for why and how entrepreneurship emerges' in everyday life and from the everyday practice of individuals (Steyaert and Katz, 2004; Blenker et al., 2012). Everyday entrepreneurship encompasses the richness of the vast and diverse contexts in which entrepreneurship occurs as highlighted in Figure 3.1. For example, entrepreneurship among women in rural Ghana (Lent, 2020), Mittelstand in Germany (Pahnke and Welter, 2019), the practice of entrepreneurship in conditions of socioeconomic crises (Garcia-Lorenzo et

al.,2018), family business (Jones and Li, 2017), and ethnic entrepreneurship (Igwe et al., 2020) to mention a few.

Welter and Baker (2021) argue that a great deal of everyday entrepreneurship, similar to most of the world's commercial activity, is informal businesses. These informal businesses are usually in multiple and often neglected sites and places (Steyaert and Katz, 2004). Thus, the future of entrepreneurship rests on the 90% of SME businesses that employ 50% of the global population and contribute 55% of GDP in developed economies and much more in developing and emerging economies (Kuratko and Audretsch, 2021).

Adopting the everyday entrepreneurship concept in this study offers an exciting explanatory lens to the wide variety and importance of entrepreneurship practice that is not limited to race, gender, or place of entrepreneurship (Welter et al., 2017). Who the entrepreneur is, what they do, and how they do it will always generate different perceptions of the value they create (Anderson and Smith, 2007)? Therefore, entrepreneurship scholars need to go beyond theorising the words "entrepreneur" and "entrepreneurship" to more empirical research on the everyday practice, behaviours and outcomes of entrepreneurship in multiple contexts (Welter and Baker, 2021; Dodd, Anderson and Jack, 2021; Ramoglou, Gartner and Tsang, 2020). This conceptual perspective is developed further in subsequent sections, and a conceptual model is provided from the extant literature.

3.3 The Entrepreneurship Process

Gupta, Chiles and McMullen (2016) view the entrepreneurship process as increasingly gaining traction in entrepreneurial studies and is becoming a mainstream approach. Equally, Hjorth, Holt and Steyaert (2015) submit that entrepreneurship occurs from 'entrepreneuring' "as a process enacted in practices" (Sklaveniti and Steyaert, 2020, p.314). Thus, the process of entrepreneurship is not restricted to an "event" or "individual processes", but more about the "becoming", the "in-between", the doing of entrepreneurship besides what the entrepreneurs do (Gaddefors and Anderson, 2017 & 2018).

Entrepreneurship as a discipline is young and rooted in practice (Wiklund, Wright and Zahra, 2019). However, the process of entrepreneurship is ratified in diverse contexts and embedded within social places of human interactions (Dodd, Anderson, and Jack, 2021). This excellent multidimensional change-making process happens in the everyday micro-practices of people's lives as they connect (Dodd et al., 2016). Change is henceforth, "simultaneously both input and output of entrepreneurial processes" (Gaddefors and Anderson, 2017, p. 269). Therefore, the implicit assumption by scholars that the output of the entrepreneurial processes results in positive outcomes can be misleading. Hence, entrepreneurship scholarship should be closely connected to the everyday realities experienced by entrepreneurs (Ramoglou, Gartner and Tsang, 2020). Furthermore, the explicit empirical testing of entrepreneurship theorisation brings relevance and credibility to the notion of entrepreneurship as an engine, a 'kind of energy' driving national or regional development (Wiklund, Wright and Zahra, 2019; Gaddefors and Anderson, 2018).

There are several approaches to studying the entrepreneurial process in extant literature. For example, Shane and Venkataraman (2000) provided a widely accepted definition of the entrepreneurial process as opportunity identification, evaluation and exploitation. Singer, Herrington and Menipaz (2018), in the 2017/18 Global Entrepreneurship Monitor (GEM) report, argue that the entrepreneurial process starts with the skills and motivation of the entrepreneur; then moves to the start-up phase of the business; finally transitions to the entrepreneur becoming a manager of a new or established firm. Mamabolo and Myres (2020) expanded on the works of Shane and Venkataraman (2000) and Singer, Herrington and Menipaz (2018) by proposing five phases to the entrepreneurial process from their systematic literature review of the empirical literature and conceptual papers on the different approaches to the entrepreneurial process. The authors suggested the five phases of the entrepreneurial process: 'opportunity identification; opportunity evaluation; opportunity exploitation; new business; and established business'. Each phase is impacted by the context of the entrepreneurial process and requires different types of skills and management as the entrepreneurial phases unfold (Mamabolo and Myres, 2020). An overview of some of the contextual approaches used in describing the process of entrepreneurship is presented in Section 3.4.

3.4 Contextual Approaches to the study of the Entrepreneurship Process

The study of entrepreneurship has increased exponentially in the past two decades (Wiklund, Wright and Zahra, 2019) with increasing gravitation toward more contextualised approaches (Welter, 2011; Jack and Anderson, 2002; Zahra and Wright, 2011; Korsgaard, Ferguson and Gaddefors, 2015; Anderson and Ronteau, 2017; Fitz-Koch et al., 2018). Entrepreneurship research was primarily focused on high capital, high-tech, and high growth enterprises (Welter, 2011), predominantly in western contexts (Welter, Baker and Wirsching, 2018). Welter (2011) and later, Welter et al. (2017) succinctly challenged this 'westernised' high technology and high growth driven notion of entrepreneurship by posturing the different entrepreneurial contexts in which everyday entrepreneurship occurs, centring the debate on entrepreneurship process and practice. The process and practice of entrepreneurship are therefore shaped by what everyday entrepreneurs do, how and why they do it, who becomes involved, and not just who they are (Welter, 2011; Gaddefors and Anderson, 2017; Ramoglou et al., 2020); usually in multiple and often neglected sites and places (Steyaert and Katz, 2004). The diverse contexts portrayed in entrepreneurship scholarship perhaps reflect the convenience of a particular analytical approach than theoretical integrity (Gaddefors and Anderson, 2019).

The place and spatial boundaries in which entrepreneurship occurs have generated increased traction in recent entrepreneurship studies on the different contexts that shape the process of entrepreneurship (see Welter and Baker, 2021; Gaddefors and Anderson, 2018, 2019; Anderson, Warren and Bensemann, 2019; Korsgaard, Ferguson and Gaddefors, 2015). For example, Welter (2011) recognises four dimensions of entrepreneurship: 'business, social, spatial, and institutional'. On the other hand, Zahra and Wright (2011) suggest four dimensions of context from their review of conceptualisations of context in extant literature: 'spatial, time, practice, and change'. Similarly, Gaddefors and Anderson (2019) identify 'social, spatial, and economic' boundaries as descriptors of the 'ruralness' in rural entrepreneurship research. Although only the spatial dimension was mentioned in all three studies above, the boundaries of these contexts are constantly changing

due to the dynamic engagement of 'actors and processes within the contexts (Zahra and Wright, 2011).

More recent context-rich entrepreneurship research emphasises the subjective elements of contexts, with a close focus on "entrepreneur active involvement in the construction and enactment of contexts." (Welter, Baker and Wirsching, 2018, p.323). Additionally, Welter and Baker (2021), call for entrepreneurship scholarship to move away from theorisation of context to studies on entrepreneurs "doing contexts". For example, Lent (2020) and Ukanwa et al. (2018) focus on female entrepreneurs in sub-Saharan Africa and how they navigate the challenging context of their resource-constrained environments to start and grow their businesses. Contextualised research should not only be on the entrepreneurial identity (Anderson, Warren and Bensemann, 2019), gender of the entrepreneur (Lent, 2020), the geographical location of the empirical research (Müller and Korsgaard, 2018), or the type of entrepreneurial activity (Yessoufou, Blok and Omta, 2018); but also, on the impact of the diverse myriad of contexts on the entrepreneur and the entrepreneurial process to explain how entrepreneurship occurs and the contribution of entrepreneurship to the socio-economic development of local communities.

Gaddefors and Anderson (2019, p.159) propose "engagement with contexts rather than simply within a context" as the fundamental 'unit of analysis' in a rural research context. For instance, Ukanwa et al. (2018) undertook a study on the challenging barriers to accessing microfinance and the resultant impact on women entrepreneurs' business and livelihood strategies in rural Nigerians. Similarly, Chipfupa and Wale (2018) found that the lack of affordable finance, access to markets, and entrepreneurial education and training, impacted the early stages of developing an agricultural smallholder business in rural South Africa. Korsgaard, Ferguson and Gaddefors (2015) call for more empirical studies into the diverse contexts that enables and constrains entrepreneurs to create opportunities within local rural areas. Embedding the local contexts eases the entrepreneurial process and benefits both the entrepreneur and the local area (Anderson, Warren and Bensemann, 2019).

Shirokova et al. (2017) highlight the significance of the context in which entrepreneurship happens as a determinant of entrepreneurial behaviour in their review of scholarly discourse on effectuation and causation as decision-making logic. Reymen et al. (2015), building on the work of Sarasvathy (2001) and Alvarez and Barney (2005), propose effectuation as a flexible, responsive, and adaptive approach to decision-making. Effectuation is a more collaborative process suitable for venture creation, survival and growth in a resource-constrained and uncertain business environment. The effectuation theory is the explanatory concept underpinning this study, focusing on the impact of context on the entrepreneurial process in a resource-constrained and uncertain business environment, presented in Section 3.5.

3.5 Effectuation Theory as an Explanatory and Analytical Concept

Sarasvathy's (2001) seminal work on 'Effectuation' as put forward by Jiang and Tornikoski (2019) postulates an alternative theoretical framework to understand how entrepreneurs pursue business opportunities within disparate evolving contexts. Effectuation assumes that opportunities exist before being discovered by the entrepreneur (Sarasvathy, 2001; Shirokova et al., 2017). As a result, the flexibility to change the initial goal of starting a venture over time emerges as necessary. As a result, entrepreneurs can make the most available means and contingencies as they emerge (Sarasvathy 2001, 2009; Brettel et al., 2012). Sarasvathy (2008) argues that the entrepreneur's identity, knowledge base, and social network, including stakeholder engagement, are integral to the effectual approach. Effectuation theory centres on the behaviour of expert entrepreneurs and the expertise of an entrepreneur (Sarasvathy 2001, 2008).

There are several assumptions, reservations and core research tensions in extant entrepreneurship literature on the 'theoretical foundations, the unit of analysis, the measures involved, and temporal measurement of effectuation' (McKelvie et al., 2019, p 690). Brettel et al. (2012) argue that even novice entrepreneurs (non-experts) also regularly depend on effectual reasoning. Thus, the disproportionate focus on expert entrepreneurs raises criticism from scholars for lack of clarity when the construct is applied to less experienced entrepreneurs (Perry, Chandler, and Markova 2012).

Arend, Sarooghi and Burkemper (2015 and 2016) recognise the evolution of effectuation in extant literature but maintain that effectuation is an underdeveloped entrepreneurship theory. The authors challenged the principles of effectuation that make it a social science or entrepreneurship theory. They argue that effectuation lacks validity when analysed through the robust scientific 3E Framework evaluation tool – Experience, Explain and Establish (3E). The authors advocated more empirical studies to demonstrate the practical implications of effectuation and acknowledge the benefits of causation. Similarly, Kitching and Rouse (2020) offer critical conceptual scrutiny of the theory of effectuation founded on critical realism ontological assumptions that emphasise the influence of structural, cultural and sociohistorical influences on the venture creation process. The authors acknowledged effectuation as a cognitive science-based approach to venture creation under conditions of uncertainty. However, they supported the work of Arend, Sarooghi and Burkemper (2015 and 2016), claiming, "The emphasis of effectuation is on explanation rather than description, and the theory does not, and cannot, explain venture creation fully because it under-theorises the influence of context... [in particular] lacks a robust conception of social context" (Kitching and Rouse, 2020, p516).

Chen, Liu and Chen (2021) suggest that effectuation is context-dependent, but the under-contextualisation of effectuation research affects the rigour and impact of effectuation as an entrepreneurship theory. Expanding further, the authors argue that effectuation can negatively lead to misperceptions, e.g., 'over trust of stakeholders and ineffective investments' are detrimental to new venture creation and success. These considerations have led to calls for further investigations into the boundary conditions of effectuation theory (Chen, Liu and Chen, 2021, p 778). Dias, Iizuka and Boas (2019) submit that the debate on the suitability of effectuation as a theoretical construct that explains the new venture creation process remains open and inconclusive. However, effectuation helps entrepreneurs in emerging economies to practically manage uncertainty surrounding their entrepreneurial activities (Chen, Liu and Chen, 2021). Effectuation also explains the behaviour of entrepreneurial actors or their decision-making logic under conditions of uncertainty; future focus on effectuation to shift from how effectuation happens to why it happens and what it impacts (McKelvie et al., 2019). Therefore, effectuation provides a meaningful but incomplete construct to address the aim of the study: *To critically investigate how farmers use entrepreneurial processes to navigate a resource-constrained context.* The cognitive processes of non-expert entrepreneurs epitomise an encouraging pathway for research on effectuation (Laskovaia, Shirokova and Morris, 2017). This study sought to remedy the social context gap in effectuation theory by exploring the practice of entrepreneurship from a sub-Saharan African structural and cultural context.

The dearth of process research on effectuation within a resource-constrained context impedes our understanding of the circumstances and factors influencing or driving the use of effectuation or causation under conditions of uncertainty (Jiang and Tornikoski, 2019). This study, therefore, expands on the antecedents of entrepreneurial decision-making logic in response to the call for more qualitative empirical research on the theory of effectuation. Additionally, Johannisson (2018) suggests that unveiling entrepreneurial activities in the context of everyday entrepreneurship practices require comprehensive empirical research.

While theories of effectuation have become popular in understanding the process through which entrepreneurs develop their enterprise (Reymen et al., 2015; Galkina, Atkova and Yang, 2021), there remains an assumption that the contextual setting is common for all. This study furthers such an isolated view of effectuation as a process, to engage with how this process is sensitive to the particularities of context. Thus, bringing the two dominant theoretical threads looking at entrepreneurship as a process together, the effectuation view and entrepreneurial and contextually sensitive view. Therefore, this study focuses on everyday entrepreneurial process in the context of a resource-constrained environment and how farmers make do with the means at hand to start and evolve their farming businesses through their willingness to pursue an entrepreneurial idea with affordable loss implications or considerations (Sarasvathy 2001, Dew and Sarasvathy 2007).

3.2.3 Effectuation and Causation Decision-Making Logics

According to Lingelbach et al. (2015), the effectuation theory postulates two opposing decision-making logics: effectuation and causation. The two logics are summarised in Table 3.1

Table 3.1: The contrasting features of causation and effectuation decision making logic

Causation	Effectuation
Goal-driven	Means driven (Bird-in-Hand)
Predicting a risky future and controlling it	Controlling an unpredictable future (Pilot-in-the-Plane)
Exploit pre-existing knowledge	Leverage environmental contingencies (Lemonade)
Focus on expected returns (possible gains)	Focus on risk perception (Affordable Loss)
Competitive analysis	Strategic alliances/ precommitments (Crazy Quilt)
Effect dependent processes	Actor dependent processes

Source adapted from Sarasvathy (2001 and 2009); Sarasvathy et al., (2014); Read and Sarasvathy (2005); Berends et al., (2014); and Kellermanns et al., (2016)

Table 3.1 highlights the fundamental principles of effectuation employed in this study. Firstly, causation, a goal-driven decision-making logic, begins with the "unique awareness of opportunities, the ability to acquire the resources needed to exploit the opportunity, and the organisational ability to recombine homogenous inputs into heterogeneous outputs" (Alvarez and Busenitz 2001, p. 771). Kellermanns et al. (2016) posit that the resources acquired are essential but not enough for competitive advantages. On the other hand, Barney, Wright and Ketchen (2001) suggest that for resources to hold and sustain a competitive advantage, 'the resources in a firm's control must be valuable, rare, imperfectly imitable and not substitutable'. To clarify, valuable resources, for example, "enable firms to conceive of or implement strategies that improve its efficiency and effectiveness" (Barney 1991, p. 106). Given the above, mainly where outside competitive forces dictate where opportunities lie, and higher expected returns can be gained, scholars (Sarasvathy, 2001 & 2009; Sarasvathy et al., 2014; Read and Sarasvathy, 2005; Berends et al., 2014; and Kellermanns et al., 2016, summarise the main features of causal decision making logic as exploitation of pre-existing knowledge; engagement in competitive analysis; predicting a risky future and controlling it, and focus on expected possible gains out of every business opportunity.

Consequently, Eyana, Masurel and Paas (2018) posit that crucial resources such as finance required for applying causation may not be available in Africa due to the resource-constrained environment. Furthermore, Shirokova et al. (2021) suggest replacing causal logic where resources are tightly constrained with increased uncertainty. Effectuation actions such as using available resources at hand and leveraging contingencies are therefore predominant in such context. Finally, Smoka et al. (2018) conclude that entrepreneurial studies explicitly concentrated on causation decision making logic remain scarce.

Secondly, in contrast to causation, effectuation is rooted in a means-driven approach where contingencies are leveraged through strategic analysis. Thus, an uncontrollable future can be acknowledged by considering the resources the entrepreneur can afford to lose. It sees entrepreneurs as starting a venture "with the means available, based on who they are, what they know, and whom they know, they would start with a list of things they can afford to do" (Read and Sarasvathy, 2005, p. 16), ending with the creation of entrepreneurial artefacts (Sarasvathy et al., 2014; Lingelbach et al., 2015). Sarasvathy (2001 and 2009) sees this process as the principal set of means that becomes an intrinsic component of the effectuation process when merged with contingencies. Effectuation as a process is not about choosing among a given number of possibilities but creating alternatives and concurrently discovering and evaluating the 'desirable and undesirable' potentials of numerous likely possibilities (Hulsink and Kek, 2014). In summary, Effectuation principles are centred on the creation of 'something new', using available resources (background knowledge, social contacts and networks, human resource) while factoring for losses at affordable levels (Sarasvathy; 2001, Lingelbach et al., 2015; and Smolka et al., 2018).

The effectuation approach is dominant where it is difficult to make assumptions about intended customers, especially in highly dynamic and uncertain market conditions (Sarasvathy, 2001). Entrepreneurs following effectuation logic have the flexibility of changing their goals by committing only the limited resources they could afford to lose. Thus, the focus is more on controlling their available resources than on their goals or business plans (Chandler et al., 2011; Fisher, 2012). In a resource-constrained context like Nigeria, effectuation logic allows the

entrepreneur to maximise opportunities with a combination of the resources they have at hand (Baker and Nelson, 2015) and control over making predictions of future available resources (Sarasvathy et al., 2014). "Because effectuation uses means currently within the actor's control as the basis for action, it does not require predictions about the future" (Sarasvathy et al., 2014, p. 72). Thus, the threat of uncertainty is controlled through strategic alliances with stakeholders, key partners, suppliers, customers, and other influencing parties (Sarasvathy, 2001; Chandler et al., 2011; Fisher, 2012) within the local community.

While this study understands and acknowledges the concept of the two opposing decision-making logics, the processes behind the entrepreneur's decision-making reasoning are often neglected (Jiang and Tornikoski, 2019). Sarasvathy's effectuation logic is a pragmatist approach primarily moored in economy theory without elaborating on the socially constructed reality everyday entrepreneurship (Johannisson, 2018). These practices support or emphasise the principles behind the logic. Johannisson (2018) further posits that the success of effectuation logic in practice relies on the entrepreneur's aptitude to identify situations where causation or effectuation is adequate or not practical. However, Jiang and Tornikoski (2019, p 26) observe that "although the extant studies make interesting suggestions about how the perception of uncertainty may predict the use of effectuation and causation, they fall short of describing the process that determines how both types of uncertainty evolve, and how this evolution influences the use of different behavioural logics." The lack of clarity in the relationship between uncertainty and behavioural logic makes it difficult for scholars to articulate when and how entrepreneurs adopt effectuation or causation. In addition, Laskovaia, Shirokova and Morris (2017) suggest that cognitive logic use depends on the 'particular context'. Understanding the nature of entrepreneurial behaviour, the context, and circumstances in which entrepreneurship happens, particularly at start-up, is significant in determining whether to use effectual or causal reasoning or both (Shirokova et al., 2017; Engel et al., 2017). Therefore, causation and effectuation should not be considered opposing poles or that one logic is superior to another, but as complementary decision-making logic applicable as the enterprise is faced with different entrepreneurial situations (Smolka et al., 2018; Ilonen, Heinonen and Stenholm, 2018).

Daniel, Di Domenico, and Sharma (2014) suggest that in resource-constrained contexts, particularly home-based businesses and where resources are scarce, difficult to access, or expensive to buy, entrepreneurs adopt an effectual approach to the entrepreneurial process. Similarly, Servantie and Rispal (2017) posit that entrepreneurs leverage accessible resources from stakeholders or productive networks to enable growth in situations where resources are scarce. Furthermore, entrepreneurial actions stemming from the adoption of effectual logic of control are predominant in a situation of environmental uncertainty (Eyana, Masurel, and Paas, 2018) and underdeveloped institutional systems (Cai et al., 2017). Likewise, this position is consistent with extant literature where uncertainty is seen to be positively associated with: effectual reasoning in product innovation (Berends et al., 2014); the innovation process in an emerging economy (Lingelbach et al., 2015); firm performance (Eyana, Masurel and Paas, 2017); entrepreneurial expertise (Read and Sarasvathy, 2005); and, sustainability and the tackling of the vast dimensions and nuances of socioeconomic problems in society (Sarasvathy et al., 2014). Inversely, uncertainty is negatively linked to causation (Sarasvathy, 2001; Cai et al., 2017).

A key attribute of effectuation is making business decisions based on available means (resources) (Sarasvathy, 2001). For instance, Jones and Li (2017) suggest that the effectuation process transitions from a starting position of having no clear set goals and limited resources. Then, with the support of a close family, it evolves into an operational and sustainable business. Thus, the family background, connections of the entrepreneur, and other external contingencies can inform how the effectuation process takes place and influences the form of the business going forward.

3.2.4 Intersection Between Effectuation and Bricolage

Baker and Nelson (2005, p. 333) defined bricolage as "the application of a combination of resources available at hand to new problems and opportunities". The use of the available resources is dependent on the context aiding or restricting entrepreneurial activities (Desa and Basu, 2013; Korsgaard, Müller and Welter, 2020), including local spatial context with a solid rural code of conduct (Korsgaard, Müller, and Welter, 2020). Bricolage focuses on the application of 'cheaply available' resources that tend to be obsolete, substandard, superfluous,

inappropriate, or provide no immediate value. However, when combined, it can solve problems or generate new opportunities (Baker and Nelson, 2005; Lévi-Strauss (1966), cited in Welter and Baker, 2021; Korsgaard, Müller, and Welter, 2020) in unexpected ways (Dimov, Schaefer and Pistrui, 2020). On the other hand, effectuation focuses on the assumption that entrepreneurs cogitate a combination of resources and then focus on selecting between likely effects created with a specific set of resources (Sarasvathy 2001). The critical consideration in effectuation is the spreading of risks with careful consideration of what the entrepreneur can afford to lose as an alternative to anticipated return on investment (Servantie and Rispal, 2018).

The difference between effectuation and bricolage theories is that "effectuation theory focuses on uncertain environments that may not be resource-constrained, while bricolage focuses on resource-constrained contexts that may or may not be uncertain" Lingelbach et al. (2015, p. 7). Servantie and Rispal (2018), drawing on the pioneering contributions of Sarasvathy (2001) and Baker and Nelson (2005), differentiate the two theories in the areas of (1) generation of new ideas and markets – bricoleurs tend to find their new markets, ideas and opportunities alone while effectuators generate their ideas and markets through strategic alliances and stakeholders' involvement within their networks; (2) While bricoleurs tend to control the future, effectuators concentrate on the 'controllable aspects' of an unpredictable future; (3) non-experts mainly use Bricolage as a theory while expert entrepreneurs mainly adapt effectuation; (4) "Bricolage is related to disorder and confusion. It involves chaotic construction, innovation, and creation, whereas effectuation is an organised process allowing creativity and changes in the rules." (Servantie and Rispal, 2018, p 321). A combination of effectuation and bricolage approaches in the context of scarce resources and opportunities, or available markets can create social value (Servantie and Rispal, 2018).

The entrepreneur has a critical role to play in the decision-making process by making the most of a combination of available resources at hand, rather than allowing predictable developments to influence the process (Sarasvathy et al.,2014; Baker and Nelson 2005; Reypens, Bacqs, and Milanov, 2021). The survival and performance of a small business cannot be attributed to the entrepreneur's behaviour alone (Reypens, Bacqs, and Milanov, 2021) or the

outcome of the entrepreneurial process (Gaddefors and Anderson, 2017). Instead, the nuanced strategic alliances and support networks within the resource-constrained local environs support entrepreneurs' survival and growth (Sarasvathy 2011). The embeddedness of entrepreneurs within their local spatial context to access available locally bound resources (Korsgaard, Müller and Welter, 2020) adds an exciting dimension to adopting an effectual approach where resources are tightly constrained.

3.2.5 Effectuation in a Resource-constrained context

Extant research on entrepreneurship primarily focused on "high-growth, high wealth-creating ventures" (Lent, 2020, p.778). However, studies on the "everyday doings" of entrepreneurship within a resource-constrained context are gaining considerable popularity in recent studies (e.g., Reypens, Bacqs, and Milanov, 2021; Lent, 2020; Igwe et al., 2020; Ejidenberg et al., 2018). Concomitant to these studies is the scarcity of essential resources necessary for the effectiveness of everyday entrepreneurship with a resultant impact on the sustainability or failure of businesses (Hones et al., 2018). For example, resources such as finance required to apply a causal goal-driven decision-making approach are not readily available in sub-Saharan Africa. Therefore, effectual means driven practices are predominant in such situations (Eyana, Masurel and Paas, 2018). Furthermore, in transitional economies with higher environmental uncertainties underdeveloped institutions and systems, new venture survival, performance and growth are dependent on the adoption of effectuation logic of control (Cai et al., 2017) and leveraging available 'human, social, and financial capital' (Hulsink and Koek, 2014, p.191) from local networks.

Similarly, adopting an effectual approach to the entrepreneurial process is prevalent where resources are scarce, difficult to access or expensive to acquire (Daniel, Di Domenico, and Sharma 2014). Entrepreneurs in such a context leverage accessible resources from stakeholders or their productive networks, as was the case in the empirical study on Tiempo de Juego, Colombian foundation (Servantie and Rispal, 2017). Reliance on strategic alliances is consistent with extant literature (Sarasvathy 2001, Cai et al., 2017), where uncertainty is positively associated with effectual reasoning and negatively linked to causation,

particularly in new venture creation and performance. In their study, Cai et al. (2017) centred on the benefits that new ventures derive from effectuation. They examined 266 Chinese new ventures' performance and concluded that effectuation positively affects new ventures. Their study also highlighted the evident bias in prior studies towards more matured economies with more stable institutional market environments than studies on transitional or emerging economies with a higher degree of environmental uncertainty.

The effectuation approach is effective when making assumptions about intended customers is difficult, especially in highly dynamic and uncertain market conditions (Sarasvathy and Dew, 2005; Smolka et al., 2018). Entrepreneurs under effectuation have the flexibility of changing their goals by committing only the limited resources they could afford to lose. Thus, the focus is more on controlling their available resources than on their goals or business plans. The threat of uncertainty is controlled through strategic alliances with stakeholders, suppliers and customers (Sarasvathy, 2001; Chandler et al., 2011; Fisher, 2012). Smolka et al. (2018) postulate that the effectuation approach is preferable where uncertainty is high, while adopting a causal approach applies to a low uncertainty context.

In the African entrepreneurial ecosystem, Atiase et al. (2018), and Andersson and Andersson (2016), suggests that the context in which entrepreneurship occurs is impacted by the quality of available resources crucial for practical entrepreneurship. Accordingly, traditional resources such as affordable finance, electricity, and good roads, are scarce (Eyana, Masurel and Paas, 2018). Therefore, entrepreneurs within the African environment lean more on solid family connections and community influence to run their businesses (Khavul, Burton and Wood, 2009). Still, studies focusing on the lived experiences of entrepreneurs within a resource-constrained context are negligible (Lent 2020). Wiklund, Wright, and Zahra (2019, p. 423), argued that "disadvantaged people often work under severe economic and institutional challenges, yet they find ways to create value that frequently goes unrecognised" and appreciated. Therefore, this study answers the call by Welter, Baker and Wirsching (2018) for more 'extensive' empirical research outside of the mainstream standard model to add to our understanding

of the entrepreneurial process, especially from a sub-Saharan Africa resourceconstrained context.

In section 3.2, a literature review was made to define who an entrepreneur is and the entrepreneurship concept. Section 3.3 followed with a summary of the literature on the entrepreneurial process. In section 3.4, the context in which entrepreneurship happens was highlighted from the entrepreneurship literature. Specifically, where resources are tightly constrained, the entrepreneurial decision-making process is shaped by the many environmental contingencies within the business area. Finally, in section 3.5, the study reviewed the effectuation literature by highlighting the relevance of the approach in a resource-constrained and uncertain environment. Next, a conceptual model is produced from the literature reviewed in this chapter. The model underpins the collection and analysis of the research data to address the research aim and objectives.

3.6 Conceptual Model – Entrepreneurial process in a resourceconstrained context

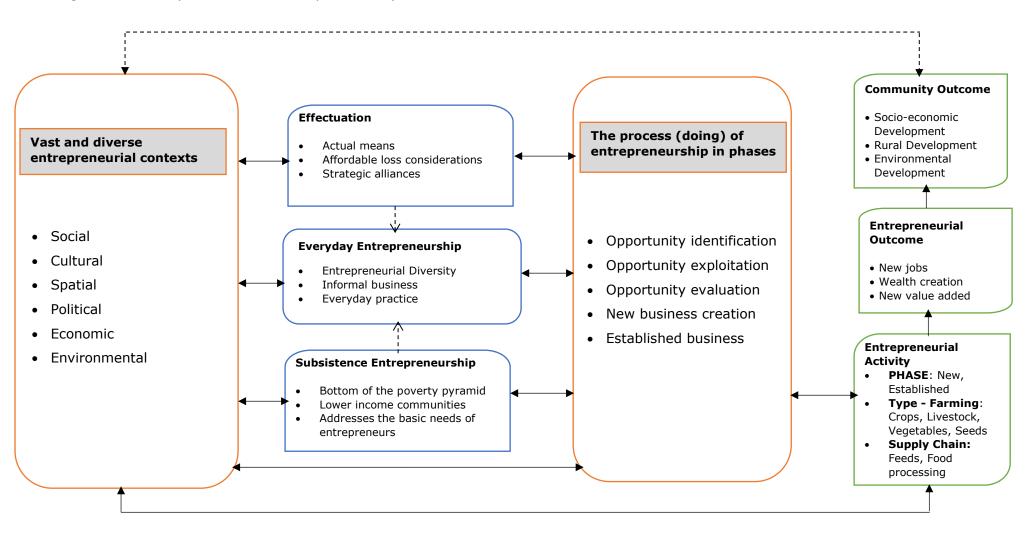
Based on the review of extant literature, this study proposes a conceptual model for the entrepreneurial process in a resource-constrained context. Relevant scholarly contributions on entrepreneurial contexts, uncertainty, entrepreneurial process, and effectuation decision reasoning presented in previous sections of this chapter informed the development of the conceptual model. Figure 3.1 provides the theoretical lens and insights (Linan, Paul and Fayolle, 2020) on the entrepreneurial process of entrepreneurial farmers within a resource-constrained and uncertain business environment.

The conceptual model accommodates a rural farming community context (Gaddefors and Anderson 2019) to build on the pioneering work of Sarasvathy (2001)'s effectuation decision-making approach. The model builds on the work of Welter et al. (2017) by extending the benefits of everyday entrepreneurship beyond the individual entrepreneur to include the community-based values (Jackson, Amaeshi and Yavuz, 2008) and the social value (Servantie and Rispal, 2018) that entrepreneurs create in their local communities. In addition, several dimensions of entrepreneurial contexts (Welter, 2011; Zahra and Wright, 2011)

and the five phases of the entrepreneurial process (Mamabolo and Myres, 2020) are integrated into the model. The entrepreneurial activity describes the phase and type of farming activities, the "doing of context" (Welter and Baker, 2021).

The vast and diverse contextual factors (social, cultural, spatial, political, and economic) influence the business and entrepreneurial contexts in a resourceconstrained environment (Singer, Herrington and Menipaz, 2018). The conceptual model is unique in several ways: First, it challenges and extends subsistence highlighting entrepreneurship studies by the importance of everyday entrepreneurial practice in multiple contexts beyond settings of poverty. Secondly, McKelvie et al. (2019) call for a shift in effectuation studies from 'how it happens to why it happens and what its impacts' is addressed through the entrepreneurial activities of the farmers, leading to entrepreneurial and community outcomes. Thirdly, entrepreneurship is enacted in multiple contexts throughout the entrepreneurial process (Sklaveniti and Steyaert, 2020), from opportunity identification to the start-up, survival, growth and establishment of the farm business. The study proposes the model in Figure 3.1 to collect relevant data, analyse the data, and effectively address the research aim and objectives.

Figure 3.1 Conceptual Model – Entrepreneurial process in a resource-constrained context



Source: Author generated (adapted and modified from Singer, Herrington and Menipaz, 2018)

3.7 Chapter Summary

In this chapter, relevant contributions of scholars were reviewed to understand who the entrepreneur is and what entrepreneurship means. There is no single universal definition of entrepreneurship, with scholars calling for acceptance of the heterogeneity and differences in using the two terms separately or interchangeably. Extant literature on entrepreneurial process research and the contextual approaches to studying the process of entrepreneurship were explored. Although entrepreneurship as a discipline is young and rooted in practice, the process of entrepreneurship, on the other hand, is ratified in contexts as diverse as humanity and embedded within social places of human interactions. Nuanced contextualised studies on the entrepreneurial process in other myriads of contexts are gaining increasing traction in the extant entrepreneurship literature. The place and spatial boundaries in which everyday entrepreneurship occurs were highlighted contrast to previous 'westernised' Silicon Valley-type entrepreneurship studies.

Effectuation was seen as the theoretical lens underpinning this study. The intersection between effectuation and bricolage places an expectation on the entrepreneur to make do with available means and leverage local contingencies to start, survive and grow the farming business. The entrepreneurial farmer has a critical role in the decision-making process by making the most of a combination of available resources at hand rather than allowing predictable developments to influence the process. A conceptual model is proposed to provide the rationale for collecting relevant data to address the research aim and objectives.

As an analytical construct and a collaborative process, effectuation is suitable for venture creation, survival, and growth in a resource-constrained and uncertain business environment. The entrepreneurship outcomes extend beyond the individual entrepreneur to include community-based and social values. Therefore, as contextualised in everyday practice, effectuation is the explanatory concept underpinning this study, focusing on the impact of multiple contexts on the entrepreneurial process, especially in a resource-constrained and uncertain business environment. The following research methodology chapter discusses the

research context, research approach, sample selection, data collection, and analysis methods.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

Research is a process of acquiring ideas, information, and knowledge to address and resolve societal issues or contribute new knowledge to the world. This process involves using systematic and scientific approaches, tools, or study methods (Saunders, Lewis and Thornhill 2019). There is an instinctive desire to discover and know what things are, how they are, and why (Tumele, 2015). The research process is enriched by the context in which the research happens, based on user behaviour in 'natural situated' contexts (Chetty et al., 2014; Chamberlain and Crabtree, 2020). Therefore, this research study aims to 'critically investigate how farmers use entrepreneurial processes to navigate a resource-constrained context'.

The research study is primarily exploratory. It generates and examines primary data from a rural agricultural setting. The primary data was analysed to comprehend the meanings and themes from the text alongside extant literature to find commonalities or differences (Harding, 2013; Gibbs, 2002). The chapter explains the approach used to answer the "what", "why", and "how" questions leading to the use of methods, instruments, techniques, and tools of investigation or analysis.

The research context is presented in Section 4.2, followed by the justification for selecting the research approach in Section 4.3. Section 4.4 outlined the research design strategy. The research methods are explained in Section 4.5. An overview of the pilot study is presented in Section 4.6. Section 4.7 covers data collection. An explanation of the data analysis approach used in the study is presented in Section 4.8. The ethical considerations underpinning this research are presented in Section 4.9, and a summary of this Chapter is in Section 4.10.

4.2 Research Context

The context of the study is Nigeria. As highlighted in Chapter Two, Section 2.3, the country is endowed with abundant human, natural, mineral and metal

resources. Known as the 'Giant of Africa', Nigeria has the largest economy and population in Africa with a young labour force, abundant agricultural land, oil and gas, hydropower, untapped minerals and metals, and a good entrepreneurial culture (Word Bank, 2019). However, severe poverty, inadequate infrastructure, lack of good governance, high dependency on oil and gas, and low agricultural productivity have hammered Nigeria's development. Although 60% of the nation's workforce is involved in agriculture, productivity is low due to difficulty in accessing mechanised farming equipment, effective technology and uncoordinated regional and national policies. In recent times, internal ethnic and religious conflicts have exacerbated agricultural management challenges leading to low economic growth. The multidimensional poverty index shows that "46.4 per cent of the population (90,919 thousand people) are multidimensionally poor while an additional 19.2 per cent classified as vulnerable to multidimensional poverty (37,659 thousand people)" (UNDP 2020, p6). The UNDP and World Bank data suggest that most people living in Nigeria earn lower than the income poverty level of \$1.90 per day, contrasting the abundant resources and good entrepreneurial culture. The 'Doing Business' report by the World Bank (2020) ranked Nigeria 15 in the world on access to credit, but 105 when starting a business.

The Nigerian government has an obligation to the people, given the poor economic outlook in the country, to reduce the severity of poverty across the country. Concerted efforts are required by government and industry to diversify the economy, provide quality public services, create job opportunities, and foster dynamic enterprises and competitive markets needed to cater for the rapidly growing population. Several initiatives by successive Nigerian governments aimed at agricultural developments were presented in Chapter 2, Section 2.5. The main objectives of these policy initiatives are to improve rural livelihood, provide employment, ensure food security, develop rural areas and sustainably use natural resources (Ogunmodede, Ogunsanwo and Manyong, 2020; Uduji, Okolo-Obasi and Asongu, 2019).

One of the recent policies designed to boost agricultural productivity in Nigeria was introducing the Agricultural Promotion Policy (APP) 2016 – 2020 by the Nigerian Federal Ministry of Agriculture and Rural Development (FMARD). The APP addressed the problem of food access and security and the quality and

competitiveness of agricultural products. The government's strategic priority under the APP is: 'food security; import substitution; job creation; economic diversification.' (FMARD, 2016, p12). The government's introduction of the APP policy is a shift away from heavy dependence on oil and gas. Investment in - and promotion of - the agricultural sector can maximise the use of the abundant land, water, and natural resources. This would potentially drive the country's socioeconomic development, and improve rural livelihood through job creation, poverty alleviation and food security.

4.2.1 Region

Jos Plateau in North-central Nigeria is an appropriate area to measure the effectiveness of the APP objectives. Plateau State is the twelfth largest state in Nigeria, situated approximately in the country's centre, between 'latitude 80°24' North and longitude 80°32' and 100°38' East. The altitude ranges from around 1,200 meters (about 4000 feet) to a peak of 1,829 metres above sea level in the Sheer Hills range near Jos'. It has a population of 3.5 million people, with three local governments in Jos accounting for 900,000 residents based on the 2006 census (Plateau State Government, 2021). Jos's climatic conditions (soil, temperature, and rainfall) are suitable for crop production and animal husbandry. With an average temperature of 18 and 22 degrees centigrade, the coldest weather between December and February is caused mainly by the Harmattan winds. The heaviest rainfall is usually recorded during the wet months between July and August. The mean annual rainfall varies from 52 inches to 57 inches. Jos is also the source of some of the main rivers in Northern Nigeria, including the Gongola, Hadejia, Kaduna, and Yobe rivers.

Agriculture is the mainstay of the economy in Jos. The Plateau state government is committed to sustainable economic growth by partnering with the private sector to promote a strong culture of entrepreneurship and rejuvenate industrialisation in the state (Plateau State Government, 2021). The state government's goal is "to create wealth, improve living standards and reduce poverty" (Plateau State Government, 2021). Putting agriculture at the vanguard of the state's sustainable growth goal aligns with the strategic priority of the APP. Therefore, Jos offers an exciting and interesting area of research to hear the voices and stories of Nigerian

entrepreneurial farmers and thus, amplify their concerns and contributions to the Nigerian economy.

4.3 Selecting the Research Design for the Study

The discourse among scholars on the research approach that adequately explains describes, or can reasonably address a phenomenon (Park and Park, 2016) is well-rehearsed. In selecting the appropriate research approach for the study, I followed a sequential step by articulating the research aim, which dictates the philosophical issues considered in the research design. Saunders, Lewis and Thornhill (2019, p130) suggest that "a well-thought-out and consistent set of assumptions will constitute a credible research philosophy, which will underpin your methodological choice, research strategy, and data collection techniques and analysis procedures". Therefore, the philosophical considerations dictated the methodology used in this study, which influenced the choice of research methods. The process is outlined in Figure 4.1

Data Collection: Interview Instrument & Documents Sampling Techniques: Purposeful and Snowballing Research Research Methodology **Design Process** Qualitative and Inductive Approach The research question dictates **Philosophical Considerations** the trajectory of a research. It Ontology: Interpretivism – Multiple realities Epistemology: Reality needs to be interpreted to dictates every methodological step of the research comprehend the underlying meaning **Research Question** How do rural farmers use entrepreneurial processes to navigate a resource-constrained context?

Figure 4.1: Research Design Process

Source: Author generated

The research design process is explained in the following sections.

4.3.1 The Importance of the Research Question

General enquiries about the social realities of the world we live in are not the same as a research aim or question (Harding 2013). A research question dictates the trajectory of research. A good research question differentiates outstanding research from ordinary research with the potential to produce better results. Alvesson and Sandberg (2013) argue that a good research question might be more valuable to the researcher than the answer(s) it generates; however, little attention is given to creating good innovative questions. Good innovative questions are potent. They can open up a new and exciting worldview, challenge the preconceived view of reality, provide solutions to societal problems, and influence theories and policies.

There have been many iterations of this study's research question before arriving at the final one. Many variables were considered in articulating the research question. The initial focus was on the challenging context of the everyday entrepreneurial activities of the farmers. The entrepreneurial farmers' intentions and behaviours were considered to emphasise the motivations of the entrepreneurial farmers in starting a farming business. The role of government institutions in providing a conducive and enabling business environment became the focus of the research later. However, the research question changed following an extensive review of relevant entrepreneurship literature and the proposal suggested by scholars (e.g., Anderson and Ronteau, 2017; Welter et al., 2017; Steyaert and Katz, 2004) for future entrepreneurship research to focus on what entrepreneurs do. Emphasis was now placed on the farmers' everyday entrepreneurial activities, the context of their entrepreneurial process and how they navigate the challenging resource-constrained and uncertain business environment to start and grow their businesses in sub-Saharan Africa. Thus, the research question, 'how do rural farmers use entrepreneurial processes to navigate resource-constrained context?', underpins every methodological and philosophical consideration in this study.

4.3.2 Philosophical Considerations

Good research originates from a clear understanding of the research aim, which dictates the research philosophy that underpins the research methodology, design, and methods for collecting and analysing rich data that effectively answer the research question. Sometimes referred to as a research paradigm, research philosophy is the ideological framework that underpins a study, setting out the basis for the researcher's knowledge claims or worldview (O'Gorman, Lochrie, and Watson, 2014) in the development of knowledge relating to diverse research question and phenomena (Lindgren and Packendorff, 2009). Hence, the choice of a research methodology is instinctively influenced by the researcher's research paradigm, the foundation to build the research design (Sekeran and Bougie, 2016; Watt and Shott, 2020; O'Gorman, Lochrie, and Watson, 2014). Lindgren and Packendorff (2009) argue that the basic assumptions of reality, view of knowledge, and what legitimises research are the building blocks of research paradigms. The position of Lindgren and Packendorff (2009) and that of other scholars (e.g., Anderson and Starnawska, 2008; Watt and Shott, 2020; O'Gorman, Lochrie, and Watson, 2014) centres mainly on three philosophical assumptions: (1) Ontology the nature of reality and knowledge about the world; (2) Epistemology - the diverse viewpoints about the nature of knowledge - what constitutes 'accepted knowledge'; and (3) Axiology - the nature and classification of values in the research process.

Entrepreneurship research is deeply entrenched in social science attitudes and cultural traditions (Anderson and Starnawska, 2008). Generally, research involves a quest for data to be collected and analysed to find the best solution to a phenomenon either through observable behaviour or through the subjective minds of individuals (Lindgren and Packendorff, 2009). Many approaches appeal to the researcher in going about this process. The researcher's philosophical assumptions influence the choice of a research approach. The researcher's quest to find the truth about a phenomenon is further influenced by the researcher's belief in the world we live in, an understanding of the nature of knowledge, and how we come to know that what we know is the truth. Three widely held philosophical worldviews are presented in Table 4.1

Table 4.1: Three Worldview Perspectives: Positivism, Interpretivism and Pragmatism

Research	Positivism	Interpretivism	Pragmatism
Philosophy Ontology (Nature of reality)	 Stable reality Universal and ordered knowledge External reality 	 Multiple realities 'Lived experiences' through the medium of language and culture socially constructed view of reality 	 Reality is the everyday consequences of ideas Reality is provisional, uncertain, and altering over time. No external truth
Epistemology (What constitutes acceptable knowledge)	 The scientific approach to research Generalisation made by laws and effects Knowledge is measurable Prediction and control through deductive reasoning and experiments 	 Simple and rich concepts Emphasis on people's stories, insights, feelings and interests Worldview is shaped by the different experiences and interactions that people have 	 Attainment of knowledge through practical experience centred on concepts and activities Successful action is a result of 'workable' theories and knowledge Emphasis on relevance, practices, and problems Well-informed future practice and problem solving as contributors to knowledge
Axiology (Role of values)	 Value-free research The researcher is separate from the object of the research Generally unbiased 	 Value-assured research Researchers are part of what is being observed Subjective knowledge Contribution of observer key to research 	 Value-determined research Consequences determine the selection of all types of values The research originated and was sustained by the researcher's beliefs and uncertainties Researcher-spontaneous

Source: Adapted from Saunders, Lewis and Thornhill (2019); Sekeran and Bougie, 2016; and Easterby-Smith, Thorpe, and Jackson, 2012

The positivistic perspective argues that social phenomena can be understood without the 'the individuals' subjective interpretation of reality and action'. Anderson and Starnawska (2008) argue that positivism is rooted in the philosophical assumptions of objective reality governed by 'natural rules. Positivism creates a narrow, one-dimensional view of reality that deals only with "attributes, characteristics and elements that are sufficiently tangible to be operationalised and measured" (Anderson and Starnawska, 2008, p 228). The role of research in a positivistic perspective is to systematically search for an explanation, regularities and predictions in the discovery of the natural rules (Anderson and Starnawska, 2008; Lindgren and Packendorff, 2009). Korsgaard (2007) acknowledges the contributions of two seminal texts in entrepreneurship, 'The Theory of Economic Development' (Schumpeter, 1961) and 'The Promise of Entrepreneurship' (Shane and Venkataraman, 2000), in producing strong knowledge about some aspects of being enterprising. However, Korsgaard (2007) regrettably observe that the two seminal texts use scientific texts instead of other data sources like interviews and observation. Positivism and the adoption of scientific research approaches lose much of the richness and peculiarity that comprehensively describes the field of entrepreneurship – the being, context, and processes that frequently exist at the boundaries and convergence of several factors and future projections (Anderson and Starnawska, 2008).

The empirical study of entrepreneurship cannot be completely devoid of the different interactional processes of the reality of people and opportunities within a specific context. The study of interactions of individuals and social phenomena through the subjective minds of individuals rather than through observable behaviour is referred to as social constructionism (Lindgren and Packendorff, 2009). Social constructionism does not deny the 'existence of the external world, rather argues that our knowledge of the world is socially constructed and cannot be seen as a representation of the world'. Also, generating insight and understanding of the social and cultural lived experiences of individuals (Berger and Luckman, 1966, cited in Anderson and Starnawska, 2008) allows us to go "beyond the immediate, to reach out and see the context, contingency and, importantly, the socio-economic setting" (Anderson and Starnawska, 2008 p 225). In other words, social constructionism enhances our understanding of the social interactions between individuals and not just the characteristics of their social and

natural world. Through the social constructionist lens, we can study individuals' language, discourse, narrative, and social interactions to subjectively and intersubjectively understand human beings (Korsgaard, 2007; Lindgren and Packendorff, 2009).

Employing a social constructionist lens to entrepreneurship, we see entrepreneurship as not a 'thing' but the process of being enterprising that combines together the entrepreneur, his/her context, and processes within certain circumstances (Anderson and Starnawska, 2008). As an interpretive approach, social constructionism implies that entrepreneurship is situated and constructed in social interaction between individuals and their interpreted setting (Korsgaard, 2007). The task of research is to explore the experience of the individuals, how they experience it, and understand the entrepreneurial process within the different institutionalised cultural norms. The "knowledge on entrepreneurship is represented as narrative, discursive and textual data" (Lindgren and Packendorff, 2009 p33).

As an exploratory study, Interpretivism is the preferred philosophical approach of the researcher in this study. Ontologically, interpretivism focuses on 'lived experiences' from individuals who have these experiences. There is no singular version of the entrepreneurial farmers' experiences as suggested by the Positivist philosophical strand. Although the Pragmatic philosophical strand could argue that the everyday reality of the entrepreneurial farmers is constantly changing, their interactions with other farmers and their lived experiences shape their view of reality and how they present themselves and other people in the farming community.

In epistemological terms, the use of scientific tools or objective methods cannot adequately measure the lived experiences of entrepreneurial farmers. Also, the use of 'workable' or best tools could provide some insight into the practical experiences of entrepreneurial farmers. However, to understand what constitutes acceptable knowledge or reality for the farmers in the context of their everyday entrepreneurial activities, their stories will need to be heard and interpreted to understand the underlying meaning. For axiological considerations, there is real value in approaching the research with no determined beliefs or uncertainties;

indeed, it is important to fully hear the stories of the research participants in their real-life setting. Careful consideration was given to understanding the stories of the farmers and their specific contexts in presenting the research findings. However, the researcher's epistemology and ontology might have, to an extent, influenced how the findings are interpreted.

Additionally, the interpretive assumption rejects the concept of universal laws/physical phenomena that apply to everyone (Ritchie et al., 2013) by emphasising the importance of the meanings humans create from their varied cultural circumstances and experiences at different times (Anderson and Starnawska, 2008). The overarching goal of interpretivism is to discover new and better insights and explanations of social reality and contexts from the social interactions and experiences of different groups of people. (Saunders, Lewis and Thornhill, 2019; Anderson and Starnawska, 2008; Lindgren and Packendorff, 2009). Central to interpretivism is adopting an 'empathetic attitude' to understand the social worldview of the research participants, usually shaped by their history, language and social values. This subjective stance influences the interpretation of data because of the empathetic interaction between the researcher and the object of the study (Tumele, 2015).

In summary, after examining the three worldview perspectives, the interpretive philosophical approach is the preferred research paradigm of this study. It: (1) focuses on the lived experiences of the entrepreneurial farmers; (2) dictates the use of qualitative and inductive methodological approach; (3) recognises the multiple socially constructed truths of the entrepreneurial farmers' experiences within the confines of culture, time, and place; and (4) supports the use of a small sample size.

4.3.3 Research Methodology

Research methodology is the systematic process of discovering and analysing knowledge. According to Mackey and Gass (2015, p. 4), "research methodology is the process of conducting research that includes theoretical conceptualisations and practical considerations. These interrelated concepts guide decision-making at all stages of the research process". There is no single overarching way to go about

doing research. However, more scientific research approaches and results have impacted public life by providing evidence for applied and civil decision-making (Flick 2015).

There are predominantly two research methodologies: Qualitative and Quantitative (Creswell, 2014). McCusker and Gunaydin (2015) suggest that the distinction between the two research approaches is in the data type for analysis. The qualitative approach mainly uses text for analysis to answer a phenomenon's "what" and "why" questions. In contrast, the quantitative approach uses numbers or statistics as data for analysis to answer the "how much" or "how many" questions of a phenomenon. With the increasing gravitation in entrepreneurship literature away from the previously dominant use of the positivist quantitative survey approach to other qualitative research approaches, the appropriateness of the specific research approach to be adopted in a given research remains unanswered (McDonald et al., 2015). Scholars (Park and Park 2016; Saunders, Lewis and Thornhill 2019; McCusker and Gunaydin 2015; Creswell 2014; Mengshoel 2012) highlighted the main features of the two approaches available to the researcher. The researcher will choose the suitable approach to collecting the data that will address the research aim and objectives. The features are summarised in Table 4.2

Table 4.2: Summary of Main features of Qualitative and Quantitative Research Approaches

Feature	Qualitative	Quantitative
Design	Subjective – emphasis on	Objective – emphasis on
	researcher's interpretation of	precise measurement, control
	events, texts	and analysis of concepts,
		phenomena
Typical Methods	Case study	Survey
	Meaning centred studies	Experiments
	Ethnography	
Sample	Usually, small cases	Usually, large cases
Data	Words, objects and pictures	Numeric and statistical
Data Collection	Unstructured or semi-	Structured:
Technique	structured:	Questionnaires
	Participant observation	Equipment
	Depth interviews	
	Group discussions	
Data Analysis	Non-statistical	Statistical

Feature	Qualitative	Quantitative
Logic	Inductive – more unrestricted	Deductive – narrow, focus
	and exploratory	more on testing and confirming
		hypotheses
Research Value	Loaded and biased	Free and unbiased
Researcher's	More on the quality of the	More on the quality of the raw
Attention	research process	data

Source: Adapted from - Saunders, Lewis and Thornhill 2019; Park and Park 2016; McCusker and Gunaydin 2015; Creswell 2014; Mengshoel 2012

Creswell (2014), focuses on the broad methods of reasoning to distinguish between qualitative and quantitative approaches to research. The quantitative approach is a deductive process, a movement from the broader spectrum to the more precise. In a top-down approach, deductive reasoning is a form of valid reasoning where new information or conclusions are derived from connected facts and information which must be accurate (Locke, 2007; Woiceshyn and Daellenbach, 2018). Slower analytic processes heavily influence deductive reasoning. The arguments may be valid or invalid, and the conclusions are typically more accurate (Heit and Rotello, 2010).

On the other hand, the qualitative approach is primarily seen as an inductive process. In this bottom-up approach, the movement is from specific observations to broader views and theories. Inductive reasoning is centred on evidence gathered in daily life instead of facts (Locke, 2007; Woiceshyn and Daellenbach, 2018). The inductive analytical process is faster, and the conclusions are probabilistic, not necessarily logically valid (Heit and Rotello, 2010).

Inductive research is a key means of advancing knowledge and developing new theories emerging from data (Locke, 2007; Eisenhardt, Graebner and Sonenshein, 2016). Qualitative data emerging from 'cases, interpretivist studies and ethnography' makes new theoretical explanations possible (Eisenhardt, Graebner and Sonenshein, 2016, p1114). Researchers adopting inductive reasoning focus more on how their research questions and study further extends what is already known (Locke, 2007). Anderson and Starnawska (2008, p224) argue that "entrepreneurship research is not well suited to a deductive approach: context, contingency, irrationality, flexibility, opportunism and even luck play too great a role in an enterprise". It is thus less suitable to grasp social phenomena by

deductive reasoning alone, and it may be more beneficial to employ an inductive lens (Anderson and Starnawska 2008).

Given the primacy of using the interpretive research paradigm to describe the entrepreneurial process of the entrepreneurial farmers in a resource-constrained context, a research design centred on the use of qualitative data gathering techniques is essential. Therefore, this study drew on a qualitative research methodology design (Engel et al., 2017; Murdock and Varnes, 2018; Dessi et al., 2014) that involved the participation of 31 Nigerian Farmers as research participants.

The rationale for qualitative research is based on the call for more empirical data on everyday entrepreneurship in a real-life setting (Gupta, Chiles & McMullen, 2016), especially in the context of a sub-Saharan African economy (Lingelbach et al., 2015; Eyana, Masurel and Paas, 2018). Practically and theoretically, using the qualitative approach aids in understanding and amplifying the voices and stories of the everyday entrepreneurial activities of Nigerian entrepreneurial farmers within the challenging context of a resource-constrained business environment in Jos.

Adopting this approach helped me understand the entrepreneurial farmers' processes, methods, strategies, and perceptions of the research objectives in the settings where the key variables occurred. This understanding was derived through words and relevant pictures built through an inductive process from the concepts, perceptions, and themes derived from the interview data, government policy documents, official publications, and the review of relevant literature on the research topic.

4.3.4 Research Methods

Research methods are the data gathering techniques used in this study. These include adapted techniques for sampling, data collection, data analysis and ethical considerations (Powell, 2020). The research aim was informed by literature on entrepreneurship context and process, effectuation, uncertainty, and socioeconomic and socio-cultural considerations for agricultural and rural development

in sub-Saharan Africa. The purposive sampling technique (Nordgaard, Müller, and Welter, 2021; Yessoufou, Blok and Omta, 2018) was used to target rural farmers in three local councils of Jos Plateau in North-central Nigeria to understand farmers' everyday entrepreneurial 'lived experience'. An interview protocol was developed from the research aim and objectives and a review of relevant literature. The researcher conducted an in-depth, face to face, semi-structured interview with Thirty-one Nigerian entrepreneurial farmers between July 2018 and September 2018. The interviews were audio-recorded, transcribed and manually coded. NVivo11 was used to manage the data analysis process, including organising emerging themes. These techniques are examined in detail in Sections 4.4, Section 4.5, and Section 4.7.

4.3.5 Comparable Research Design Approaches in this field of study

Entrepreneurial process research that focuses on generating rich empirical data within a resource-constrained business environment is existent (e.g., Hundera et al., 2020; Eyana, Masurel and Paas, 2018; Servantie and Rispal, 2017). Sarasvathy and Dew (2005) suggest three constructs that explain the decision-making traits of entrepreneurs: (1) focus on the personal attribute of the entrepreneur; (2) the importance of strategic stakeholder networks; and (3) the competencies of the entrepreneur. These constructs operate within the premise of the availability and access to gathered resources necessary to run a business. Physical structures such as shops, premises, stalls, product brands, social media profiles or bundles of resources become the business. The entrepreneurs then bring in their business acumen and personal knowledge to make the business work.

The Silicon Valley view of entrepreneurship (Welter et al., 2017; Audretsch, 2021) is not suitable for most entrepreneurs in sub-Saharan Africa due to over-reliance on high capital, technology and big data. A single and exclusive focus on the Silicon Valley view of entrepreneurship may have been oversold in extant literature (Audretsch, 2021). It is far more critical for the entrepreneurs in sub-Saharan Africa to have a business that can provide enough resources to feed and educate their children than to create new apps for smartphones or other high capital and technology backed products. There are nuances in the Nigerian economy with

digital and innovative start-ups in the metropolitan cities through the working class and young, energetic tech-savvy entrepreneurs predominantly in telecoms, media and financial services sectors.

Recent studies have gravitated more toward understanding the purposes and reasons for why and how entrepreneurship happens within the context of space, values, culture, or place (Welter et al., 2017; Anderson and Ronteau, 2017). For example, Igwe et al. (2020) examined the Igbo culture's attributes and influential role in shaping entrepreneurial behaviour in Nigeria. Yessoufou, Block and Omta (2018) paid close attention to the individual and external factors in a poverty setting, affecting the entrepreneurial actions of vegetable farmers in Benin. Similarly, Eijdenberg et al. (2018) saw institutional constraints, including gender disparity impacting entrepreneurial activities in Tanzania. South Africa as the research location, Cele and Wale (2020) centred on the scarcity of available infrastructural facilities and the impact on the entrepreneurs' aptitude, readiness, and drive to expand their farming operations; while Magagula and Tsvakirai (2020) found that the accessibility and affordability of finance and entrepreneurial education, impeded the engagement of youth in agricultural entrepreneurship. Lent (2020) specifically focused on the everyday entrepreneurial activities of widowed women in Ghana within the limitation of a resource-constrained and uncertain business environment. The above studies portray a challenging context of the everyday entrepreneurial activities in sub-Saharan Africa. The studies highlight the resultant impact of the challenging context on new venture creation, performance, growth or survival.

As highlighted in the studies above, the contextual resource-constrained and uncertain business environment prevalent in most sub-Saharan African economies did not deter aspiring entrepreneurs from starting or growing their businesses. The research approaches that the studies adopted are summarised in Table 4.3.

Table 4.3: Research Design Approaches in Similar Studies

Study	Methodological Approach	Sampling Technique	Data Collection	Research Location
Igwe et al. (2020)	Inductive Qualitative	Purposeful	Focus Group (1) - 5 participants; Interviews (50)	Nigeria
Yessoufou et al. (2018)	Inductive- Qualitative	Purposeful	Focus group (5) - 32 participants; Interviews (32)	Benin
Cele and Wale (2020)	Quantitative	Simple Random	Questionnaire (242)	South Africa
Magagula and Tsvakirai (2020)	Quantitative	Simple Random	Structured Questionnaire (120)	South Africa
Eijdenberg et al. (2019)	Inductive - Qualitative	Snowball	Focus group (2) – 12 participants Interviews (24)	Tanzania
Lent (2020)	Practice approach- Qualitative	Purposeful	Participant Observation; Long Interviews (multiple)	Ghana

Source – Adapted from: Igwe et al., 2020; Yessoufou et al., 2018; Cele and Wale, 2020; Magagula and Tsvakirai, 2020; Eijdenberg et al., 2019; and Lent, 2020)

Table 4.3 shows that qualitative and quantitative approaches can be used to study everyday entrepreneurial activities in a resource-constrained sub-Saharan African context. Although studies by Cele and Wale (2020) and Magagula and Tsvakirai (2020) both centred on the lack of crucial resources within an agricultural setting, the use of quantitative research methods in these studies is not suitable for this study. This study recognises the contribution of quantitative studies in attempting an economic explanation for how entrepreneurship occurs. However, the social perspectives of the place in which entrepreneurship happens and the interactions of entrepreneurs with their varied contexts require an interpretive approach. The richness of the perspective of the research participants amplified through their voices and stories is lost when quantitative methods are used. The two studies further missed out on observing the 'lived' experiences of the entrepreneurial farmers in the real-life settings that they occur. The lack of qualitative data for analysis has policy implications; the use of contextual data to promote cooperative associations and improved productivity of small firms, and the availability of quality data that underpins investment decisions by local and international businesses.

This study uses the inductive qualitative approach similar to the approach adopted by Yessoufou et al. (2018) and Eijdenberg et al. (2018). However, there are some

differences in the research approaches used in the two studies compared to this study: (1) The study by Yessoufou et al. (2018) centred on the core experiences of vegetable farmers in Southern Benin. In comparison, Eijdenberg et al. (2018) focused on the institutional constraints and gender inequality among various entrepreneurs, including 'Expert' entrepreneurs from the 'largest commercial city in East Africa' Da Es Salaam, Tanzania. In contrast to these two studies, this study looked at the entrepreneurial experiences of various farmers in North-central Nigeria. (2) Yessoufou et al. (2018) used a purposeful sampling technique in selecting their research participants from a list collected from the Ministry of Agriculture (CARDER) in Benin. Eijdenberg et al. (2018), on the other hand, used only snowballing sampling technique. This study started with a purposeful sample of two farmers from a Poultry Farming Association in Jos. It reverted into a snowballing technique to get data from a 'hard to reach' group of farmers in their real-life setting affected by the violent clashes between Farmers vs Herdsmen during data collection. (3) Yessoufou et al. (2018) and Eijdenberg et al. (2018) both used focus group discussions to triangulate their primary data. In addition to the limitation of time and resources, the tense security situation in Jos affected the setting up of focus group discussions to crystalise this study's primary data collected through the interview instrument. However, follow-up telephone calls were made to the research participants to check and confirm some common meanings and themes emerging from the data.

Lent (2020) focused on only widowed women to understand the entrepreneurial practices of these women in Northern Ghana. In contrast, this study focuses on the everyday experiences of both men and women entrepreneurial farmers in North-central Nigeria. Broadening the sample to include both genders provide this study with a better data set to understand the everyday entrepreneurial process within a resource-constrained rural environment. In addition, the daily engagement of Lent's (2020) study with the widowed women entrepreneurs through participatory observation over a month is commendable. However, the researcher's bias may be more apparent in the interpretation of the data through the daily encounters and interactions with the entrepreneurs and not necessarily the actual thoughts of the entrepreneurs expressed during the sessions. Equally, the entrepreneurs may adjust their daily practices in recognition of the presence of a European researcher in their business environment. In contrast, to reduce the

researcher's bias and ensure that each farmer's thoughts and behaviour are captured in the data, this study focused entirely on interviewing the farmers on their farms through open questions with limited probing questions. This approach ensured that the farmers could talk openly and freely about their everyday entrepreneurial experiences through their stories and were not influenced by the researcher in their daily farming operations.

The study conducted by Igwe et al. (2020) is of particular interest in relation to this study. It is a very recent study from a Nigerian perspective on the antecedents of entrepreneurial behaviour. Igwe et al. (2020) used a similar interpretive approach to this study, focusing on the influential role that family and informal institutions play in shaping entrepreneurial education and behaviour in a Nigerian rural community. In addition, the study highlights the limitation in extant western entrepreneurship literature that depicts the motivation for pursuing an entrepreneurial career as that of choice, based on acquiring adequate resources, experience and knowledge. Igwe et al. (2020) argue that "Igbo entrepreneurial culture develops from the linked institutions of the extended family and the informal apprenticeship systems" (Igwe et al., 2020, p 47). Similarly, this study's research on entrepreneurial farmers from different cultural groups in North-central Nigeria also revealed the active participation of the farmer's family unit and the local community in the farm business. Specifically, where resources are tightly constrained, familial and community interventions are crucial in providing start-up capital, local strategic networks, and entrepreneurial exposure and education.

Although the use of an interpretive research design and the everyday experiences of the Igbo entrepreneurs in the Igwe et al. (2020) study are similar to the design and experiences of this study's entrepreneurial farmers, there are differences in research methods. (1) The study by Igwe et al. (2020) collected data from only one ethnic group in five states of Eastern Nigeria, the Igbos. In contrast, this study collected data from farmers belonging to multiple ethnic groups in one State of North-central Nigeria. (2) Whereas this study's 31 research participants are all entrepreneurial farmers, Igwe et al.'s (2020) 50 research participants are a 50-50 split between entrepreneurs and community leaders. (3) Igwe et al. (2020) used a purposeful sampling procedure. In contrast, this study employed both purposeful and snowballing sampling techniques.

The use of survey instruments to generate empirical data on everyday entrepreneurial activities in a sub-Saharan African context exists (see, Hundera et al., 2020; Cele and Wale, 2020; Magagula and Tsvakirai, 2020). Although the survey instrument can generate large sample data through structured questionnaires, this instrument was not employed in this study due to the small sample size. Also, by interviewing the farmers in person and on their farms, the researcher was able to use probing and clarifying questions to generate rich and better data on the lived experiences of the farmers. The personal connection and trust that the farmers had with the researcher during the interview sessions ensured an open two-way conversation between the interviewee and interviewer that is missing if a structured survey was used. The farmers openly conveyed their emotions and feelings about the research topic and, in some cases, went beyond the requirements of the questions asked. By actively participating in the interview sessions as against using a structured questionnaire, the researcher better understood the data generated from the interviews to make an informed interpretation and analysis of the research data.

The review of past and recent studies on the entrepreneurial processes in sub-Saharan Africa was helpful in understanding the practical use of both the qualitative and quantitative research approaches. Based on the studies reviewed and the best approach to answer the research question, the qualitative approach was found most suitable for collecting rich empirical data on the lived experiences of the entrepreneurs. The inductive qualitative approach (see Table 4.3) was the dominant approach used by scholars in their respective studies of entrepreneurs in real-life settings. Although all the studies reviewed had relatively small sample sizes, which might impact the generalisation of the data, Yin (2013, p 327) suggested that "the strongest empirical foundation for these generalisations derives from close-up, in-depth study of a specific case in its real-world context." Thus, an in-depth qualitative study of a sample's real-world context generates newer and rich contributions to the entrepreneurship literature.

Additionally, Saunders, Lewis and Thornhill (2019) suggested that qualitative researchers can use other forms of generalisation to validate the quality and value of their research design. Generalisation becomes possible where the context of the research setting is similar across other locations, or the research outcomes can be

applied in other settings. Therefore, the inductive qualitative case study research approach from an interpretive lens is suitable for this study following the review of the research methodologies identified in previous studies with similar research context, patterns, methods, or theories (Lune and Berg, 2017). This methodology provided rich data that paints a multifaceted picture of the everyday entrepreneurial process within a resource-constrained farming community.

4.4 Research Design Strategy

A research strategy is a plan of activities or steps that the researcher undertakes to guide the research to discover the research findings or outcomes linked to the research aim and objectives (Saunders, Lewis and Thornhill 2019; Bryman and Bell 2015).

Following the discourse on the research approach selected in this study in Section 4.3, an inductive qualitative case study research strategy was used to collect data through the semi-structured interview instrument in a real-life agricultural setting. The importance of a case study is the understanding that it provides of the context of the research (Yin, 2018), generating rich insights and 'in-depth' data into the study of a phenomenon (Yin, 2018, Saunders, Lewis and Thornhill, 2019, Eisenhardt and Graebner 2007), or "a less well-known phenomenon" (Yessoufou et al., 2018, p8). According to Saunders, Lewis and Thornhill (2019, p 197), a case study research strategy is "designed to identify what is happening and why ... to understand the effects of the situation and implications for action". The process requires collecting and analysing data to identify emerging patterns, concepts, and themes and revisiting empirical groupings and literature to enhance, extend, or create theory (Ridder et al., 2014).

The case study approach is used in this study to search for meaning and understanding of the lived experiences of entrepreneurs within a bounded farming community in Jos, Nigeria, suitable for addressing the research objectives (Merriam and Tisdell, 2015). Chetty et al. (2014, p 820) argue that a case study includes "several countries or research sites pose major challenges that affect methodological rigour". Therefore, this study is limited to one country, focusing on one State in Nigeria enriched by the social context in which everyday

entrepreneurial activities happen despite the challenging resource-constrained business environment.

Harding (2013) argues that a research design strategy represents a 'practical plan' for applying methods based on the decisions taken on the methodological approach to be applied in the research (e.g., qualitative or quantitative). The design should consist of the sampling technique, data collection, and data analysis.

Firstly, a purposeful sampling method was employed to generate considerable information (Servantie and Rispal, 2018) about the context and process of everyday entrepreneurship within the Nigerian agricultural sector. A 'chain referral' sampling technique was also used during data collection to contact 'hard to reach' farmers (Heckathorn, 2011). As a non-probability sampling method, randomisation was not an essential consideration under purposeful and chain referral sampling techniques.

Secondly, a semi-structured interview approach (n=31) was used to understand the everyday entrepreneurial perspectives of the entrepreneurial farmers to generate rich data. The interview questions and data collection method were designed to align with the research strategy proposed by Becker et al. (2017). An inductive qualitative research method was used. It combines 'Priori assumptions' based on previous empirical research with new open questions to develop themes from the research data.

The interviews served four primary purposes. Firstly, to evaluate Nigerian agricultural enterprises' formation, growth, and survival within a resource-constrained business environment. Secondly, to explore the interactions of Nigerian agricultural entrepreneurs to understand the networks and support structures (if any) that exist within the farming communities, notwithstanding the challenging resource-constrained business environment in Jos, Plateau State of Nigeria. Thirdly, to examine the predominant decision-making logic, Nigerian agricultural entrepreneurs use when pursuing business opportunities. Fourthly, to understand the coping strategies that entrepreneurial farmers use when faced with tightly constrained resources and amplify their voices and contributions to the Nigerian economy. Interviews were conducted mainly face-to-face with follow-up

telephone calls to confirm emerging themes and patterns from the interview transcripts. The interview sessions lasted, on average, for an hour and were recorded.

Thirdly, the qualitative data was transcribed manually and then structured using the NVivo software. The data was analysed using 3 level analysis (Morris et al., 2017): case by case, cross-case and finally, thematic analysis.

4.5 Sample Selection

In deciding the sampling technique to use in a study, it is essential to understand and identify the sample population and sample size. Bryman and Bell (2015) suggest that such a decision signifies a compromise concerning cost and time limitations and the desire for accuracy after other limiting factors have been considered.

Similar to other studies (see Korsgaard, Müller, and Welter, 2021; Yessoufou, Blok and Omta, 2018), a purposeful sampling method was used in this study to find and compare the everyday entrepreneurial experiences of the entrepreneurial farmers in Jos. A set of eligibility criteria (Easterby-Smith, Thorpe and Jackson, 2012) was used to generate as much heterogeneity as possible within the limitations of a single country and rural farming setting (Müller and Korsgaard, 2018). The researcher approached prospective sample participants to check whether they were appropriate to participate in the research based on the researcher's reasonably good knowledge of the required sample components. Three focal eligibility criteria were used in this study:

- 1) The participant must be an entrepreneurial farmer in Jos Plateau State;
- 2) The core activity of the enterprise must be either in food and crop production, processing of food, animal husbandry, and the production or development of machines, tools, or equipment to be used within the agriculture supply value chain;
- 3) The enterprise has no more than 49 permanent workers.

This sampling technique was adopted due to the limitations of time and resources required to execute a probability sampling for a large population. As Harding

(2013) argued, where there are insufficient resources to sample a large population, the researcher must select the appropriate population members to generate the research data. Similarly, the purposeful sampling technique gives each component of the population an equal likelihood of being included in the sample. The sample population was further divided into three clusters representing the three local authorities in Jos (Jos East, Jos North, and Jos South) to ensure that the sample size represents entrepreneurial farmers in Jos. The justification for using purposeful sampling is the cost and time effectiveness of the sampling technique and the researcher's judgment to select the sample that can generate novel insights, perceptions, and reflections from the entrepreneurial farmers to the interview questions to achieve the research aim and objectives.

There is no single universally accepted definition of a small enterprise or the size of a small firm (Storey, 2016). There are varying definitions of Micro, Small Enterprises (MSEs) and Small and Medium Scale Enterprises (SMEs) put forward by scholars. The MSEs or SMEs are usually defined as the number of workers employed in a firm or defined based on the size of the turnover of the enterprise. Leidholm and Mead (2013) define MSEs as firms with 1-50 workers. Other studies (see Lussier and Sonfield, 2016; Rahbauer et al., 2016; and Leidholm and Mead, 2013), for example, used the European Commission established firm size definitions for all businesses in the European Union in their respective studies. The European Commission's (2015) categorisation of staff headcount simplifies the definition of micro, small and medium-sized enterprises (SMEs) as follows:

Micro enterprise: 0 – 9 employees

■ Small enterprise: 10 – 49 employees

Medium enterprise: 50 – 249 employees

Leidholm and Mead (2013) suggest that firms in Africa that employ ten or more workers are less than 2 per cent of the businesses in the continent. This study adopts the European Commission's definition of Micro and Small Enterprises (MSEs) firm size as firms with 1-49 employees. This definition is adopted because there are relatively fewer entrepreneurial farmers in Jos Plateau with more than ten permanent workers on their farms. Table 4.4 corroborates this assertion, with only two entrepreneurial farmers having more than ten permanent workers on their farms.

The demographics of the research participants are presented in Table 4.4 below. The research participants are farmers based in Jos Plateau State, Nigeria. In terms of their educational status, the majority of research participants have attained a university degree-level education. Only three research participants studied a subject related to agriculture. Research Participant 02 studied Animal Health production at a postgraduate diploma level, while Research Participant 20 has a Bachelor of Science (BSc) Degree in Agriculture. Research Participant 31 obtained a BSc Degree in Agriculture and a Masters Degree in Agriculture Extension.

While seeing a dominance of university educated farmers in the sample may seem surprising - given what is known of the nature of home-based and family learning in the farming context, this is reflective of the cultural importance of higher education in Nigeria (Jaja, 2014). Though most of the entrepreneurial farmers here have been successfully educated to degree level, this degree is not necessarily related to farming itself with the exception of the aforementioned three research participants. Many have gained their degree independently and in subjects unrelated to their future career; for example, engineering, education, accounting, psychology, mathematics to mention a few. Further details of university subjects studied by the farmers is available in Table 4.4. This finding, while arguably unusual in the westernised context, is therefore not untypical in the Nigerian context where such currency is put on higher education at a young age, and doing well in school is synonymous to being raised in a good "Nigerian home" (Griffin et al., 2012).

Additionally, though concerted effort has been made to capture a variety of perspectives on farming, it is acknowledged that the research sample is made up of farmers educated to a higher level, meaning that not all farmers are necessarily represented. It is recognised that many farming operations will take place at the subsistence level, and these farmers may not be so strongly educated in a structured, traditional, sense - and thus may not have been uncovered through the snowball sampling process. However, as the focus of this work is on the everyday entrepreneurial farmer, and not those engaging in subsistence entrepreneurship (see Section 3.2), there is confidence that the sample appropriately captures those engaging in entrepreneurial ambitions, where education regardless of subject studied has strengthened the capabilities of the

farmers. There is a limitation in that those famers operating at the subsistence level are likely not included in this work. Accessing such subsistence farms would necessitate an alternative sampling approach and would certainly be of interest for future research looking at this form of farming activity. Although, the majority of the research participants have a university degree certificate and operate in a community where farming is not always considered lucrative. The fact that they are engaged in farming suggests the attraction of farming as an entrepreneurial activity or in response to the dearth of well-paid professional jobs in the local economy. Farming is also seen as a good retirement plan, with many civil servants venturing into farming after retirement (see Table 4.4).

The research participants had varying professional experience within the civil service or in the private sector, except for Research Participants (09, 13, and 20), who had no other experience outside of farming. All research participants are job creators employing at least one permanent worker with several ad-hoc workers added to the workforce during various stages of the farming season, particularly during the harvesting seasons. All participants have, at a minimum, five years' farming experience with exposure to farming from an early age.

Table 4.4 shows that many research participants are male, except for eight female participants. The age range of the participants is between thirty-one and sixty-nine, which indicates that age is not a barrier to involvement in agricultural entrepreneurial activities. On average, 10.9 acres of land in Jos is used for crop production, while seven acres are used for livestock farming (Majekodunmi et al., 2014). A portion of the farm produce is usually consumed by the family and given as gifts to friends and other local community members.

Table 4.4: Overview of Research Participants' Characteristics

Research Participant (RP)	Gender	Age	Education/ Subject	The decision to become an entrepreneurial farmer	Type of farming activity	Route to farming	Years of farming experience	No. of employees (workers) ¹	Other careers outside of farming
RP01	Male	38	University/ Mechanical Engineering	To be the biggest rabbit farmer in Jos	Crops, Rabbit and Poultry farming	Family tradition	Since childhood	4	Mechanical Engineer
RP02	Male	42	Tertiary education/ PGD Animal health production	To have a farm that will become a household name - as a model to others	Poultry and Piggery farms and breeding dogs	Interest and Agricultural educational training	7	3	Vice-principal secondary school
RP03	Male	54	University/ Mathematics	To raise resources to support the Christian mission, and create jobs for others	Fruits farms (Banana, apple & strawberry) and Fishery	Family (Father) and Agricultural educational training	40	4	Missionary and student worker
RP04	Male	60+	University/ Theatre Arts	Retirement plan and the joy of farming	Poultry farming and Greenhouse vegetable garden	Family tradition	Since childhood	2	Retired Civil Servant
RP05	Male	60+	University/ Accounting	To farm and make a profit and to serve as a retirement business	Poultry farming	Retirement Plan	28	4	Retired Civil Servant
RP06	Male	69	University/ Mass Communication	Interest, heart and passion for agriculture and Job creation	Vegetables and fruits farms, Animal husbandry	Passion and High school activities	Since childhood	8	University Lecturer & National Electoral Commissioner

Research Participant (RP)	Gender	Age	Education/ Subject	The decision to become an entrepreneurial farmer	Type of farming activity	Route to farming	Years of farming experience	No. of employees (workers) ¹	Other careers outside of farming
					and agro- processing				
RP07	Male	57	University/ Law	Supplement income as a civil servant and the joy of farming	Crop farming (Rice, soya beans, maize and finger millet)	Interest	20	4	Lawyer
RP08	Male	60+	Tertiary education/ HND Building & Civil engineering/Law	Passion for integrated farming and food processing	Fishery, Tomatoes greenhouse, maize and rice farming	Family tradition and Passion	5	15	Building Engineer/Lawyer
RP09	Male	68	Primary school	Only option due to unemployment	Poultry farming	Unemployment	41	3	None
RP10	Female	65+	Primary school	Unsuccessful tailoring and provision stop (grocery). Decided to venture into farming.	Poultry farming	Family tradition	28	6	Tailoring and Trading (provision shop)
RP11	Male	60	Tertiary education/ Diploma Education	Inherited family farming business	Crop production (maize, rice, groundnuts, beans)	Family (Father)	Since childhood	20	Retired Civil Servant
RP12	Male	48	University/ Mechanical engineering	Passion for farming, helping others around and profit-making	Poultry farming and Greenhouse	Family (Father)	10	3	Mechanical engineer
RP13	Female	45	University/ Divinity	To raise substantial	Poultry farming	Family tradition and Friend	11	1	None

Research Participant (RP)	Gender	Age	Education/ Subject	The decision to become an entrepreneurial farmer	Type of farming activity	Route to farming	Years of farming experience	No. of employees (workers)	Other careers outside of farming
				income for the family – the husband is a pastor					
RP14	Female	35	University/ English Drama	Feeding the household and provision of good nutrition to other households	Poultry farming	Family (Mother)	Since childhood	1	Civil servant
RP15	Male	32	University/ Environmental Engineering	To have a business that caters for people that need to be on a diet	Rabbits farming	Hobby	5	2	Lecturer
RP16	Male	44	University/ Medicine & public health	To make money outside of being a medical doctor	Poultry farming	Family (Father)	Since childhood	4	Medical Doctor
RP17	Male	49	University/ Accounting	Passion for farming	Irish potatoes, maize, chillies and green beans farms	Family (Parents)	Since childhood	3	Bank Officer
RP18	Male	63	University/ Psychology	Influenced in 1984 by an entrepreneurial farmer to go into large scale farming	Maize and rice farming, poultry and piggery	Family	Since childhood	5	Lecturer
RP19	Male	63	University/ History	Supplement family income and as a retirement plan	Poultry and crop farming (maize & rice)	Secondary School and Interest	51	3	Retired Civil Servant

Research Participant (RP)	Gender	Age	Education/ Subject	The decision to become an entrepreneurial farmer	Type of farming activity	Route to farming	Years of farming experience	No. of employees (workers) ¹	Other careers outside of farming
RP20	Male	69	University/ Agriculture	Worked in Ministry of Agriculture but had personal farms to create jobs for others	Crops (maise, rice and soya beans) farms	Interest	Since being a young man	3	None
RP21	Female	33	University/ Biology Education	High prices of 'fresh items' in the market – a business idea	Greenhouse farming (cucumber & tomatoes), potatoes, beans & groundnuts farms	Secondary school	6	5	Worked in Bank and NGO
RP22	Female	48	University/ not declared	Unsuccessful provision (grocery) shop	Poultry and rice farming	Friends	15	8	University staff
RP23	Male	64	University/ Agricultural Science	Potential of greenhouse farming and the sale of imported seeds from Israel	Greenhouse (tomatoes, cucumbers, lettuce, choy, & cabbage)	Israeli Kibbutz farming settlement	53	8	Soldier in the army
RP24	Male	28	University/ Adult Education & Statistics	Interest, and as an alternative source of income	Vegetable irrigation farming (Okra, tomatoes and cucumber)	Family (Parents)	Since childhood	2	Office Assistant at Theological College
RP25	Male	53	University/ Theology	Profit-making and supplementing household income	Poultry farming	Hobby and Experimentation	15	3	Lecturer

Research Participant (RP)	Gender	Age	Education/ Subject	The decision to become an entrepreneurial farmer	Type of farming activity	Route to farming	Years of farming experience	No. of employees (workers) ¹	Other careers outside of farming
RP26	Female	33	University/ Science Education	Augment household income	Crops (Maize, soya beans, groundnuts). Vegetable farms (carrots & cucumbers)	Family (Father)	Since childhood	10	Administrative staff at a College of Education
RP27	Male	31	University/ Human Resources	Left professional football to farm. Farming provides both joy and financial benefits.	Greenhouse (Broccoli, cabbage, carrots, tomatoes) and groundnuts	Family (Father)	Since childhood	9	Professional footballer and teacher
RP28	Male	34	University/ Education	The safest business venture based on experience as a farmer compared to IT or car business	Vegetables (tomatoes and bell peppers)	Family and farming community	Since childhood	1	Civil servant
RP29	Female	52	University/ Conflict Management & Peace Studies	Passion for farming and raising household income to train children	Poultry farming	Retirement and the need for income to sustain the family	A very long time ago	4	Retired civil servant
RP30	Female	32	University/ Journalism	Money making, Food processing, and providing food security for the hungry	Tomatoes, green peppers and potatoes farming	Family (Brothers), friends and community	10	9	Journalist and social entrepreneur

Research Participant (RP)	Gender	Age	Education/ Subject	The decision to become an entrepreneurial farmer	Type of farming activity	Route to farming	Years of farming experience	No. of employees (workers) ¹	Other careers outside of farming
RP31	Male	64	University/ Agriculture Extension	To produce quality seeds to improve the production levels of peasant farmers	Seeds production (rice, maize	Family and Secondary School	Since childhood	10	Retired civil servant

¹Permanent farmworkers. Seasonal workers are added to the workforce at different stages of the farming season, especially during harvest.

Source: Author

Access to finance, education, and training is critical to entrepreneurship development in the sub-Saharan African agricultural sector (Chipfupa and Wale, 2018). Rashid and Ratten's (2021) assertion that subsistence entrepreneurs originate from 'disadvantaged backgrounds with low-income and lack of education' is not atypical of the majority of the everyday entrepreneurial farmers in Table 4.4. The latter are well educated with professional work experience. The entrepreneurial farmers rely on their strategic alliances to obtain finance and other crucial resources (Eyana, Masurel and Paas, 2018) that they require in their farm business to create jobs and add substantial value to their families and wider communities.

The context of an entrepreneurial endeavour shape and perhaps even determines what values are accepted (Anderson and Smith, 2007). Although the majority of the entrepreneurial farmers had other careers outside of farming (see Table 4.4), the entrepreneurial education and exposure they received from family made farming a viable business opportunity before or after retirement. Smith (2021) suggests that children of a family business are more likely to become entrepreneurs than those who are not. The majority of research participants referenced the strong influence of family in their decision to go into the farming business.

Randomisation is not an essential consideration under the purposeful sampling technique, especially in emerging economies where accurate and reliable directories of small businesses are not publicly available. The data about the entrepreneurial farmers in Jos in this study is not known to have been collected and recorded. Also, in rural Nigeria, some people are sceptical about the notion and value of data collection for research purposes (Elston, Chen and Weidinger, 2015). We are responsible for the information we provide about Nigeria and need to provide context and nuance. There are several reasons – trust, lack of confidence, challenges around confidentiality and ambivalence. Such negative perceptions of the research process can potentially impact the participants' willingness to fully engage with the research process and the richness of information available to the researcher. The overarching consideration for adopting

a purposeful sampling is to generate novel insights, reflections and perceptions of the entrepreneurial farmers.

During data collection, a combination of purposeful sampling and snowballing "Chain-referral-sampling" technique (Heckathorn, 2011; Eijdenberg et al., 2018; Martina, 2020) was implemented to mitigate the challenge of contacting "hard to reach" rural farmers on the outskirts of Jos East and Jos South. Similarly, a recent study combined the two approaches into one coined "Purposive snowball sampling" (see de Guzman et al., 2020). Two initial participants (gatekeepers) were chosen from a purposive sample of farmers from a known network of a Farming Association in Jos. These two farmers served as "kernels" to recruit further research participants, subsequently recommending other recruits. After two weeks of adopting the purposeful snowball sampling technique, 16 successful interviews were completed. A friend of one of the entrepreneurial farmers with a strong social media presence puts a request on Facebook soliciting other farmers willing and available to tell their stories about their everyday farming experience in Jos. This strategy generated thirteen recruits, but only four were successfully interviewed. The four recruits from the Facebook post further recommended other recruits. The sample consequently grew from each approach and snowballed in number to thirty-one.

A limitation of the chain-referral snowball sampling technique adopted in this research is the high dependence on recruited individuals to refer the researcher to other individuals they think meet the inclusion criteria defined by the researcher (Eijdenberg et at., 2018). The Chain-referral snowball technique generated research participants from the recruited farmers' personal and professional connections (de Guzman et al., 2020). Although this strategy was effective in collecting rich data from hard-to-reach farmers in their real-life setting due to violent clashes between farmers and herdsmen (Onyema, Gideon, and Ekwugha, 2018), it potentially eliminated other farmers who could not be reached or were deemed not to meet the inclusion criteria.

A consistent purposive snowballing sampling context was kept throughout the process as in previous studies (de Guzman et al., 2020; Engel et al., 2017),

safeguarding the evolution of the sampling process as data are being collected. A consistent sampling process ensured that the sampled entrepreneurs were all involved in a farming-oriented business in Jos, Nigeria. The research participants either identified their agricultural activity as entrepreneurial or saw themselves as entrepreneurs (Matthews, Chalmers and Fraser, 2018). Servantie and Rispal (2017) suggest that selecting this sampling technique provides rich information from the sample population for the study. It also helps to build trust with the participants, necessary to mitigate the challenging security concerns in the local business areas caused by the Farmers vs Herdsmen classes anchored on the outskirts of Jos East and Jos South.

The rationale for sampling entrepreneurial farmers with not more than 49 workers is the scarcity of larger farms that employ 50 and above permanent workers on their farm similar to Leidholm and Mead's (2013) suggestion that businesses in Africa that employ ten or more workers are less than 2 per cent of the businesses in the continent. It would have been difficult to access the bigger farms with high walls and mainly owned by retired military officers involved in 'large-scale farming and agro-allied production' (Agara, 2006).

4.6 Pilot Study

Conducting a pilot is more evident in quantitative survey research, where questionnaires are the primary instrument for data collection (Saunders, Lewis and Thornhill 2019; Harding 2013). However, pilot testing of interview questions is also beneficial in evaluating the questions' appropriateness and making necessary adjustments before fieldwork study. Saunders, Lewis and Thornhill (2019) suggest that pilot testing of interview themes is critical in building the researcher's competence in conducting interviews. Equally, Harding (2013) asserts that the pilot testing of interviews is crucial to recognising and reducing the possible problems and dangers that could impact the validity and quality of data collected from the field. Lune and Berg (2017) recommend using focus groups to pilot test interview schedules and data collection instruments.

A convenient sample of four entrepreneurs from Jos Plateau who attended a conference in Aberdeen in May 2018 was contacted to participate in a pilot study

to test the appropriateness of this study's interview themes and questions. The themes were appropriate to address the research aim and objectives. The four participants in the pilot all commented positively on the interview experience. The sessions lasted, on averagely, for an hour. The data generated was probably skewed with political bias because the four participants in the pilot also work for the Plateau state government. The setting was not the most appropriate as the participants were not on their farms to facilitate capturing the data in their real-life setting. The pilot participants all gave glowing praise to the government for the government's 'generous' interventions in the Jos farming community.

It became apparent that the questions asked in the pilot study were not targeted at generating rich narrative data on the lived experiences of the entrepreneurial farmers in the course of their everyday entrepreneurial activities. It was too narrow in focus. The pilot questions/themes only focused on the limitation associated with electricity access, impacting the entrepreneurial farmers' behaviours. Thus, further review and iterations of the questions were carried out to validate the interview themes' appropriateness. The process necessitated a refocus of the research aim and objectives to capture a broader view of resource-constrained beyond the limitation of electricity access. In addition, the pilot study was helpful in the subsequent recalibration and alignment of the interview themes to the main research aim. Also, the pilot study provided the researcher with practical experience in conducting a research interview.

4.7 Data Collection

Eijdenberg et al. (2018) argue that collecting primary data in emerging economies is challenging for researchers. However, the data is enriched by the nuances of the challenging and changing resource-constrained context that the everyday entrepreneurship occurs. Data was collected over three months between July 2018 and September 2018. Like other studies (see Korsgaard, Müller, and Welter, 2021), data were collected using the interview instrument. The data source is discussed in detail in the following sections.

4.7.1 Semi-Structured Interview

Barbour (2008, p113, as cited in Harding 2013) argues that the interview instrument for data collection is historically assumed to be the 'gold standard for qualitative research and requires no substantial justification'. Similarly, Ward and Shortt (2020, p2) suggest that the semi-structured interview 'reigns supreme' in qualitative research. Therefore, a semi-structured interview instrument was implemented in Jos, Plateau State of Nigeria, to obtain rich primary data for the study from entrepreneurial farmers resident in three local authorities in Jos. The interview questions were designed from the review of relevant literature and previously used and established questions on the entrepreneurial processes within an emerging economy context. The questions were tested through a pilot study, and a further review of the instrument was conducted. A similar approach was used by Cai et al. (2017) and Cunningham (2018). The interview schedule is presented in Table 4.5.

The design of the interview schedule centred on the research aim 'to critically investigate how farmers use entrepreneurial processes to navigate a resource-constrained context'. The research objectives and relevant literature that informed the drafting of the interview questions are presented in Table 4.5 below:

Table 4.5: Interview Schedule

Research Objectives	Supporting Literature	Interview Questions
To explore how micro and small-scale business owners start and sustain their businesses in a resource-constrained context.	 Acquisition of relevant training and practical experience (Cunningham and McGuire, 2019) for start-up business from childhood Jones and Li, 2017) The family unit is interwoven with the entrepreneurial business entity (Khavul, Burton and Wood, 2009) Everyday Entrepreneurship (Welter, 2011) Opportunity identification and exploitation (Shane and Venkataraman (2000) 	 Can you tell me about your decision to become a farmer? Was farming your choice or the only option available? Do you enjoy life as a farmer? What resources did you require to start farming? Thinking about how you work the farm, what are the essential things you need? Are the resources that you need available? Are you satisfied as a farmer? Please explain? What two things would make you more satisfied with your life as a farmer? Will you encourage your sons or daughters to become farmers? Why?

Research Objectives	Supporting Literature	Interview Questions
To explore the factors that influence effectuation processes of entrepreneurs as they engage in entrepreneurial decision-making.	 Effectuation is a response to a resource-constrained and uncertain environment (Sarasvathy, 2001 and 2008; Sarasvathy et al., 2014; Lingelbach et al., 2015; Reymen et al., 2015) Entrepreneurial Identity and Traits (Janker, Vesala, and Vesala, 2021; Suvanto, Niemi and Lähdesmäki, 2020) 	 Can you tell me about your decision to become a farmer? Was farming your choice or the only option available? What were your expectations when you decided to go into farming, and have they been met? When pursuing new business opportunities, are you careful not to risk more resources than you could afford to lose? Why?
To evaluate the effects of social embeddedness on the entrepreneurial process.	 Uncertainty predicting behavioural logic (Jiang and Tornikoski, 2019; Smolka et al., 2018;) Unemployment driving entrepreneurial energy (Gaddefors and Anderson, 2018) Social embeddedness in the local community creates business opportunities and networks (Jack and Anderson, 2002; Laskovia, Shirokova and Morris, 2017) The embeddedness of entrepreneurs within their local spatial context opens up access to locally bound resources (Korsgaard, Müller and Welter, 2020) 	 Who works on your farm? Are they related to you? Do you cooperate with any other farmers? Can you please give me some examples? Does this work well? Are people fair and helpful? Tell me how you get on with government officials, customers, market leaders, community leaders, and neighbouring farmers? Do you belong to a farming association? What is the importance of formal group membership? Are farmers benefiting from group membership of the formal association?
To establish the coping strategies of Nigerian entrepreneurial farmers.	 Reliance on family for guidance, support and future direction of the enterprise (Aldrich and Cliff, 2003) Access to a wealth of essential resources from family and local community (Anderson et al., 2005) Context provides the resources to which entrepreneurs connect to create value (Gaddefors and Anderson, 2019) Leveraging on strategic local alliances and networks to improve 	 Can you give some examples of the measures you or some farmers have proactively taken to find new or different ways or solutions to grow or expand your farming businesses in Jos Plateau? How do you manage your farming business? How do you cope? (Please provide some examples) Tell me how you get on with government officials, customers, market leaders, community leaders, and neighbouring farmers?

Research Objectives	Supporting Literature	Interview Questions
	performance and grow the farm business (Sarasvathy, 2001; Eyana, Masurel and ass, 2018)	What are the effects of the business environment on what you do?
To identify the key social-cultural challenges of everyday entrepreneurship and make recommendations on entrepreneurship context and process in rural settings.	 Daunting prevalence of poverty in sub-Saharan Africa (Jayne, Chamberlin and Benfica, 2018; Adam et al., 2017) Rural Poverty (Anderson and Lent, 2017) The quality of available resources is crucial for practical entrepreneurship (Ataise et al., 2018; Andersson and Andersson, 2016) Entrepreneurial education impacting on the behaviour and experience of entrepreneurs (Rauch and Hulsink 2015) 	 Some things can make farming easier and more productive, such as better equipment (machinery, access to tractors, irrigation and others). Can you or other farmers get these when they would be useful? What are your views, understanding and opinions about the sustainability of the business environment in Jos? Are you aware of any government or local initiative, programme or scheme that will economically influence the future outlook of your farming business? What does the future look like for your farming business? Given all we have discussed today, what should be the main focus of farmers in Jos Plateau?

Source: Author generated

Interview as a data collection instrument was ideal for capturing the entrepreneurial farmers' behaviours and diverse perspectives on their farming operations in an informal but real-life setting. The interview offered the research participants a platform to openly amplify their voices and stories on various issues and opportunities in their farm business. Such a setting comes with distractions from farm animals or requests for farmers' attention from their farmworkers. Still, the setting offers the interviewer a unique opportunity to validate statements made by the entrepreneurial farmers by observing and confirming statements made on the farm operations, equipment and other farm inputs available to the farmer. Equally, a semi-structured interview creates the opportunity and flexibility to explore thoroughly the answers that respondents give through probing

questions to generate further data or context beneficial to the research aim and objectives.

The interview sessions lasted an hour on average. Each session was audiorecorded. In each session, notes were taken to enhance the data and provide a rich context for data analysis (Phillippi and Lauderdale, 2018). The field data were manually transcribed and analysed, revealing a comprehensive understanding of the primary data within a "specific context, a specific culture, values, and entrepreneurship tradition" (Letaifa & Golio-Primard, 2016, p 5129). Table 5.1 provides an overview of the characteristics of the 31 entrepreneurial farmers that were sampled. Initially, 46 entrepreneurial farmers were contacted to participate in the study. However, 31 of the farmers successfully participated in the semi-structured interview exercise. There are several reasons why the remaining 15 farmers did not attend the arranged interview appointments ranging from: (1) a critical business event came up; (2) emergency or unforeseen concerns with a family member; (3) fear of the data being used by the government to collect more taxes; (4) pursuing the supply of farm inputs; and (5) supervising farm workers. The majority of the 15 entrepreneurial farmers were polite and apologetic when declining to participate in the study.

The research participants were asked to tell their stories with minimal structure, explaining the rationale for the research, themes and questions (Magalhaes and Abouzeid, 2018). The story told in each interview session is remarkably similar. The research participants elaborated on the trajectory of their farming experience, starting from their childhood working on the family farm to later owning their own farm business. Allowing an open, free-flowing conversation elicits a two-way communication between the interviewer and interviewees, emphasising the interviewee's behaviour, decision making logic, actions and reflections on the context and process of the farmers' everyday entrepreneurial activities. Concerted efforts were made throughout the interview sessions to avoid unnecessary interference whenever the research participant narrated their personal and detailed story (Eijdenberg et al., 2018). Probing questions were carefully selected to minimise the unintentional influence of the interviewer on the research participants' responses and experiences. With the explicit consent of the entrepreneurial farmers, additional notes and photographs were carefully taken

during the farm tour that occurred after the interview sessions to avoid becoming a distraction to the interview, but primarily to substantiate some of the information obtained in the interview sessions.

Some qualitative studies (see Reymen et al., 2015, Igwe et al., 2020; Yessoufou et al., 2018) combined interviews with either a focused group or archival data to triangulate the primary interview data. Setting up a focus group to triangulate this study's primary data was impossible due to security challenges in Jos and the limitation of time and resources available for this research. However, follow-up telephone calls were made to the research participants to check and confirm some common meanings and themes emerging from the data.

Harding (2013, p 35) aptly summarised the conundrum faced by the researcher during some of the interview sessions. "It is particularly difficult to maintain a neutral approach when faced with a subject that the interviewer feels strongly about or when the respondent expresses views that the researcher finds offensive". In some interview sessions, some offensive and rude language were used in some instances to describe the lack of government support for the farming community. In some of these cases, the interview session was paused to allow the interviewee to control the strong expressions of emotions or rage. Ultimately, the emotive outbursts result from years of neglect and the lack of appropriate channels for some rural entrepreneurial farmers to voice their frustrations without being challenged or rebuked. The emotional perspectives of the farmers are presented and analysed in Chapters Five and Six.

4.8 Data Analysis

The study adapted Becker et al.'s (2017) approach to analysis in a resource-constrained context. A combination of 'a Priori assumptions' based on previous empirical research on the everyday entrepreneurial process informs the generation of research themes and structure from the primary data. The preliminary analytical framework stemmed from the concepts intrinsic in the literature, with modifications emerging from the data (Karmowska et al., 2017). The research objective is to understand the entrepreneurial farmers' decision-making process, particularly how these relate to their reactions and adaptations to their resource-

constrained business environment. Statements were manually coded from the transcribed script regarding their decision-making orientations throughout the new venture creation process (Servantie & Rispal, 2017, Engel et al., 2017). The process required revisiting empirical groupings and the literature to clarify the study's inducted constructs by searching for unknown insights that were not previously explored (Karmowska et al., 2017; Engel et al., 2017).

Inducted constructs were introduced to re-analyse the data using three-level analysis (Engel et al., 2017; Matthews, Chalmers and Fraser, 2018): first-order and second-order themes and final aggregation of the themes to demonstrate core categories (Harding, 2013). This flexible approach, combined with a consistent reference to the entrepreneurial farmers' reflections and voices, assisted in identifying new common themes and insights emerging from the data (Reypens, Bacq and Mianov, 2021). Using The conceptual model provided in Figure 3.1 and particularly, Mamabolo and Myres's (2020) entrepreneurial process framework, a typical everyday entrepreneurship process for the sub-Saharan African entrepreneurial farmer is suggested as follows:

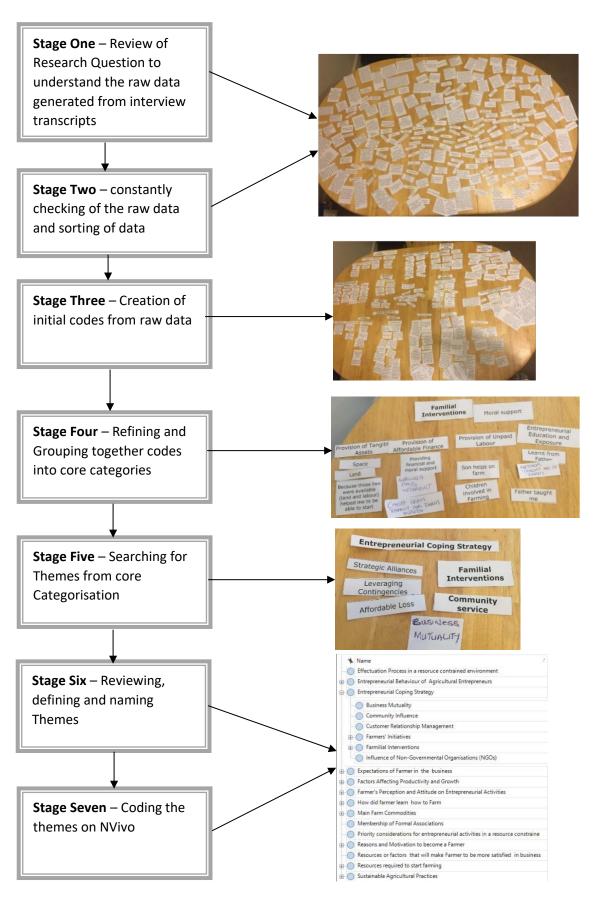
- Opportunity Identification the decision-making process and motivation
 of the farmer to either start a new farm business, expand the existing farm
 or continue the family farm business;
- Opportunity Evaluation Consideration is made on the farm's profitability, impact on family and the wider community, and market for the farm produce. The planning and organisation at this stage are simple, done mostly by the farmer or with the help of close family;
- Opportunity Exploitation The commitment and determination to the farm.
 After evaluating the available resources required to start the farm business, the farmer moves to secure affordable finance, tools, farm inputs and additional manpower. Due to the resource-constrained context in sub-Saharan Africa, the family unit and community provide the locally bounded resources for the farmer to start the business;
- New Business At this early stage, the focus is on survival. The viability of the farm in the short term is assessed. Consideration is made on equipment and other resources based on early market demands and insight.

• Established Business – Beyond survival, the farm enterprise grows and matures, requiring more managerial skills. The long-term viability of the farm is assessed at this phase. Consideration for expansion or diversification of the farm is made based on market demands and the availability of critical resources. Additional resources such as affordable finance or equipment may be sourced based on market opportunities and demands and the personal circumstances of the farmer. When the farm business reaches maturity, and the farmer cannot expand due to limited resources (land, finance, equipment) or the farmer not having the required skills or vision to grow the farm, the farm business could start declining. It may eventually have to pass to another family member or be sold.

The above-outlined process is not always sequential or systematically followed by all farmers. Movement from one phase to the other is reliant on the farmers' entrepreneurial skills (Dias et al., 2019), availability of affordable finance (Ukanwa et al., 2018), support from economic and political institutions (Autio and Fu, 2015), and access to other critical resources required in business from the farmers' support systems, culture and human capital (Rashid and Ratten, 2021).

Figure 4.2 highlights the analytical process used in categorising the data on how the entrepreneurial farmers navigated their everyday entrepreneurial context to start, survive and thrive in business. The code sheet is provided in Annex A.

Figure 4.2: Data Analysis – Data Categorisation Process



The "NVivo" Software for qualitative analysis aided the analytical and thematic coding, sorting, and structuring of the interview transcripts (Magalhaes and Abouzeid, 2018).

4.9 Ethical Consideration

Ethical considerations cannot be overlooked, especially when dealing with people and their sources of income. The protection of participants' privacy is paramount to the integrity of the research process (Bryman and Bell, 2015). Ethical issues are extensive and occur at various stages of the research process. They are crucial to the "success or failure of any high-quality research involving humans", particularly in qualitative research (Saunders, Lewis and Thornhill 2019, p 44).

Confidentiality was the main ethical issue considered in this study. The researcher sought explicit consent from the participants before the interviews were conducted in line with Robert Gordon University's (RGU) ethical guidance and the provisions of the UK GDPR and Data Protection Act 2018. A Participant Information Sheet was produced to ensure that there is no privacy invasion, deception, or any harm to participants during data collection, storing of data, processing and analysis of the data, and reporting of research findings (See Appendix B). The participant information sheet set the rationale behind the research and sought the explicit consent of the research participants to participate in the study.

All research participants signed the Participant Information Sheet to elicit maximum participation from the entrepreneurial farmers. Thirty-one interviews were conducted either at the farm location or home of the farmer in and around Jos Plateau, Nigeria. The researcher and research participants mutually agreed on the interview venue and time. The participants were all given adequate notice before each interview session to read the Participants Information Sheet, understand the background and purpose of the study, what the study will involve, and the strict confidentiality condition that safeguards their privacy. The data collected (recorded interview files and transcribed scripts) are securely stored on RGU servers. The electronic data is stored on RGU secured servers with a backup copy on an encrypted USB memory drive.

The written results from the interview sessions displayed the pseudonyms of individual research participants to protect their privacy. The research participants' consent was sought to ensure that their business contact data was stored with the researcher. Consent will be required from the research participants to facilitate a forum that brings the research participants and government officials together to dialogue and find solutions based on the research findings as one of the study's outcomes.

Qualitative research relies heavily on the researcher as the primary research instrument in all stages of the study, from designing, conducting, and reporting the research data (Sanjari et al., 2014; Johnson, Adkins and Chauvin, 2020). Research rigour was applied throughout the study to ensure that socially or culturally desirable bias – the presentation of reality perceived as socially or culturally acceptable, is minimised in the research design, method and the analysis of the research data (Bergen and Labonté, 2020). A review of scholarly contributions on the research subjects informed the development of a conceptual model (see Figure 3.1) underpinning the collection of rich data from semi-structured interviews. Core questions emanating from the literature provided a structure meaning the data collection could not deviate from the informed objectives of the work, thus reducing researcher bias.

Thematic analysis was applied (see Figure 4.2) to provide the structure and reflexivity to analyse the textual data to address the research question (Mackieson, Shlonsky and Connolly, 2018). The application of 'standards of rigour and adherence to systematic processes' in the study ensures that the research conclusions are clear, public, reproducible, and open to critique (Johnson, Adkins and Chauvin, 2020, p145). Careful consideration was taken to minimise professional self-interest in publishing the research findings (Bryman and Bell, 2015; Harding, 2013). Finally, the study was guided by the principles of ethical integrity (approach and attitude of the researcher), data confidentiality (the use of/access to the research data), and data anonymity (publication of research findings) to minimise the potential impact of the researcher on the research participants and vice versa.

4.10 Chapter Summary

This chapter outlined the context of this study and the methodological process followed during the research. The characteristics of the research participants were provided. The philosophical assumption predicting the research design and strategy was established. The research question, aims and objectives dictated the interpretive philosophical lens that underpins the inductive qualitative approach and methods used in the study.

The interview instrument was used to collect the primary data of the study. The data collected was analysed using three levels of analysis: case by case, crosscase, and thematic analysis. Confidentiality was the main ethical issue considered in this study, along with the principles of data integrity and data anonymity.

The research findings and analysis are presented in Chapters Five and Six.

CHAPTER FIVE: RESEARCH FINDINGS - CONTEXT OF EVERYDAY ENTREPRENEURIAL ACTIVITIES IN A RESOURCE CONSTRAINED FARMING ENVIRONMENT IN NIGERIA

5.1 Introduction

This chapter discusses the analysis of the data collected through the interview instrument of data collection and observes the farmers' reactions during the interview sessions. A thematic analysis method was employed to analyse the resource-constrained farmers' everyday entrepreneurial activities' viewpoints, perspectives, and experiences. This chapter focuses on how resource-constrained entrepreneurs perceive the context they operate within and how the various elements of this context impact the decision-making logic they employ in their everyday entrepreneurial activities. Section 5.2 focuses on the characteristics of the farmers and their expectations. Section 5.3 highlights the farmers' practices and the farming methods that they use to reduce the impact of the resourceconstrained environment on their everyday entrepreneurial activities. Section 5.4 considers some of the cultural norms within the local community, including the farmers' perceptions of the government's attitude towards farming. This section further examines the management of key stakeholders within the farming community. Section 5.5 focuses on the farmers' reflections on their everyday entrepreneurial activities and presents the role of the local community in their farming operations. The importance of farming as a viable profession is also presented in this section. Section 5.6 explores the relevance of the formal membership of a farming association to the farmer. Section 5.7 concludes with a summary of the chapter.

Where appropriate, the resource-constrained farmers' viewpoints and experiences are tabulated to show their varying viewpoints on specific issues (see Table 5.2 – Expectations of the farmers). The representative quotes of the research participants are used to illustrate their viewpoints and experiences. Pseudonyms are employed to represent each research participant to maintain their anonymity and the research's integrity.

An overview of the demographics of the research participants is presented in Table 5.1 to understand the characteristics of the research participants who were all

willing to participate in the face-to-face interview either at their farms during a farming operation, in the farmhouse or in their residential houses where the house is located close to the farm.

5.1.1 Overview of the Research Participants

This section provides an overview of the farmers that participated in data collection. Thirty-one (31) in-depth interviews were conducted from July to September 2018. The demographics of the research participants are presented in Table 5.1 below. The research participants are farmers based in Jos Plateau State, Nigeria.

European and North American Christian missionaries established primary and secondary schools in Jos during the period of British rule in Nigeria (1900-1960). Christian converts were encouraged to send their children to the mission schools, a strategy of Christian evangelisation and British colonial policies in Northern Nigeria (Abdullahi, 2019). Jos became the centre of Christian missionary activities for Northern Nigeria and the headquarters of several West African Christian missionary societies (Krause, 2011). The high calibre of educated farmers indicates the importance of formal education in the predominantly Christian communities in Jos. Although not literate, the parents of the majority of the older farmers would have considered Western education as an equally important component of the training and exposure the children receive while growing up in a farming community. Typically, children go to school and engage in a farming activity before having their dinner and sleep on return from school. A minority of the farmers further honed their farming skills through continuous involvement in farming activities during their secondary school education and, in some cases, to support the payment of their school fees.

Table 5.1: Overview of Research Participants

Gender	Male (23)	Female (8)	
Age	28-40 (9)	41-50 (6)	51-70 (16)
Education	Primary (2)	College/Diploma (3)	University (26)
Route to Farming	Family (18)	Passion/interest (7)	Others (6)
Years of Farming	5-10 (6)	11-20 (4)	21-70 (21)
experience			
No. of employees	1-5(21)	6-10 (8)	11-20 (2)
(workers)			

Source: Author generated from research data

Traditionally in rural Nigeria, the men expect to farm, hunt and provide food for the family while the women look after the children at home (Forde, 1937). However, due to exposure to education, trade, and the encouragement of many active female entrepreneurs, the communities' evolution encourages more women to participate in commercialised agricultural practices (Ojinta and Halkias, 2019). The girl child receives similar training in farming as the male child from an early age. This can be illustrated through Research Participant 08, who includes his daughters in the farming operations instead of only his sons:

"All my daughters have all been, and worked on the farm, and they are very, very encouraged."

RP08

While Table 5.1 shows mainly male participants compared to their female counterparts, the wives and daughters of the farmers are all involved in the farming business. This demonstrates a changing dynamic in the traditional farming sector with the recognition that the contribution of girls/women in commercial farming in the local community is appreciated and valued.

All research participants are job creators, employing at least one permanent worker with several ad-hoc workers added to the workforce during various farming season stages, particularly during harvest. Table 5.1 presents that all study participants have five years' farming experience at a minimum, and most were exposed to farming from an early age. Such early influence of active participation in the family farming operations equips the entrepreneur to effectively navigate

the challenging resource-constrained environments to determine the direction of the enterprise, especially at the early stage of the business.

Furthermore, Table 5.1 presents the age range of the research participants to be between 28 and 70 years of age, indicating that age is not a barrier to agricultural entrepreneurial activities. The entrepreneurial process for the majority of the research participants started when they were very young. However, opportunity identification and maximisation happened in the later stages of their lives. The majority of the research participants adopted farming as a viable profession following retirement from the civil service, in some cases to support the wider household needs.

The entrepreneurial process of the research participants is shaped by multiple everyday entrepreneurial contexts, as outlined in Figure 5.1. The various everyday entrepreneurial contexts of the farmers are presented in the rest of this chapter.

Expectation of the Cultural Issues (CI) Farmer (EF) Cultural norms · Food provision for family & nation EF CI Language barrier · Job satisfaction - joy of life as a farmer Perception of Government attitude · Profit making to support family towards farming Stakeholder Management · Job creation in local economy Growth and expansion · Support charitable causes Everyday Farmers' Reflections (FR) Entrepreneurial on their farming activities FR Food production **Operational Trends (OT) Activities** Farming as a viable profession OT Partnership, networking and knowledge · Maximising farming conditions Context transfer – enabler of farm growth · Variations in farm management · Environmental awareness Relevance of Farming · Sustainable farming practices Associations (RFA) RFA Access to loans & grants Sharing of information & ideas Strategy and capacity for growth Pressure group to government Price regulation and controlling influence of middlemen · Disadvantages of membership.

Figure 5.1: Everyday Entrepreneurial Activity Contexts.

Source: Author generated from research data

5.2 Background and Expectations of the Farmers in their Business

The decision to engage in an entrepreneurial activity is not always a choice of the entrepreneur but a response to the many exigencies that exists within the family unit and the wider community. The local environment that the entrepreneurs

operate in is shaped by the interrelated relationships between the farmers and their local community. Hence, the expectation of growing the business and making a profit is therefore juxtaposed with the many competing needs of the community for food provision and the creation of jobs in the local community. These critical and competing social elements inform the everyday decision-making process of the entrepreneur to find the right combinations of available resources to build a sustainable business venture and actively provide for the social needs of the community.

Table 5.2 below shows the expectations of the farmers in their businesses. Each expectation will then be presented in turn.

Table 5.2: Expectations of the Farmer

Expectations of the Farmer in the Business	Expectations met	Expectations not met
Food Provision	"To at least feed myself and my family." (RP11)	"Well, my expectation was that I should be able to get something [] that it could augment my feeding needs for at least half of the year [], but I do not think it has been met (laughs)." (RP26)
Job Satisfaction – the joy of life as a Farmer	"I enjoy my life as a farmer [] with plenty of reasons. It gives me fulfilment really to see what I plant to grow into things that I can harvest. I just notice every single detail of all the beauty that is there in farming." (RP27)	"Satisfied in terms of my vision of becoming a farmer, I will say yes. Satisfied at my level of production, I will say not quite." (RP02)
Profit-making to support Family	"I expected to make a profit [], I am making enough to meet my family needs." (RP10)	"Well, my expectation actually was to see how I will be able to raise additional income, my income level from farming, but so far, I will say that has not been met yet." (RP17)
Job Creation	"I am personally satisfied because I can say that not less than 20 people are benefiting from my enterprise annually. So, creating jobs for people, yes" (RP03)	None

Expectations of the Farmer in the Business	Expectations met	Expectations not met
Growth and Expansion	"My expectation is to grow in the business." (RP02)	"My desire had always been to be the biggest rabbit farmer in Jos Plateau (laughs). That dream has not been fulfilled yet, partly due to lack of capital and the availability of resources to expand the farm" [] The lack of available market for it [rabbits] has also been a challenge." (RP01)
Support Charitable Causes	"When it [the farm] was booming and doing good, I used to help the less privileged, orphanage." (RP22)	None

Source: Author generated

5.2.1 Food Provision for the family

The minimum expectation of farmers is to provide food for their families. Although the majority of the research participants did not mention this expectation during the interview, it was seen that, either at the beginning of or the end of the interview sessions, some farmers proudly presented some produce from the farm – see Figure 5.2 below.

Figure 5.2: Harvested Catfish



Source: Author's collection (Fieldwork photograph)

The produce from the farm was either prepared into a meal or a drink, and an array of fresh fruits or vegetables was shown to the researcher. It is equally important to note that the farmers take pride in what they produce on their farms. Carefully selected prime farm produce are given to visitors to the farm as was this researcher's experience during data collection. This gesture is also extended to seasonal workers, as claimed by Research Participant 03:

"I provide a good portion of what they [farm workers] eat. I provide some feeding for them and accommodation on the farm [...] when they leave. I give them some farm produces and other stipends which they will use to sustain their own families."

RP03

Also, farming is seen to provide a wide variety of good food for the family, as stated by Research Participant 18:

"You do not buy food from the market because you have the food you need. Even the source of protein is readily available since you mix it with animal husbandry."

RP18

The research participants are proud of the quality of their farm produce that they sell to both local and regional markets. The farmers are also proud of the free farm produce they regularly provide to their workers to augment the workers' household food supply. However, the majority of the research participants suggested that the joy they get in farming and the money from it to support their families are their main drivers.

5.2.2 Job Satisfaction – The joy of life as a farmer

The majority of the research participants did not mention 'food provision' as one of their expectations. However, the majority of the research participants used many emotive words to describe their satisfaction in their everyday farming activities. Words like: 'joy,' 'love,' 'happiness,' and 'pleasure' were uttered with a

smile, burst of laughter, or a pleasant countenance. Observing the farmers as they talk about their everyday activities reveals a sense of inner satisfaction and joy in what they do beyond the income that the entrepreneurial activity generates, as exemplified by Research Participant 07.

"Apart from the income, I also enjoy going to the farm when the farm is green. I enjoy moving around to inspect the farm. I think it has some therapeutic purpose [laughs]."

RP07

Outside of the research participants' community, external observers are drawn to the drudgery of manual farming methods devoid of appropriate mechanised farming equipment. However, the farmers view the physical side of farming as an exercise considered beneficial to mental and physical health:

"Oh, I love it! Without farming, I probably would have been dead by now. I tell you the truth, and it drives me. I leave my house at 7 am. I drive through, and I eat the produce of my farm. I eat a lot of vegetables and fruits. My numbers are down in terms of blood pressure etc., my numbers are good, so we are doing very well."

RP06

"Wow, when I go to the farm, it is like I do not want to come back home [laughs]! It makes me exercise myself. Because in most cases, when we visit the farm, we walk around the perimeter of the farm, it really keeps us agile, and we feel a part of the environment [nature].

RP08

Given the extraordinary demonstration of joy by the research participants when describing their everyday entrepreneurial activities, it is not a surprise to see poultry farmers exhibiting a close relationship with their birds. Some poultry farmers associate the behaviour that the birds exhibit with that of humans. Research participant 25 suggests that the birds are given names to identify them from the rest of the group based on their behaviour:

"We are beginning to relate the behaviour of the birds with that of humans. [...] some birds could be naughty and all the rest of it. So, we will call them with certain names."

RP25

The research participants' enthusiasm further translates into their absolute joy when observing their farming activities' progress. This is evident in the daily signs of growth that they see in their plants or the joy of raising their animals from mere infants to parenting their own young. This is particularly fulfilling for poultry farmers who work tirelessly for months but look forward to the first day the poultry birds start laying eggs. Figure 5.3 shows a typical poultry farm where the poultry birds are often kept outside (A) or permanently kept inside (B)

Figure 5.3: Poultry farm





Free Range A

Free Range B

Source: Author's collection (Fieldwork photograph)

Research Participant 16 highlights the thrill that many farmers felt in the day-today aspects of the job:

"I find lots of pleasure that I am able to bring day old chicks, and I do the brooding myself, and I watch them grow after like 17 weeks, they start producing eggs. The day we saw the first egg is one of the happiest days of my life."

RP16

Daily farming activities pose numerous challenges to the farmers, especially when resources are scarce. As revealed in Table 5.2, not all research participants' expectations were met. The minority of the research participants mentioned their disappointment in putting in a substantial investment of physical and scarce financial resources that resulted in a poor harvest at the end of the farming season. In addition, the research participants did not envisage such an outcome based on their projections and the income they expected to generate from the farm from the advice they received from more experienced farmers, as expressed by research participant 04:

"There are times when you have exaggerated expectations. People say there is a lot of money in farming, but if you do a little bit of due diligence before you go into it, you can moderate your expectations. It is not as if farming does not have challenges. It has challenges."

RP04

Notwithstanding the daily challenges that the farmers experience in their farming business, there is always a joy when the farm is successful and generates sizable income for the farmers. The income generally supports the family's needs. As expressed by the majority of research participants, in some cases, they even receive more income from their farming business than the salaries they get from their other careers outside of farming.

5.2.3 Profit-making to support Family

The general expectation for starting a business venture is to make some profit. This is also true for the majority of the research participants who expect the farming business to generate profit mainly to support their families in educating the children or meeting some household financial needs. The importance of the farm making a profit is particularly salient for those farmers who are civil servants with a salary that scarcely can support the family aspirations for quality education for the children and a comfortable residential house to live in. Such an expectation was aptly captured by research participant 05:

"The expectation was for me to farm and to make a profit[...] it is from the farming business that I was able to educate my children in school. I was able to build a house."

RP05

This expectation of making a profit was not just at an individual level. Reference to profit-making for the majority of the research participants was presented in relation to the family's decision to augment their family income. Even for retired civil servants, the growing needs of the extended family were presented. With little or no savings and a poor pension, a return to active farming is the only viable option that the majority of the research participants suggested they have to do to supplement the family income:

"I had left the public service; I felt I could not just stay like that, my husband is also a retired public servant, so we needed some income to sustain the family."

RP29

However, for fewer research participants, making a profit from their farming business has not been fully met. This is partly due to the lack of affordable funds to go into large scale production, as highlighted by research participant 30:

"When I went into farming, I wanted to make immediate cash. I wanted to make money, which I did, but not as expected. I wanted more. And because

I was just an everyday individual, with little cash going into farming, so I was not making as much as I would have made if I were doing large-scale farming."

RP30

While in some cases, the expectations of the research participants have not been fully met due to some factors affecting their growth and productivity, the provision of food for the family, and the joy they get from their farming activities, provide some level of satisfaction to the farmers. The factors affecting the growth and productivity of the farms will be further presented in Chapter Seven.

The creation of opportunities for others in the local community to make a living is presented below.

5.2.4 Job Creation

There is a general expectation in Nigeria for the Federal Government to create job opportunities to meet the rapidly increasing population due to the substantial revenues that the country generates from the sale of oil and gas and other mineral resources (Sertoğlu, Ugural and Bekun, 2017). However, even with the government's best intentions, the jobs are not enough to cater to the many jobless youths who have a level of education but cannot secure a job. The research participants expect that they can create job openings to support their entrepreneurial activities and provide a source of livelihood to members of their respective communities through their farming business.

"Create job opportunities for people around."

RP22

As shown in Table 5.1, all research participants employ a minimum of one permanent worker outside their immediate family unit. Several ad-hoc workers are added to the workforce during key stages of the farming season, particularly at harvest.

Being a role model in the local community is closely associated with creating job opportunities. The majority of the research participants take much pride in the

ideas they bring to the community and their ability to provide free consultancy services, including mentoring other farmers to create job opportunities in the local community:

"Many people, many farmers, are in consultation with us. We have many people who are now doing it [greenhouse farming]. That makes us happy at least instead of the youth walking with their papers [degree certificates], at least now they are doing something and even creating jobs for others."

RP23

During the interview session with Research Participant 23, the farmer and his wife had six different farmers visit the farm within 3 hours. The interview was interrupted four times, and in the other two cases, the farmer or the wife attended to their visitors. They can be overheard, freely providing commercially privileged information to the visitors ranging from the best seedlings to use, appropriate chemicals to spray on the farm, how to monitor the greenhouses' temperature, and when to apply fertiliser. They seem to have a very close and personal relationship with the other farmers, even offering to visit other farmers' farms to inspect and provide further advice on the issues they are advising on. It is pleasantly remarkable to observe the level of interactions and the sharing of ideas that goes on, on a farm.

The research participants viewed creating jobs in the local community as an integral part of their social responsibility. This could be in the area of meeting a particular social need, including the prevention of crime on the streets:

"When I employ one person on my farm, it makes the street safer that is one less person who will carry a gun as well. It makes my society safer and then creates financial stability for the person I am employing, which, by extension, society."

RP27

Being a role model and creating jobs in the local community by some young research participants plays an important role in crime reduction on the streets.

The government has a responsibility to ensure law and order in the community through the presence of the police and other law enforcement agencies. However, over time, due to the inefficiency or absence of strong law enforcement in local communities, vigilante groups are organised by residents of the local community to protect farms and the community at large.

5.2.5 Supporting Charitable Causes

There is a strong sense of social responsibility amongst some of the research participants partly due to the communal way of living they are accustomed to or the varying socioeconomic needs they witness in the farming community. The majority of the research participants give either money or farm produce to support their religious beliefs as an expression of gratitude to God for the farming business's provision and sustenance. On the other hand, other research participants set aside a portion of their income to give to the less privileged in society, orphanages, and other charities. This is usually done out of empathy or aligned with their religious principles:

"My expectation when I began to farm was that I was going to raise resources to be able to support Christian Missions [...] from the profit I make, I will be able to help others through scholarship provisions, through establishing possibly more schools and for funding the missions' endeavours I believe in."

RP03

"[...] but with time, working, and getting other means of remuneration, my expectations changed. I saw that people suffered a lot around me, and I wanted to solve their hunger problems. So, it was not just about the money now. I wanted to solve a huge problem, which was hunger, and I wanted to provide food security."

RP30

One of the research participants decided as part of their social responsibility to go into maize and rice production mainly to meet the social needs of their community:

"What we do for now is for the maize and rice that we farm, we share to the neighbours, to the needy (laughs)."

RP23

It was always fascinating at the end of some of the interviews; when the recording is turned off, the research participants speak of some of the charitable causes they support. There are remarkable stories of farmers loaning out food or monies to neighbours who need help and refusing to collect what they had given out when returned. Others have anonymously paid for medical bills and school fees to answer prayer requests from their workers or other community members. They do not want their charitable contributions to the community to be captured because of their religious beliefs of doing things unto God and not to receive recognition and appreciation from people.

5.2.6 Growth and Expansion

When considering the expectation for business growth, only a few farmers identified with this notion. This may be because farm growth is inherent in any farming business. The farmers probably did not think it was important to mention farm growth as an expectation. On the other hand, they were enthused to mention the joy or the satisfaction they get in their everyday entrepreneurial activities. For the few research participants who had expected to grow their farms, the majority just expected growth. However, one of the research participants expected to expand his business from crop production into animal husbandry:

"Yea, my expectation was to keep growing, so it will eventually get me into the animal husbandry that I so desire."

RP18

The majority of the research participants saw their expectation for growth not to have been met partly due to some of the factors shown in Chapter Seven.

However, research participant 24 summarises some of the issues impacting growth:

"As a farmer, you always expect a bumper harvest and maybe good market prices. At a certain level, these expectations are not actually attainable."

RP24

Conversely, another research participant suggests that the expectation for growth was superseded as a result of a good harvest and a new method of farming:

"[...] the harvest has superseded my expectation, especially with this new way of farming [greenhouse farming] that I am not used to. I realise that you can actually make a lot from farming. Saying that it has met my expectation will be an understatement. It has exceeded my expectation. It had pushed the limit of what my expectation was when I started."

RP27

There is a huge potential for growth in the Nigerian farming sector. It will require proactive and coordinated efforts from the government to channel the research participants' enthusiasm and energy into sustainable large-scale food production leading to more job opportunities in local communities.

5.3 Operational Trends in Farming

The disparate evolving social context presented in the preceding section demands some flexibility on the entrepreneurs' part in pursuing and managing business opportunities within a resource-constrained and uncertain business environment. Operating under such a context is difficult. It requires much organisational ability to maximise the farming conditions that may require changing established farm methods to make the most of the available means and contingencies to achieve better output from the farm. Additionally, the farmers aim for a more sustainable business that balances the drive for growth and increased productivity with the impact of such an operation on the environment. Looking after the environment is good for the business and the wider community.

5.3.1 Maximising the Farming Conditions – Climate

All research participants identified Jos Plateau's climatic conditions as suitable for their entrepreneurial activities concerning soil, temperature, or rainfall. This is evident with an average temperature of 18 and 22 degrees centigrade, with the coldest weather between December and February mostly caused by the Harmattan winds. The heaviest rainfall is usually recorded during the wet months between July and August. The mean annual rainfall varies from 52 inches to 57 inches. Jos is also the source of some of the main rivers in Northern Nigeria, including the Gongola, Hadejia, Kaduna, and Yobe rivers. The research participants saw these climatic conditions as favourable for all year farming and applicable to crop production and animal husbandry.

"The weather is good, and there is a reasonable quantity of water available [...], the products from Jos, you cannot compare them with anywhere in Nigeria. I think the weather plays a major role."

RP17

"The weather is good for almost everything you do, whether it is crop planting or animal husbandry."

RP13

The research participants attributed the favourable climatic conditions in Jos as an enabler to the growth of the variety of crops in Jos. Vegetables and fruits like grapes, apples, guavas, raspberries and cherries are grown in Jos and seen in some of the farms visited during data collection. Some of these fruits are commonly referred to on the street as "Exotic Fruits" because, in the past, they were mainly imported but are now grown in Jos. Figure 5.4: Exotic Fruits – Guava and Raspberry

Figure 5.4: Exotic Fruits – Guava and Raspberry



Guava Raspberry

Source: Author's collection (Fieldwork photograph)

Poultry farmers claim that Jos' eggs are far superior to other eggs produced in the rest of the country. The climatic conditions are seen to be clement for poultry farming, providing a longer egg shelf life for the eggs produced in Jos as compared to eggs from other parts of Nigeria:

"Jos is a good place for farming [...] if I produce an egg in Jos and somebody produces an egg in Abuja, and we take it to the market, they will prefer the egg from Jos. I think because of the weather or so. They keep telling us that the eggs produced in Jos have a longer shelf life. Poultry goes with the weather."

RP12

Similarly, at the interview session with Research Participant 23, a farmer came from Adamawa State in North-Eastern Nigeria to Jos for advice on greenhouse farming. The favourable climatic conditions and the number of successful greenhouse farmers in Jos make it an attractive hub for other farmers to source information and advice on greenhouse farming. This may also be reflected in the better prices of vegetables and fruits produced in Jos than those grown outside Jos Plateau. The variations in farming methods of the research participants will be presented next.

5.3.2 Variations in Farm Management

Given the social and operational context of the everyday entrepreneurial activities of the research participants, a variety of approaches are needed to maximise the opportunities within the business environment the make the most of the available resources at hand. Similarly, different approaches are required to handle some of the problems that the farmers face in their everyday entrepreneurial activities. Examples are the challenge of disease infestations on poultry farms, poor quality of seeds and the need for good quality chemicals to apply on the farms. The research participants acknowledged the support they receive from other farmers in the community as crucial to their farming operations.

The research participants emphasised the importance of knowledge transfer and good farming methods as critical to disease control and improving productivity on the farm. Equally, continuous improvement and good maintenance culture are important components of their everyday entrepreneurial activities. The interaction among the farmers facilitates sharing information on new and improved seed varieties and approaches to avoiding bird flu and other diseases affecting poultry farming. Equally, the challenge of knowing where to market the farm products is a problem for a minority of the research participants:

"We work very hard, but we do very little to be able to sell what we have [sighs]. We should work hard but work smart. We need to go beyond production and think of the end-users, how we reach them because that is where the profit is not in just sitting and working hard."

RP16

An example of a more progressive and enlightened approach to farming is the increasing trend of farmers seeking practical skills and training mostly from other experienced farmers to improve their farming methods and reduce production costs. Subsequently, the skills and information acquired impact the management of their farms. A majority of the research participants involved in poultry and crop production see poultry farming as a strategy for reducing the cost of fertiliser application on their farm by using the chicken droppings as manure on their crop farms. A minority of the research participants then go into crop production mainly

to generate the feed for their animals. Other research participants go into aquaponics to use the fishpond water once the fish are harvested to water their vegetable farms to reduce the cost of further application of inorganic fertiliser on the farm.

Research Participant 31 suggests that the limitation in the size of the farmland is mitigated by going into irrigation farming in the dry season to raise the production level of the farming business at the end of the year:

"If one [farmer] is having half a hectare in the rainy season, and he is able to farm another crop in the dry season, then he has a hectare of production in a year. That will raise his production level, and it will engage him."

RP31

Ultimately, there is no shortcut to a thriving farming business, as suggested by research participant 24:

"Farming is not magic [repeats], so you must do what you are expected to do so that you get what you are supposed to get. There is no magic in farming."

RP24

The majority of the research participants that mentioned one or more of the different farm management approaches always had a caveat that only a good maintenance culture, hard work, and divine interventions can lead to a successful and sustainable farming business, especially in a resource-constrained and uncertain business environment.

5.3.3 Environmental awareness

Given the many social and operational demands on the farmers to make do with the scarce resources within their local environment to meet the demanding social needs in their communities, it is surprising that they have a great awareness of their individual and collective responsibilities to protect the environment. Due to the many competing demands on the farmers, there may be an expectation that they leverage every accessible resource within the environment to grow and expand their business. On the contrary, the research participants adopt good farming practices to protect the soil surface from erosion by planting trees, creating good drainage, avoiding bush burning at the end of the harvesting season, and the practice of other soil conservation techniques aptly captured by the Research Participant 31:

"If you are ploughing, you make sure that you plough along the grain rather than along that side, even your mechanisation, you should plan which side your tractor will go. If you just do it anyhow, the soil will just get washed, and the environment is damaged, and it is difficult for you to come back to again."

RP31

Poultry farmers are conscientious about their farms' waste and how it affects their neighbours or the neighbouring farms. Where possible, they try to locate the farms at a distance from residential areas, and where this is not possible, they try their best to maintain a good hygiene system on the farm:

"I use a deep litter method of farming, so I always make sure that the litter is always dry because if it is wet, it smells in the environment and becomes a problem to people around. You have to maintain optimum hygiene."

RP12

As pointed out by a minority of the research participants, the government plays a part in protecting the environment. This is in providing a central waste collection point within the farming community or the investigation, removal, and destruction of birds from farms during bird flu outbreaks. The government also assists or subsidises the fumigation of farms after the culling of the birds:

"When we had the disease, the poultry disease [bird flu], we reported, and we had the government officials come here, get rid of the birds, they were properly buried in order not to destroy other farms."

RP08

Awareness and protection of the environment are closely linked to the survival of the farming business. Additionally, the research participants see the recycling and reintegration of the waste from their farms into other farming areas as integral to the protection of the environment. The next section presents an overview of some sustainable farming practices used within the farming community in this area.

5.3.4 Sustainable Farming Practices

The farmers translate their environmental awareness into a desire for sustainable farming practices. Beyond protecting the environment, the research participants integrate some of their waste materials into other farming areas. For example, aquaponics is seen to be a sustainable form of farming where the research participants use the water from the fishpond to irrigate their other crop farms or vegetable gardens:

"I began making the fishpond. From the fishpond, I would use the water to irrigate other crops, which will serve as manure, and it reduces the use of chemical applications of fertiliser on the farm. From what I produce like corn, it is actually part of the ingredients I will use in making my food for the fish."

RP03

The main sustainable practices that the research participants adopt in their farming businesses can be grouped into three: 1) Reusing water from the fish pond for their crop production 2) Applying chicken/turkey droppings on crop farms; 3) Recycling and selling the feeds bags and other waste products to generate additional income. These three approaches to sustainable farming are further captured in Table 5.3.

Table 5.3: Sustainable Farming Practices

Fish Pond Water used for crop production	Chicken/Turkey Droppings as manure for crop production	Recycling and generating additional income
 "Aquaponics a very sustainable form of agriculture where you can use fish, essentially their droppings, inside the water, and the water is pass through vegetable gardens" (RP01) "We have a fish farm; we just started it. The 	There is a kind of symbiotic relationship between the poultry and the greenhouse. What we do is we use the chickens' droppings, the by-product of the poultry farm, to fertiliser the garden for the vegetables" (RP04) "When I ventured into	"Whatever waste is created [from the farm], is stored in good and dry places and disposed of properly, especially the dropping to the farmers as manure. The sawdust and droppings are sometimes sold to crop farmers." (RP10)
water has a lot of nitrogen that is used for crop farming." (RP16) • "Because we have fishpond, so we empty the water from the pond into the banana plantation." (RP26)	turkey production, I used the droppings to apply as fertiliser for maize production or for some other crops that I needed fertiliser for." (RP07) "I am into crop production, and most of the waste that I get from the poultry farm goes into my crop production." (RP19)	 "[] we realised over 600 000 Naira [£1000] just from the sale of the litter from the birds. The bags that we buy the feeds, we sell them too." (RP25) "We try to see what we can recycle, whatever droppings from the rabbit we use it, or we sell it to other farmers so that they can use it on their farms." (RP15)

Source: Author generated

The citing of fishponds closer to the residential house of the farmer was observed in some of the farms visited during data collection – see Figure 5.5. This provides a source of protein to the farmer and family, but when farmed on a large scale, it offers a rich source of revenue to the farmer. Strategically, the water in the fishpond is used to water the vegetable gardens. The nutrients from the fish and the water from the fishpond subsidise the cost of fertiliser to be applied to the vegetables and the sourcing of water in the dry seasons, respectively. As highlighted in Table 5.3, the farmers use fishpond water to enrich their vegetable gardens. However, Research Participant 03 uses the fish pond water on his maize and sweetcorn farms. The corn harvested is used to make the food for the fish and roughages for other livestock.

Figure 5.5: Siting of fish pond closer to Farmer's residential house



Source: Author's collection (Fieldwork photograph)

When chicken or turkey droppings are kept dry and preserved appropriately, they become a good source of manure to apply on crop farms – see Figure 5.6. This practice benefits farmers who use chicken droppings as a substitute for inorganic fertiliser on their crop farms.

Figure 5.6: Processing and storage of poultry waste for crop production



Source: Author's collection (Fieldwork photograph)

Poultry farmers generate additional income by selling the droppings and other wastes from the farm to crop farmers to use on their farms. Making additional money from the sale of farm waste is good for the environment and the farmers. The waste coming out of poultry farms is highly sought after by other farmers:

"Well, like the chicken droppings, it is a raw material for other farmers, so as we produce it, some farmers are waiting to have it for their arable farming, so it is not being dumped as a waste, it is highly sought for."

RP09

The recycling of the feed bags ensures that most of the materials used in the poultry farming become farm inputs for other farming operations. The feed bags are sold to potato or maize farmers who use them to store their farm produce and eventually sell them in the market.

Waste disposal is not always done responsibly. As suggested by research participant 28, it is easier to throw the waste or burn them than to recycle or reintegrate the waste into other farming aspects. The approach to recycling farm waste or not is dependent on whether the farmer is responsible or not:

"[...] So, you have to find a way of disposing of your waste by yourself. If you are a responsible farmer, you will dispose of it responsibly, but if you are not, some people just burn or take it and dump it somewhere."

RP28

Although the majority of the research participants find a way of disposing of the waste from their farms, waste management is generally seen as a problem for the farmers. The research participants look up to the government to provide central waste management or recycling points that they can use to dispose of their farm wastes. When this is not available, the farmers struggle to dispose of their farm waste. This is prevalent where there is no immediate farmland behind the farm or where the farm is located not too close to a residential area. The result is generally bad for the environment as waste materials are thrown over the farms' walls or fences, polluting the environment.

5.4 Cultural Issues

Culture plays a crucial role in determining business practices by influencing the decision-making process of the entrepreneur, crystallising the accepted method of farming in a particular community, or the provision of resources to sustain the farming business. The cultural context that the research participants operate in places a high expectation on the government to provide the enabling resources for the farming enterprises to thrive. Where these resources are not available or easily accessible, it leads to a disconnect between the farmers and the government. Such tension can easily spiral into a poor and tense relationship between the farming community and government officials. The farming community's multi-ethnic dimensions also impact the relationship between the indigenes of a particular

farming community and other settlers in the community. These elements will be presented in turn.

5.4.1 Cultural Norms

Historically, there is an expectation within the Nigerian rural farming community for all households to farm and produce most of what they will consume. The expectation to continuously provide food for the households adds to the desire to have male children who were deemed to be stronger to cultivate the land and remain within the family unit, even when married, to sustain the extended family and farm. Farming to sustain the family unit usually starts at a subsistent level with the farming of grains and fresh vegetables. To provide the protein content in the household diet, some research participants then venture into keeping birds, goats, and sheep within the family house. Additionally, some research participants engage in farming groundnuts to generate the oil from the nuts to use as cooking oil. In some households, no food item is bought in the market as the household food requirement is provided through the family farming operations. Farming solely to feed the family is not a sustainable approach, as claimed by Research Participant 17:

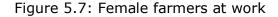
"Everything you farm, it goes into the pot. There is no value chain; agriculture cannot keep up like that [showing so much passion and anger] cannot go on like that, and we need to create a value chain."

RP17

Some of the research participants are now engaged in extensive large-scale production to generate sufficient income to provide better education to their children and, by extension, better career prospects in the future. They strive so hard to have the finances to educate their children in good secondary and tertiary schools outside Jos Plateau or even outside Nigeria.

Although still prevalent in some sections of the farming community, the cultural expectation of desiring more male children to help with the farming activities is not as widespread as it used to be 40 – 50 years ago. This is partly due to the change in attitude towards the female child, who is seen as equally strong and able to participate in the farming activities as the male child (Ojinta and Halkias,

2019). Figure 5.7 shows women actively engaged in one of the farming operations – removing weeds.





Source: Author's collection (Fieldwork photograph)

Equally, the value placed on western education has seen an increase in rural to urban migration, where farmers send their children to attend schools outside the farming community in search of various career choices for their children. This change in attitude and behaviour has had a detrimental impact on some youths within the community who cannot find the jobs they require in the cities after acquiring good educational qualifications. On their return to their local farming community, some of the youths are reluctant to re-engage back into farming. A Majority of the research participants are not happy about this development, as expressed by Research Participant 03:

"Some of the things we see here are very painful when we see young men with files looking for jobs. If you walk down opposite the farm, it is the Chinese that are here. You mean a man from China is stupid enough to leave China to come to Jos to farm. They are producing cabbage and fruits, and they take them to Lagos, where there are many Chinese people. All the Chinese food cooked in Chinese hotels; the produces are from Jos."

RP03

The older research participants would like to see the younger men and women in the community having a different mindset when it comes to farming. The younger population should see farming as not just a part-time engagement but a viable business venture. When the youth and society see the dignity in farming, it can gainfully employ and engage the many jobless youths walking on the streets looking for jobs. Additionally, attitudes need to shift from seeing farming as an occupation more suited for people residing in rural areas. Urban dwellers, too, can engage in farming and make a living out of it:

"Farming should not be for the rural people in the villages like we used to think before; in the town, you can farm too."

RP12

When the farming opportunities in the rural and urban areas are exploited to the fullest, active engagement in commercial farming, in particular, can generate good income for many households and the sustainability of the local economy.

Religion plays a pivotal role in the attitudes and behaviours of the farmers in their everyday entrepreneurial activities. Success on the farm is attributed to the blessings received from God, and any difficulty or failure is channelled to God through prayers for divine interventions:

"God sees the heart, so He will help you on how to achieve the goal or the dream that you have. So, do not focus on the negative; focus on the positive. Always have a positive mind towards things, and it will work out by the grace of God."

RP22

Reliance on a Deity may not be at the forefront of entrepreneurs in other parts of the world, but for our research participants, committing their plans, strategy, and prospects to God gives them peace and confidence to continue to engage in their everyday entrepreneurial activities despite the drudgery associated with the farming business:

"Any entrepreneur, a business person, will tell you that it takes the grace of God to survive in business."

RP09

Such reliance on God for divine provision and sustenance of the community is integral to the relationship between the research participants and other members of the wider community. There is a lot of sharing, doing things together, and caring for and providing for the needs of the less privileged in the community as commanded in the canons of their respective faiths. While this is the case, a minority of the research participants claimed that they could not fully integrate with other farmers because they were not indigenous members of the Jos community. This is presented in the following section.

5.4.2 Language Barrier

About 40 ethnic groups in Plateau State share similar cultural and traditional ways of doing things. Jos, the capital of Plateau State, has all these ethnic groups resident in the city. However, the predominant ethnic group in Jos is the Birom people, who control most of the land in and around Jos (Krause, 2011). Access to land for expansion is sometimes impacted by where the farmer originates from. The Birom community tends to protect their ancestral land from outsiders. It sometimes takes intervention from community leaders to sanction the sale of large hectares of the land to people outside of the Birom community. Such consultations and interventions of the community leaders come at a cost to the farmer and could be a deterrent to purchasing the land for growth and expansion.

Membership in farming associations is sometimes a reflection of the ethnic or tribal group of the association's dominant leaders. Some research participants struggle to join a farming association in their local community because they are not indigenes of the community:

"There are a few farming associations, but I do not belong to any. Most of them are quite tribal in nature. That is one of the biggest factors. I am not from Jos south, and I do not understand the dialect, and most of the associations are organised by the local community".

RP27

Decisions taken that should benefit the entire community are sometimes shaped by the selfish ethnic interest interests of the community. Ethnic distrust stifles the spirit of cooperation and togetherness that the community expects and demands of the farmers. It creates a tense working environment for the farmers to operate in, especially if they are not indigenous to the community. For these ethnic and tribal reasons, some research participants call for more unity and interaction among the farmers:

"[...] the farmers should also take advantage to try and interact more meaningfully to reduce all these ethnic and religious tensions; it will augur well for the advancement of the agricultural sector."

RP07

The majority of the research participants accuse the government of fostering the ethnic tensions by the governments' neglect of the agricultural sector and awarding loans, contracts, and other farm subsidies to members of their ethnic or friendship groups. Government attitudes towards farming are presented in the following section.

5.4.3 Perception of Government attitude towards farming

There is a general perception among the research participants of the government's role as the sole provider of an enabling business environment for the farmers to operate in. The government is expected to provide the social amenities and infrastructural facilities that support large-scale production, preservation, and

processing facilities for the excess farm produce or make necessary arrangements to mobilize the excesses out of the farmers' hands. Where these are not available in the community, the farmers resort to the use of strongly negative words to describe the attitude of the government to farming:

"They [Government] are the people killing agriculture, I must tell you. The attitude of a lot of government officials is apart from the corruption that is prevalent in society; many of them are lazy."

RP06

"Do you want me to be honest or political? [laughs]. To be honest, the government makes a lot of noise around it [agriculture], but in terms of pursuing it to the grassroots, you just discover that it is a good gimmick."

RP03

The absence of governmental intervention in the agricultural sector pushes the farmers to provide their water, electricity, roads, and drainage. The measures they take directly impact the cost of production and, subsequently, the higher cost of farm produces sold in the market. There is also the problem of lack of market regulation affecting the prices of the farm produces. The lack of adequate market regulation further impacts the quality of the farm produces entering the food chain, right from the farm to the dinner plate.

Nevertheless, the majority of the research participants identified some of the policies, programmes, and initiatives of the respective state or federal governments as beneficial to the progress they made in their farming business. The 'You Win' scheme introduced by President Jonathan Goodluck Administration, the 'Back to Rice Farming' programme of President Buhari and the 'Agricultural Services Training Centre (ASTC)' of Governor Gyang were among the few initiatives that had a positive impact on the farming community:

"During the last administration on the Plateau when we had ASTC, they used to organise seminars and workshops to train farmers on how to carry out the things you need to do on your farm to make it better in 3 weeks or one-month regularity."

RP12

There are laudable programmes and policies that almost every new government introduces at the start of their administration. However, the lack of continuity of some of the good agricultural initiatives by successive governments affects any investment plans that the farmers may have. This lack of clarity and uncertainty around the implementation of the policies is not good for morale and confidence in the government's role in the agricultural sector. The management of key stakeholders in the community will be presented next.

5.4.4 Stakeholder Management

Stakeholder management is critical to the success of the farming business. The farmers have to find the right balance between meeting their key stakeholders' expectations and running a successful profit-making business. Customarily, farmers are expected to give out some of their farms produce to visitors to the farm out of the communal spirit that exists in the local area. In some cases, where a farmer refuses to honour such tradition, especially when visited by elderly community members, such a farmer may be described as an irresponsible farmer bringing a bad reputation to their family name. To continue to honour the family name, the farmers regularly show hospitality, kindness, and generosity to their community members.

The customer is usually the key stakeholder that the farmer tries to please to ensure a good market for the farm produce is kept at all times. The farmer-customer relationship is vital to safeguard the continuous operations of the business, especially during the glut season when supply far exceeds demand:

"What has helped us so far is the consistency in the business that we do. Most times is the one-on-one relationship that we have with our customers." The influence of the community on the farming operations gives the leaders good leverage over the farmer. The farmer meets the needs of the traditional community leaders to secure the cooperation of the leadership in his/her business, especially in the provision of security around the farm:

"Community leaders are always supportive because, of course, they have their own share from the farm. Whenever you harvest, there is a particular portion that you take to the community leaders. The biggest support they give you is security."

RP27

Furthermore, there is an expectation to support traditional leaders at social events by providing financial help during traditional functions, weddings, and other celebrations. The symbiotic relationship between the farmers and their community leaders is effective if managed properly to avoid exploitation and harassment.

As mentioned under 5.4.3., the government is a key stakeholder but is not always regarded as instrumental to the farming business's success. The nonchalant nature of government to provide an enabling business environment to the farmer affects the relationship between the government officials and farmers, as claimed by research participant 24:

"We do not have any relationship with government officials, maybe the local government officials when you are taking your products to the market, sometimes they harass us."

RP24

Still, government officials have to be managed well to ensure that the farm continues to operate and flourish. This usually comes at a high cost to the farmers.

5.5 The Farmers' reflections on their everyday entrepreneurial activities

The challenging social, operational, and cultural contexts highlighted in the preceding sections create a considerable barrier to the farmers' everyday entrepreneurial activities. As a result, it is difficult to make assumptions about the available resources needed to grow the business, especially in a resource-constrained environment with poor infrastructural facilities and uncertain market conditions. In response to these highly dynamic contexts, the farmers provided wide-ranging perspectives on their everyday entrepreneurial activities grouped under three major categories: Food production, farming as a profession, and the importance of leveraging effective networks and partnerships to survive in business and foster farm growth.

5.5.1 Food Production to meet the demands of local communities

Food production is an important activity that the majority of the research participants deliver in their local communities. As highlighted under Section 5.4.4, a key consideration in managing stakeholders is to provide for some of their needs, particularly during formal events or celebrations. Farmers donate some of their farm produce to provide the food consumed at such events as part of their social responsibility to their respective communities.

There is so much pride among the farmers in their ability to feed their extended families and play an important role in the local economy. Still, some research participants see the production of food as not only essential to their local communities but a means of sustaining the economy of the nation:

"The main focus of farmers in Jos Plateau should be to go beyond farming to feed themselves, to farming to sustain an economy."

PR02

The assertion of "feeding the nation" is made with the confidence that the excellent climatic conditions in places like Jos, as highlighted under Section 5.3.1., are suitable for large-scale food production. Jos' conditions are particularly advantageous to poultry farmers, who have a larger share of the market due to the better table life of the eggs produced in Jos compared to other parts of the

country. On the contrary, Nigeria's harsh economic conditions make it difficult for some local community members to afford a good source of protein like eggs and chicken. Even with the farmers' best intentions, they cannot meet every community member's needs. There is also a lack of awareness of the importance of having a nutritious and affordable diet:

"Well, you see the major problem we have in this country is that there is poverty, there is lack of awareness like the product eggs and chicken are supposed to be the cheapest source of protein, but you will be surprised to know that a family for a whole year may not have an egg to take [eat]."

PR09

This unfortunate situation calls for concerted efforts across the nation to ensure that food is produced in large quantities and affordable for local communities. The priority, as suggested by some research participants, is for the country to be self-sufficient in food production to cater to the needs of both rural and urban communities:

"[...] let us be self-sufficient in food production. Let us be able to feed everyone from the rural community to the urban community at a very, very reduced price."

RP20

In addition to the affordability of farm produce, processing some raw food materials can ensure that food is available to all Nigerians throughout the year. Processing the raw food materials will further reduce food waste during the harvesting seasons, where supply outstrips demand. When the raw food materials are processed and packaged appropriately, some research participants suggest that Nigerians can be assured of nutritious food available and affordable in large quantities during the wet and dry farming seasons. The following section will present reflections on the viability of farming as a profession.

5.5.2 Farming as a viable Profession

Suggesting farming as a viable career choice is not often the counsel that educated parents give to their children after investing substantial amounts of money into their children's education. Traditionally, a typical Nigerian parent recognises only three professions: Medical Doctor, Engineer, and Lawyer. Children are steered towards one of the three professions, in some cases, against their wishes and abilities. It is considered a momentous achievement to have children in all three professions within a single household. In the village square, when the men meet to discuss their community's affairs, the men whose children contribute to such professions proudly extol their achievement as a sign of authority and their claimed privileged status in the community to speak during important decision-making sessions. Although the focus on the three professions is changing in most communities, there is still a dearth of young people actively involved in agriculture as a full-time profession. Farming must be seen as a viable profession that should be taken seriously, as opined by a majority of the research participants:

"They [farmers] must appreciate and see farming as a business [...] Agriculture will provide our youth with a lot of employment. All these youth who are wandering around without jobs, if they see the dignity in farming, then they can go into it."

RP03

The majority of the research participants who have retired from government jobs lamented their lack of active involvement in farming earlier in their careers. Some recounted the sparse money they have made over the many years spent working for the government compared to what they now make from their farm businesses. Others are still passionate about farming as a profession as it keeps them active and motivated to live:

"So naturally the profession, do I enjoy doing it, yes! Absolutely yes, if not, when I retired, I would have just gone to sleep, but I am still on it, and I will continue to be on it until the last day that I checked out [die]."

RP31

Much money can be made in agriculture by introducing advanced technology and mechanised farming systems. The government has a part to play in subsidising these mechanised farming systems to encourage an increasing number of younger members of society to take up farming as a profession. The school curriculum can play a part in upgrading farming and agriculture to par with other known professions like medicine, engineering, and law. The farmers also have a role in encouraging their children to consider active participation in farming as a full or part-time profession after completing their university degrees.

5.5.3 Partnership, Networking, and Knowledge Transfer, enablers to Growth

Servantie and Rispal (2017) argue that partnership and good networks enable firm growth. The communal way of living within the farming community and the many intertwined relationships by marriage, or the exchange of goods and services among the farmers, further emphasise that no farmer can flourish on their own - 'no man is an island.' Equally important is sharing information and ideas, usually free of charge and done without any serious consideration that the information shared could be a good trade secret passed to a competitor in the business. The information shared could be finding good quality seeds, disease control, the market for farm produces, availability of grants, loans and subsidies. The majority of the research participants advocated the forming of or joining a cooperative group as instrumental to effective partnership and knowledge transfer among farmers:

"I think in order to boost farming on the Plateau [Jos], it is not an individual thing. I think people should be seen to be working more in cooperative groups."

RP08

Although the importance of farming associations will be presented in the next section, some research participants link membership of farming societies to fostering a more collaborative working relationship among farmers. When there is good cooperation among farmers, it can lead to the best solutions for their farm businesses. This could also be in finding a stronger voice to lobby the government to assist the farmers or securing a market for their farm produce:

"More cooperation among farmers, the ability to come together, pull resources together, help one another, and have the influence to get assistance through the cooperative association."

RP10

Similarly, the lack of available resources can impact growth. The collaborative working relationship among the farmers leads to the sharing of resources, loaning farm equipment at no cost, giving out loans without interest, and producing quality seeds to reduce the cost of importing the seeds. Additionally, workers from one farm can assist a farmer on another farm that requires more hands during harvest or at other farming operations stages. These varied partnerships and knowledge transfers boost confidence in farming techniques that drive productivity and growth. It is also vital for new farmers to tap into such networks to benefit from some of the rich tacit knowledge they may never get through searching the internet or books they read. The information that they get through the local associations is relevant to the local area's specific farming requirements.

5.6 The relevance of farming associations

The Nigerian Government encourages farmers to belong to a farming association to access the government's resources for farmers. The majority of the research participants belong to farming associations to access relevant information on government interventions in the agricultural sector. These are mainly related to fertilizer distribution, financial assistance through loans and grants, disease control strategies and support, and access to mechanised farming equipment. Majority of the research participants see the benefit of membership in a farming association. However, other research participants are sceptical about the benefits they can get from formal membership in a farming association. Table 5.4 below shows the different perspectives on the relevance of formal membership to a farming association.

Table 5.4: Relevance of Membership of a Farming Association

Advantages

Access to affordable loans and grants

"You get to hear more about possible opportunities that come around farmers, whether there are grants or loans or training facilities etc." (RP26)

✓ Sharing of information and ideas

"[...] those that have big farms and have been into it for years, they share their experiences with those that are about starting. It is very, very vital to get that information." (RP25)

✓ Building strategy and capacity for growth

"[...] during the meetings, you are able to know where you can get good breeds of what you keep, your livestock, and so we share our problems, we share our successes and failures."(RP19)

✓ Pressure group to Government

"Well, there are lots of benefits. We speak with one voice. The association goes for advocacy. At the association meetings, we create awareness to our members of what is currently happening even within the government circle also." (RP09)

✓ Price regulation and controlling the influence of middlemen

"Network of people that do a similar thing, it helps members to avoid exploitation from middlemen from the market. It is also a forum whereby you can unify(standardise) your prices when it comes to selling your commodities." (RP14)

Disadvantages

Poor leadership

"Honestly [voice raised], is there any association that works in Nigeria? If the government gives the association, let us say 100 cartons of disinfectant to help farmers in cleaning their hands, before it gets to farmers, maybe you will have only 20 cartons left. All the other cartons will be diverted to the leaders' individual homes/farms." (RP03)

No tangible benefits

"Gathering is like a waste of time. They will keep promising you that this thing is coming, and at the end, the loan come, and you cannot pay. So, you just manage from what you have. So, to me there is no benefit." (RP23)

No proper interaction among group members

"Since I signed up to the first one, there has really been no interaction. It is a government-driven cooperative we joined over a year ago and they have not even contacted us." (RP15)

> Lack of support during glut season

"I have not benefitted anything from group membership yet. I joined thinking I will benefit during egg glut, but I do not see that." (RP13)

Source: Author

The advantages and disadvantages of membership in a formal farming association will be explained further below.

5.6.1 Advantages of Formal Associations

As highlighted in Table 5.4, the first benefit of formal membership in a farming association is access to affordable loans and grants, as suggested by the research participants. The government and the banks urge farmers to form or join a cooperative farming association to access grants and loans at a lower interest rate. The association serves as a body that checks and validates the members before credit facilities can be given. Farming associations with a high calibre of educated members can explain the terms and conditions of loans to other members who would ordinarily struggle to understand the different credit facilities available to farmers.

Secondly, the sharing of information and ideas is made possible through the formal membership of an association. National or International charity organisations such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and Tony Elumelu Foundation, organise training sessions to help farmers with different aspects of the farming operations. For example, in the areas of fertiliser application, disease control measures, sourcing of quality seeds, mechanised farming, and other farming techniques and strategies. These sessions are organised and delivered in conjunction with the leadership of the farming associations, and in some cases, with help from governmental institutions. Members can attend these sessions to interact with other farmers, share ideas, and learn best practices to take back to their farms.

"When we faced challenges like when we had bird flu, they [association] organised sensitisation seminars to teach farmers on good hygiene practices, etc. Basically, for advice and education."

RP12

Sharing ideas and information is important in preventing and controlling farm diseases. When farmers are honest and share their experiences, others can learn from them and implement preventive measures on their farms.

Thirdly, formal membership in a farming association creates a platform for resilience building and farm growth. Farmers can learn different techniques and

strategies that have been effective in other farms to employ on their own farms. This is so important, particularly for new entrants into farming. Vegetable farmers who traditionally do most of their farming during the dry season are now using the knowledge and resources available from greenhouse farmers to grow their tomatoes, cucumber, bell peppers, and even potatoes throughout the year using the greenhouse technology. Such exposure to new and improved farming methods generates substantial income for farmers who decide to expand and grow their farming businesses.

Fourthly, farmers can come together to put pressure on the government to intervene during cases of disease outbreaks on farms or to buy the excess farm produce from the farmers during glut seasons, e.g., egg glut where demand for the eggs substantially exceeds supply. The leaders of the associations can meet with government officials on behalf of the farmers to request help or provision of farm inputs:

"The farmers' association sometimes, they pressure government generally and say we need fertiliser, etc. So, the government has a way, whether it is at the federal, state, or local government level, to give the farmers' association fertiliser."

RP28

It is important to have a strong association that can provide advocacy services for the association members with good leadership that works for the whole association's benefit to redistribute farming inputs received from the government.

Fifthly, Price regulation and reducing the influence of middlemen in the market is another benefit of formal membership in a cooperative association, as highlighted in Table 5.4. Middlemen are seen to be profiting from the hard work of farmers. The middlemen make more money than farmers by haggling down the farm prices to get a wider profit margin when they take the produce to the market. This is a major concern to the farming community. The farmers look up to the farming associations for help in the absence of government regulations. The farmers call out for standardisation of prices of farm produces and a system where they can have free access to customers in the markets to sell their products instead of going through an intermediary, a middleman:

"[...] to organise a system where you can mitigate the middleman activity where they control the market to the detriment of the farmer."

RP21

Governmental institutions regulate farm produces and farm inputs, such as the National Agricultural Seed Council (NASC), which validates and approves the seeds sold to farmers. Farmers seek more of such interventions to eliminate the dominant control that middlemen have on the farming community.

5.6.2 Disadvantages of Formal Farming Associations

The attitude of some of the various associations' leadership demotivates some research participants from joining a formal farming association. Where the leaders are dishonest in the provision of good leadership that has the collective interests of all members of the association, it discourages farmers from having any confidence in such associations:

"There is nothing to benefit from it. The leaders, even when the government decides to assist farmers, sometimes the things get to the association, but you do not get to know. By the time you get to know, the leaders would have used it all."

RP30

As shown in Table 5.4, leaders are accused of focusing more on what they will personally benefit from the association. The leaders use many communication channels like leaflets, posters, WhatsApp messages, and radio adverts to encourage farmers to join the associations to secure government interventions. However, when the grants, farming inputs, or other government interventions reach the association, the leaders share these with little left for the other association members. Some research participants claimed knowledge of the dissolution of farming associations after the leaders and those closely connected to them had been awarded affordable loans from banks or received government intervention.

Secondly, a minority of the research participants point out the lack of tangible benefits from the membership of a formal association as one reason for not belonging to any association. The benefits of membership in the association may be outlined in the memorandum of association, but in reality, the benefits are not felt by some research participants:

"There are so many benefits in the book. Most of these benefits we see them in the book. But that cooperative is almost two years now since we formed it, we have 30 members. So, before forming that cooperative, we were told you can easily access a loan from the bank of agriculture, GIZ can supply you with seeds, and then they can even come to lecture you. But, since we received that lecture once, in a duration of three weeks, the officials have not called for any refresher training or something like that."

RP24

The absence of a good regulatory framework and a body to enforce the governance of many of these associations aid some of the leadership to treat the associations as a personal business venture. Annual accounts and reports are not usually audited to reveal the actual income and expenditures, including other farming inputs that may have come to the association in a financial year.

Thirdly, an important reason for joining a farming association, as shown under Section 5.6.1, is the good interactions among the association members. The association provides a platform for the farmers to interact, share, and learn from members' experiences. Sadly, as highlighted by Research Participant 15 in Table 5.4, such interactions among their association members are non-existent since they joined the association. Such an experience will undoubtedly discourage further involvement in other farming associations. The lack of interaction is potentially a reflection of such an association's leadership and the purpose for establishing the association in the first place.

Fourthly, some poultry farmers did not benefit from membership in the poultry farmers association during the glut season. Members will be looking for markets for their poultry products to avoid waste or the eventual sale of their eggs at giveaway prices. This is usually hard to take as the birds still need to be fed to lay

the eggs. The lack of vital information on managing the outbreak of diseases on the farm like the bird flu is unsettling for the farmers, especially when the government or the farmers' poultry association does not provide such information.

5.7 Chapter Summary

The chapter provided an overview of the research participants' social, operational, and cultural contexts of their everyday entrepreneurial activities. Their reflections on some of these contexts, including the relevance of formal membership in farming associations, were provided.

The context of the research participants' everyday entrepreneurial activities paints a mixed picture of the positive social status of the farmers operating in favourable climatic farming conditions. However, on the other hand, the changing operational trends demanding a development in management skills, shifting cultural norms pulling away from farming to other professions, and (at best) inconsistent support from associations creates a challenging environment for the farmers to thrive in their farming business.

The demography is mainly educated men aged between 28-70 years old. The research participants take their social responsibility to their local communities seriously. This is evident in their expectation of providing food to support their extended families, creating job opportunities, and supporting charitable causes to address some of the community's socioeconomic needs. Profit-making was seen to be instrumental in augmenting household income. The research participants' overwhelming expectation is the joy and satisfaction they get in their entrepreneurial farming activities. The farmers expressed real job and inner satisfaction in what they do by using emotive words to express their everyday entrepreneurial activities and their meanings to them.

Similarly, the favourable climatic conditions in Jos were seen to be an ideal place to farm. The majority of the research participants take full advantage of the good conditions to grow their farming business. The research participants particularly saw Jos' conditions as advantageous to poultry farmers compared to other parts of Nigeria. The research participants further claimed that Jos' poultry products

were superior in the markets with a longer shelf life. Additionally, good sustainable practices are adopted by the farmers. Although there is limited access to the government waste disposal system or facility available for the farmers to dispose of their farms' waste, virtually nothing goes to waste. Most farmers either reintegrate the waste from one farm area back into other areas or recycle and sell the waste materials to other farmers to use on their farms. There is also a good awareness among the research participants to protect the environment from pollution.

The cultural context of the farming community was examined. The historical preference for male children against female children was not as prevalent as in the 1950s and 1960s. Attitudes are also changing toward the farmers' children's career prospects with more gravitation toward advanced educational training to secure jobs outside the farming community. This change potentially impacts succession planning, especially when the children returning to the community are not so keen to re-engage with the farming activities and techniques they were brought up with. Being in a different ethnic group was a barrier to joining formal farming associations to access government subsidies and loans. The farmers perceived the government to have a nonchalant attitude towards the farming community's plight. However, community leaders play an important role in supporting farming operations, especially in providing security around farms. The research participants see customer relationships as crucial to the survival of the farming business. Additionally, the farmers' reliance on God's intervention helps them navigate challenging hurdles in their farm businesses and maintain a humble and cautious attitude when the farm is doing well and generating income.

Some of the major reflections of the farmers on their everyday entrepreneurial activities were presented. Food production to feed the local community's growing food needs was seen as a priority of the research participants. However, their focus is more on large-scale food production that can feed the nation. Food production is emphasised on the availability and affordability of food throughout the year. The research participants expressed their desire to see farming taken seriously as a viable profession similar to medicine, engineering, and law. Farming can address the unemployment challenge across Nigeria by providing jobless youths with a good platform to earn a living and have a rewarding career. As suggested by the

research participants, the secret to farm growth is building effective partnerships, good collaborative networks, and knowledge transfer of vital information within the farming community. Farming societies/associations are an important vehicle for better cooperation among farmers.

The government initiative to bring farmers together to access relevant information, resources, and support in their farming business through formal membership of farming associations received mixed responses from the research participants. Some research participants see the benefits in their membership of the associations: access to grants and loans, sharing of information and ideas, capacity building for growth, lobbying the government, regulation of prices, and mitigating the influence of middlemen in the market. On the contrary, other research participants did not see the reason to join or continue participating in the associations. The poor and selfish attitudes of some of the leadership, lack of proper interactions among members, lack of adequate support to mob up excess supplies of eggs during the egg glut season, and the absence of tangible benefits are some of the reasons given by the research participants as disadvantages of formal membership of an association.

The majority of the farmers find the joy of life as farmers to be the foundation to start, grow, and expand their businesses. The process of entrepreneurship for these farmers is not necessarily one of opportunity exploitation and growth but one of negotiating with the various elements of the context. The varied contexts presented in this chapter force the entrepreneurial farmers to carefully consider their everyday entrepreneurial decision-making process when navigating their way through the many components of their everyday entrepreneurial context. Whatever the context of the everyday entrepreneurial activities within the resource-constrained environment, the farmers were not deterred from engaging in their respective farming businesses. The next chapter will look at the entrepreneurial process and behaviour of the resource-constrained entrepreneurs, given the context presented in this chapter.

CHAPTER SIX: RESEARCH FINDINGS- ENTREPRENEURIAL PROCESS AND BEHAVIOUR OF THE RESOURCE-CONSTRAINED ENTREPRENEURS

6.1 Introduction

The data analysis presented in Chapter Five focused on the context of our resourced constrained entrepreneurs' everyday entrepreneurial activities. The analysis now considers the entrepreneurial farmers' everyday activities to cope with the previous chapter's context.

As discussed in section 3.3, Mamabolo and Myres (2020) five different phases in the entrepreneurial process: 'Opportunity identification; Opportunity evaluation; Opportunity exploitation; New business; and Established businesses, were discussed and added to the conceptual model in Figure 3.1. An enterprise usually begins with identifying an opportunity or an idea to solve a problem, meet a need, or satisfy a passion, interest or desire. After generating an idea, an aspiring entrepreneur considers the value of investing time and resources to capitalise the idea into a successful business venture by evaluating the many opportunities that such a venture will bring to the entrepreneur. Planning and exploitation of the opportunity usually occur at the initial stages to ensure a sound business strategy and an effective operating plan to implement the strategy. When the entrepreneur has a good plan and a convincing business opportunity, the enterprise will be formed with all regulatory or legal documents completed and filed at the appropriate regulatory authorities, thus making the business a legal entity. Following the enterprise's launch, the entrepreneur and their team expect that the business's services or products generate income that can sustain the business either short or long term. Further opportunities are sought and maximised to establish and grow the business, generate more income, and sustain the enterprise.

As outlined above, the research participants' entrepreneurial process shaped by the challenging and dynamic context is not systematic or confined. Also, this study is centred only on legal forms of enterprise such as farming that are socially derived, relational and community-based. Such a focus is potentially limiting. It does not cover 'off-the-books' and illegal enterprises that add value to

communities, whether such enterprising practices are deemed 'authentic' or the values and behaviours associated with the practices can be socially legitimised. To legitimise 'social needs' will vary from context to context, and entrepreneurship is a broad and diverse field (Anderson and Smith, 2007). This chapter will explore the entrepreneurial process of our resource-constrained entrepreneurial farmers under the four sections highlighted in Figure 6.1 and provides a template for an entrepreneurial coping strategy:

Figure 6.1: Entrepreneurial Process of Resource-Constrained Farmers



Source: Author generated

In Section 6.2 below, the main reasons that motivated the research participants to engage in their respective farming businesses are presented against the backdrop of the farmers' everyday entrepreneurial context discussed in Chapter Five. Section 6.3 identifies the primary resources that the research participants used to start their farming businesses. Section 6.4, on the other hand, outlines some of the factors affecting growth and productivity. In contrast, Section 6.5 shows the research participants' coping strategies within the context of their everyday entrepreneurial activities. Section 6.6 presents a summary of the chapter.

6.2 Reasons and Motivations to Become a Farmer

There are several reasons that the research participants mentioned as motivation for them to start their farming businesses. The majority of the research participants mentioned a combination of reasons for starting their respective business ventures. Table 6.1 displays a flavour of some of the reasons that motivated the research participants to start their farming businesses.

Table 6.1: Main Motivation or Reason for starting a Farming Business

Core Category of the Reasons for starting a Farming Business	Main Reason or Motivation for starting a Farming Business	
Continuation of family tradition	"I grew up farming, started with broilers and then layers." (RP10)	
Personal Interest, Passion and Choice	 "It is a thing of interest, passion. First of all, passion in the sense that you think about what you want to eat, providing for people to eat, not just the money that is in it." (RP12) "It is a choice because there are other business opportunities, we settled to farming, which we have the passion and we believe that we can do very well." (RP08) 	
Subsistence Purpose- providing for the family	 "One major thing is to supplement income, and in terms of supplementing income because it provides food in the house and we are able to sell to meet our needs for feeding." (RP01) "I needed something that will bring substantial help to the family. I discovered that farming was more suitable." (RP13) 	
Commercial Purpose – money making	"Other businesses I had tried like the tailoring and provision store were not yielding much. I thought the poultry farm would yield better." (RP10)	
Retirement Plan	"First of all is the passion, of course, the monetary aspect we intended to make it as an income for retirement." (RP08)	
Unemployment	"The first thing was the need for survival. I finished from the university, and there was hardly any other thing for me to do, and the only other language I knew to bring some sort of income to me was farming." (RP27)	

Source: Author generated

6.2.1 Continuation of Family Tradition

Experience in the family farming business has enlightened entrepreneurial farmers about farming methods. The majority of research participants credited their parents for communicating the importance of farming as part of the family tradition. There is an expectation on the male child to understand what the family

does as early as possible. A lot of the learning about farming is through hands-on practical experience on the farm that children are exposed to from an early age. Children play a vital role in farming activities, from ploughing the land to harvesting crops. As highlighted under Section 5.1.1, the traditional preference of having more male children to help with the farming business has shifted with more girls and women actively participating and, in some cases, leading some of the farming operations.

A primary motivator for some research participants, as highlighted in Table 6.1, is the continuation of the family tradition to feed the family and generate additional household income to educate children and provide for other needs of the family. Very few farmers deviated from the type of farming they inherited from their parents, as suggested by research participant 01.

"Wow... farming or agriculture as a whole, my family has been in it for a while before I also got into it [...], we just carried on as part of what we do as a family."

RP01

The majority of the research participants continued in the farming activity that they were taught in childhood, keeping the family farming tradition but making incremental improvements in the automation of some of the farming processes or the use of mechanised farming equipment for large-scale production. It is easy to fall back on the tradition that the research participants have been accustomed to when evaluating the local economy's opportunities to exploit and the resources they have in hand to launch their farming business. Returning to farming as a business proposition is particularly relevant to retired civil servants who require a good income stream to survive at retirement. Continuing the family tradition is the easiest way to launch the farming business as the ideas to start a farming business are ingrained in the farmers in childhood.

6.2.2 Personal Interest, Passion and Choice

Perhaps the continuation of the family tradition discussed in the previous section is possible due to the research participants' strong desire, interest, or passion for a particular farming activity or agricultural activity. This passion drives them to launch into farming even at retirement age or, in some cases, to combine an already busy 9am to 5pm job with the drudgery of maintaining a poultry farm that requires extensive care of the birds. Therefore, it is not surprising that some research participants work into the late hours of the day and all through the weekend to sustain their business. This passion for putting so many hours and efforts into farming is borne out of the responsibility that most research participants have to provide food for their immediate families. Equally, the desire to farm and how the farm produce benefits the local community, as firmly suggested by Research Participants 02 and 12:

"My desire is not just to have a farm at the back of my house but to have a farm that will become a household name. People eating the chicken, the eggs, and the pork consistently."

RP02

"You help others [farm workers] to provide food for other people in your community. That is just my passion, yea. I am driven by passion."

RP12

As highlighted in Table 6.1, farming is the only choice that research participants have after carefully evaluating business opportunities within their local economy and the available resources they have in hand to start a business. Likewise, the passion for farming as an entrepreneurial activity is a motivation to farm irrespective of the gender or age of the farmer, as suggested by research participant 30:

"It is a choice for me, something that I love to do. And if you ask me why, it is because I feel that food security is something that a lot of women do not think of going into a lot because we have a lot of women who want to

do makeup, into arts and singing, but for me, I am just a natural food person."

RP30

The research participants find lots of pleasure in their everyday farming activities, during visits to the farm, walking around the farm's perimeters, engaging with farmworkers, and interacting with the farm animals. Such interactions generate additional ideas for the business and evaluation of farming operations. The classic ideas of opportunity and rational planning are different for these entrepreneurial farmers. When resources are tightly constrained, the business model is restricted to what will work with the resources at hand, calculating the resources that the farmers can afford to lose before venturing into the business. Having the passion and desire to engage in a farming business creates momentum and drive to persevere and maximise the business environment's limited resources.

6.2.3 Subsistence Purpose- Providing for Family

Knowing how to farm as part of the family tradition is fundamental to our resource-constrained entrepreneurs. Passion and interest are also key motivators to launch the farming business. However, in the early stages of the farming business, the challenge of limited income and the increasing demand of the family motivates the majority of the research participants to launch a farming business:

"I have a family with little children; good nutrition is essential for good growth. It is for the purpose of feeding the household and other households who need these commodities that I started farming."

RP14

Although providing nutritious food for the family is essential for our research participants, the quality of their house and their children's education is also high in their decision-making process to launch a farming business. It is difficult for the average Nigerian family to educate their children in good private schools in Nigeria. However, farming opens up opportunities for the research participants to educate their children in good private schools. This scenario sheds light on why entrepreneurial farmers do, what they do, and why. Through the farming business,

a minority of the resource-constrained entrepreneurs were able to educate their children in universities in Europe and the United States of America (USA):

"[...] we decided to go into farming because I felt that it will go a long way in sustaining the family since I do not do any government job. It has gone a long way; I have trained by child abroad [UK] through this farming, and I am still doing it."

RP29

Despite the country's harsh economic conditions, farming provides the needed food and income that Jos Plateau's average Nigerian family requires to survive. The Cost of living is high, but many families get by with additional farming income. As highlighted above, some farmers can send their children to school in Western universities, paying an average of £22,000 per year, a large sum of money for an average Nigerian family to generate from the farming business. Farming to meet the household's subsistence needs is more prominent than envisaged outside the farming community. Some farming businesses generate substantial income to meet the family's household needs and the wider community.

6.2.4 Commercial Purpose - Money Making

The decision to enter into large-scale production either at the early or later stages of the farming business is, in most cases, a reflection of the commercial goal of the business in maximising the many opportunities within the farming business to make money. Making as much money as possible from the farm supports the farmer in providing the family's home and educating the children. The farmers evaluate opportunities within their local economy, including the type of farming business, before starting a farming business. In some cases, the farmers deviate from the family tradition such as crop production, to launch into vegetable and fruit farming to meet the growing healthy eating trends in the local economy as suggested by Research Participant 15:

"I thought about having a business that will cater for people that need to be on a diet, people of age or those with medical conditions that need to eat healthily; that is why I decided to commercialise the business." A minority of the research participants were pleasantly surprised by the money the farm generated after their first farming year. For example, Research Participant 31 was surprised to make 4 million Naira [£7450] from selling 10 tonnes of rice seeds. Such a substantial amount of money is exceptional for a farmer with a good civil service job earning an average annual salary of 1.56 million Naira [£2175]. When reflecting on the years spent in the civil service, the farmers who are now retired wish they left their jobs early to start their farming business. They are, in most cases, making more money from their farming business in a year compared to what they were earning as civil servants in the same period.

6.2.5 Retirement Plan

Many civil servants in Western societies rarely think of farming as a retirement plan. On the contrary, the emphasis is placed on holidays, golf, and other recreational activities. For entrepreneurial farmers, given the social and cultural context described in Chapter 6, their involvement in farming while still working as civil servants is to plan for a business that generates income at retirement. The pension accrued is insufficient to meet their household needs and, by extension, the needs of the wider family. It is, therefore, expedient to find a business that can continue to support them when they retire. Farming is the only other official profession that Nigerian civil servants can be involved in while still in active service. Hence, the majority of the research participants engaged in farming as the only viable business opportunity to exploit while still in active service. Equally, participating in a farming enterprise results from the passion the entrepreneurial farmers have for farming and maintaining the family tradition. Research participant 18 planned to retire to farming even while still in secondary school:

"(Sighs), when we grew up and schooled, the desire was to work with the government to rise to the highest height that one can rise to. Get all the good things you can get out of it, eventually retire, and find some business to do. Farming was actually what I had in mind."

RP18

All retired civil servants highlighted having a good retirement plan during the interview sessions. Not planning for retirement was seen as foolish as the pension that most people get from their jobs is insufficient to meet their needs and other family commitments. The emphasis is to save early and start small with the available resources while navigating the business environment's different evolving contexts. As the business grows and becomes self-sustaining, then the farmer can think of expanding the business.

6.2.6 Unemployment

There is a high rate of unemployment in Jos Plateau. However, only one of the research participants mentioned unemployment as a reason for starting his farming business after graduating from university.

"The first thing was the need for survival. I finished from the university, and there was hardly any other thing for me to do and the only other language I knew to bring some sort of income to me was farming."

RP27

There are probably more jobless youths who could go into farming and earn a living but are unwilling to do that either due to a lack of interest in continuing the family tradition or the lack of available finances to go into farming. After spending considerable time and energy studying and earning a professional degree, getting their hands dirty will not be easy for young people engaged in the digital world. The lure of corporate jobs in big cities is sometimes a stronger pull away from the family farming tradition. Some unemployed youths returned and worked on their parents' farm to take over the business subsequently. However, with many still searching for corporate or government jobs, it impacts the number of entrepreneurial farmers required to continue farming to provide food for their households and sustain the local economy. The lack of younger family members having similar passion and interest for farming affects the family business's succession planning for farmers who are already retired.

6.3 Resources Required to Start Farming

The majority of the research participants had available resources to start their farming business, as outlined in Table 6.2 below. The table shows the words or phrases that the research participants used to articulate the resources they had at hand to start their farming business. For example, some of these resources, land and structure, were available for the research participants to use from the respective family businesses that they inherited or, in some cases, renting the resources from family for free. Other research participants evaluate the local economy's available opportunities and plan to save money from their salaries to launch their farming businesses. There are also informal arrangements among the farmers to loan out farming inputs or equipment to their fellow farmers to start their businesses. These resources are captured in Table 6.2.

Table 6.2: Resources required to start Farming Business

Research Participants (RP)	Core Category of Resources required to start the Farming Business	Words or Phrases used to describe available Resources at the start of Farming Business
RP01, RP04, RP07, RP08, RP10, Rp12, RP14, RP18, RP21, RP24, RP26, RP28, RP29, RP30	Tangible Asset	Land, Structure, Space
RP02, RP05, RP07, RP08, RP09, RP10, RP11, RP12, RP13, RP14, RP16, RP17, RP18, RP19, RP21, RP25, RP27, RP29, RP30, RP31	Finance	Savings, Funds, Money, Financing, Salary, Loan, Capital
RP02, RP07, RP10, RP12, RP15, RP17, RP19, RP21, RP22, RP23, RP24, RP27, RP28, RP29, RP30, RP31	Farming Inputs and equipment	Fertilisers, Chemicals, Implements, Cages, Vaccinations and drugs, Housing, Greenhouse leather cover and bags, good seedlings/seeds, Pen house, Herbicides, Insecticides, Feeds, Disinfectants, Tractors, Drip irrigators, Hoes, Drinkers, Feeders, Irrigation equipment, Generators, Vehicle
RP02, RP12, RP16, RP17, RP23, RP25, RP27, RP28, RP29	Utilities and Infrastructure	Water, Electricity, Transportation
RP01, RP02, RP05, RP07, RP10, RP21, RP22, RP26, RP29	Manpower	Manpower, Labour, Workers, Mason, Carpenters
RP01	Security	Security

Source: Author

The specific resources that the research participants required at the start of their farming business captured in Table 6.2 will be discussed in the following sessions.

6.3.1 Availability of Tangible Assets

Livestock production or crop production is driven by acquiring land to cultivate or space and farm structures to raise the animals. The availability of farmland, space and structure inherited or provided by family was a substantial boost for some research participants to start their farming business:

"Basically, you need land; the availability of the land is very important. Then you need the structure."

RP28

Farm Land is a very precious resource for farming. Traditionally, the family land will be divided among the male children as an inheritance when a father dies. With more female children getting some of the land or property as an inheritance, this custom changes. When the ancestral land is not converted into a residential housing estate or sold to other farmers, it becomes an essential resource for the research participants to leverage during the planning process, especially when considering the local economy's options. In some cases, this is not a choice but something they had to do to support their family or augment the household income.

A minority of the poultry farmers interviewed started with the spare room within the family house or used the garage to start brooding the chicks. Having such space and structure saves much money in the initial stages of the farming business. Where these critical resources are not available, it impacts the decision-making process for the entrepreneurial farmers to either start the farming business or to continue in it, as suggested by Research Participant 01:

[...] "I have friends who would have loved to go into farming, but because they do not have the land to start and their family have not been into

farming, it is trickier for them, but in my case, because that was available, it made it easier to be able to go in to farming."

RP01

More and more families sell their ancestral lands to raise the money they need to educate their children or relocate to some major cities in Nigeria. Technological advancement and the lure of working in the cities have affected the farming communities. In some cases, the farmers relocate from the mainly rural communities in Jos East to the more urban residential areas in Jos North in search of civil service or bank jobs. Some farmers have benefited from some of the ancestral lands made available by other fathers to acquire more land to expand their farm business. A key challenge is raising substantial funds to purchase the portions of land made available for sale.

6.3.2 Affordable Finance

Finance is the resource that all research participants require at the start of their farming business. Finance is required to purchase farm inputs or equipment or hire the workforce to cultivate the land. The majority of the research participants used their savings or soft loans from family or friends at the start of their farming business:

"I started from my savings. Savings from my job and when the farm was growing, there was a need for additional money from other sources."

RP05

Additional finance is usually required when the farm grows, which is a challenge for the research participants. The banks' credit facilities are challenging to secure, or the interest rate is too high for the farmers. A minority of the research participants claimed that the length of time it takes to secure the finance they require sometimes goes deep into the farming season, with an unrealistic expectation from the banks to pay the loan within a short period. That is probably why, in most cases, the research participants started with the finances they had in hand, only committing what they could afford to lose before investing their hard-earned savings into the farming business.

6.3.3 Farming Inputs and Equipment

A farmer requires various farming inputs and equipment to start a farming business, as listed in Table 6.2. The farm inputs and equipment include seeds, tractors to plough the land, chemicals to apply on the farm, drinkers, feeders and the feeds needed in a poultry farm. The majority of the research participants voiced their frustrations over the cost of procuring these essential resources:

"I would need feeds, vaccinations and drugs, and they are expensive."

RP10

Acquiring these essential resources requires sizeable finance, especially where the business is into large-scale production. The lack of resources delayed a minority of the farmers from venturing into large scale production until after retiring from the civil service, bringing substantial savings from their salaries and the gratuity payment they received at the end of their service to the farm business.

Equipment requirements at the start of the farming business depend on the nature of the farming activity and its size. While a minority of the research participants required modern farming equipment, the majority relied on traditional tools to start their farming businesses (see Figure 6.2).

Surprisingly, a small minority of the research participants mentioned using a piece of equipment at the start of their business, possibly because it is associated with mechanised equipment like tractors and harvesters. The few who mentioned that they had equipment at the start of their farming business were fortunate to secure a grant, or they bought the equipment from the government when they retired from public service, as expressed by Research Participant 31:

"I have my own tractor. I have the implements, the planters, and some other implements. When I started, and by the time I retired, I was lucky because I had already gathered some of the machineries, like the tractor, like threshers, since I retired in the ministry of agriculture, they sold that to me."

Figure 6.2: Traditional Farming Tools



Source: Author's collection (Fieldwork photograph)

The majority of the research participants are not as lucky as research participant 31 to secure their mechanised equipment. Hiring this equipment is also costly and beyond the reach of the minority of the research participants. The only alternative is to use manual labour on the farms.

6.3.4 Utilities and Infrastructural Facilities

The general perception within the farming community is that the government should provide the necessary utilities and infrastructural facilities required in the local economy. For the research participants that are engaged in poultry farming, irrigation farming or greenhouse farming - water and electricity are the two most essential utilities they require at the start of their farming business:

Water is very, very important. Not everybody has good water. Water must be from a source that is clean because contaminated water normally will have a lot of problems. And then you need to also have light [electricity], very, very important."

RP25

In the absence of these critical utilities, some research participants dug boreholes to obtain an adequate water supply for their farm business. The lack of available water supply comes at a cost that the farmers struggle to afford, but these critical resources are non-negotiable at the start of the business. The sound of privately owned small generator power plants (see Figure 6.3) was overheard during data collection due to consistent power cuts from the national grid. The research participants require reliable electricity to pump the water from the boreholes to water their farms.

Figure 6.3: Small electric generating plant



Source: Author's collection (Fieldwork photograph)

6.3.5 Manpower

The majority of the research participants suggested that having local people working on the farm at the start of the farming business was an essential resource.

This resource met the necessary farming activities but, in most cases, is not a reliable resource to use in large-scale production:

Manual Labour is usually pretty much available but just for the basic farming activities."

RP01

Research participant 10 suggested that the family unit was relied on to provide the workforce at the start of their farming business:

"Manpower from family. I encourage my children and want them to take over the farm from me. I have involved them in some of the financial dealings on the farm."

RP10

Although the introduction of children into the farming business could be seen as an appropriate succession plan, in most cases, such an introduction is to provide an essential cost-free resource to the farmer. The available hired hands are not always cheap, and their commitment to putting in long hours on the farm will come at a cost to the farmer.

6.3.6 Security Considerations

Research participant 01 mentioned security considerations as an essential resource that he considered at the start of his farming business:

"Security is another very important thing."

RP01

At the time of data collection, violent clashes between farmers and herdsmen were prevalent around the farming communities. Farmlands that are more remote from residential areas are at high risk of the herdsmen's attacks when travelling through these farmlands with their cattle. The security situation affected the farmers'

decision to launch into crop production and locate poultry farms away from the residential areas.

6.4 Factors Affecting Productivity and Growth

The resource-constrained business environment that the farmers work in unfavourably affects their productivity and the propensity to grow their respective farming businesses. Besides scarce available resources in an uncertain business environment, the lack of supportive governmental institutions and the prevalence of farm diseases affect the farmers' yearly productivity. The following sections will further explore the factors affecting productivity and growth.

6.4.1 Securing Affordable Finance

Securing affordable finance to survive or expand the business is a challenge for a large majority of the research participants. The process is usually too cumbersome, making it extremely difficult to secure credit facilities from government grants or the banks' loan facilities. Equally, most research participants claimed that the interest rates attached to credit facilities packages are high, affecting any plan that they may have to expand their business. Similarly, the lack of affordable finance impacts the procurement of mechanised equipment required for large-scale production. The cumulative impact of all these challenges in securing affordable finance affects the farm business's productivity and growth, as highlighted in Table 6.3.

Table 6.3: Challenges in Securing Affordable Finance

Securing Affordable Finance Challenges	Research Participants' perspective on Securing Affordable Finance	
The Process	 "Sometimes the process in accessing the credit facilities is difficult. [] if you have the collateral or things that they are requesting, you may not even need to access the [credit] facility." (RP15) "Access to loans honestly, it was a big problem for us since last year." (RP30) 	
High-Interest Rates	"Our banks are not fair. The interest rate is very, very high; you are talking about almost 30% interest, and they are not looking out to farmers." (RP16)	

Securing Affordable Finance Challenges	Research Participants' perspective on Securing Affordable Finance	
Timumee enamenges	"There are some banks that give out loans, but their interest is quite high, and therefore sometimes, it stops farmers from really expanding." (RP19)	
The barrier to Farm Mechanisation	 "Well, wanting to hire the equipment like the tractors or the irrigation pump systems, it is quite expensive doing that [] it is expensive for any regular farmer if not for the well-established farmer." (RP21) "You need about 1.1 million Naira [£2,075] to build a greenhouse with the seeds, and of course, most people do not have that level of capital." (RP23) "It is expensive, some of these things like the pumping machine [] The claim the people selling the products [equipment] use is the exchange rate to the US dollar – cost of dollars." (RP24) 	
Impact on Productivity and Growth	 "I have seen a lot of farmers that had to abandon their farms because they did not have the money to buy fertilisers to apply [] Finance has limited the type of farms I am cultivating first of all." (RP17) "I only had to buy a big hoe which probably cost me nothing, starting was not difficult at all, but transiting from normal farming to greenhouse farming was where cost became a factor." (RP27) "The problem is when you tend to be the major person earning in your family. It becomes very difficult because you cannot keep the money for crops when human beings have a need [laughs]." (RP18) 	

Source: Author

Access to affordable finance is crucial to the farm business's survival and any plans the farmer may have to expand the business, as shown in Table 6.3. To grow the farm business, the farmer requires a low-interest loan with a reasonable time to pay back the loan, ideally at the end of the farming season(s). When this is not available, and the farmers cannot source additional finances from their close family and local networks, it impacts their productivity and growth.

6.4.2 Availability of Farm Inputs

As highlighted by the majority of the research participants, closely related to the challenge of securing affordable finance is the cost of farm inputs. Some farm inputs are not readily available for the farmer to buy. When the farm inputs are made available in the markets, they are expensive to buy because of the high

exchange rate to import the farm inputs. The high exchange rate (cost of US Dollars) raises the market prices of the farm inputs and, by extension, the affordability of the farm inputs to the research participants:

"Cost of raw materials, medication, vaccines for the birds are on the high side. Most of the vaccines and drugs for birds are imported into Nigeria. The cost is always high because of the exchange rate. In fact, it has been the worst last two years."

RP12

Research participants 16 and 17 articulated the benefits of having useful quality farm inputs. However, they also expressed their frustrations with the high cost of procuring the farm inputs:

"There are battery cages that make your work easy, but it is just that they are very expensive [sighs]."

RP16

"The costs are usually on the high side. Tractors, for instance, last year, we were hiring tractors for #23,000 [£43.4] to cultivate a hectare of land. This year it shot up to #50,000 [£94.3], more than 100% increase."

RP17

Research participant 18 suggested that the high cost of fertilisers and chemicals directly impacted the farm's productivity.

"The problem we have is we farm, and when we do not have sufficient fertiliser, their yield becomes very poor."

RP18

Part of the challenge in sourcing good quality farm inputs is the lack of research. The absence of affordable and reliable broadband or mobile internet connectivity makes it difficult for the farmers to use the internet to research suppliers that supply the right farm inputs or what to look for when procuring a farm input. Some of the research participants reported that even the government subsided fertilisers were detrimental to their farm:

"A lot of people around us did not want to use the government fertilisers because it was not giving them the kind of results they wanted. So, they rather go for the premium fertiliser."

RP30

The absence of decisive governmental intervention in subsidising and regulating farm inputs affects the quality of farm inputs imported into the country. Consequently, the lack of adequate farming inputs puts a lot of physical pressure and exhaustion on an ageing farming community, affecting some research participants' ability to contemplate going into large-scale production. The drudgery of using manual farming tools and methods is further a demotivator to the youths in the community to consider farming as a profitable entrepreneurial activity.

6.4.3 The role of Government Institutions

The research participants saw the role and absence of governmental institutions as a critical factor affecting their productivity and growth. The views expressed by the research participants range from lack of leadership, policy formulation and implementation to the continuation of initiatives and schemes after a change of government. The general attitudes of politicians are another area of concern to the research participants. Also, the absence of extension workers to advise the farmers and the appalling infrastructural facilities in some farming communities further affects the farm's growth and productivity. Table 6.4 highlights the perspective of the research participants on the role of governmental institutions.

Table 6.4: Role of Governmental Institutions

Role of Government in supporting Farmers	The perspective of the research participants on the role of the government in supporting Farmers	
Leadership/attitude of Politicians	 "[Laughs] Well, the truth is there is little or no government presence in this sector. You could start a farm and finish without hearing or knowing anything about government." (RP28) "When you hear politicians come out to campaign, they talk about farming, how they will make agriculture great 	

Role of	The perspective of the research participants on the role		
Government in	of the government in supporting Farmers		
supporting			
Farmers	and things like that. But we have seen it come at different		
	 times and never happens." (RP01) "They [government] are the people killing agriculture, I must tell you. The attitude of a lot of government officials is apart from the corruption that is prevalent in society, many of them are lazy." (RP06) "I know just recently; the government gave out tractors that we saw on the television, but all of them ended up in the hands of Commissioners who do not even have a farm and other government officials who have never been to a farm." (RP27) 		
	"In terms of policy, yes, they have so many policies on		
	agriculture, but implementing them is the problem." (RP19)		
Agricultural Policies	 "When the government tells you they are subsidising, it goes into their own pockets, into private hands [] Government policies should be consistent and sustainable." (RP20) 		
	 "For government, they keep changing policies, changing directives, changing so many things [] certain selfish ethnic or religious interests kill the farmers." (RP06) 		
Taxation Issues	 "I am not aware of any government money set aside for agriculture. Either they come and harass you for tax, you know that is all they do." (RP06) "They come, and they ask us to pay tax. But there are fake tax collectors, they come and introduce themselves but have no ID cards [] You will not know when somebody is telling you the truth or not." (RP22) "There are the issues of multiple taxations, there are some fees that business owners are supposed to pay, but different parastatals of government will come." (RP15) 		
Agricultural Extension Workers	 "Even the category that we thought we would be having them around us are completely not here, that is the farm extension officers. They are not here at this dispensation. The farmers are left on their own." (RP09) "The extension work system has broken down. We were working over a ratio of one extension worker to two hundred farmers. Today is about one extension worker to a thousand farmers." (RP20) "I have never seen any extension workers in spite of the challenges we are having." (RP17) 		
Infrastructural Issues	 "Pigs like to swim in the water to feel good, so that will be good if we have sufficient water, a source of good water for them."(RP18) "We have had a lot of challenges with electricity here. This is my 7th year in this community, and I think we only got 		
	electricity last year." (RP21)		

Role of Government in supporting Farmers	 The perspective of the research participants on the role of the government in supporting Farmers "There is also the issue of road access to the farm, how you move your goods from the farm to where you can put them in a vehicle that is also a challenge." (RP17) "Preservation is one of our major concerns, a major problem because here, you find out that at a time, the demand for things goes down, and there are no storage facilities for the farmers." (RP12) 	

Source: Author generated

There seems to be some governmental intervention for collecting taxes and other revenues, but the government is absent when the farmers require support or government assistance. The government officials' attitude to the farmers' plights notably received the most negative comments, as highlighted in Table 6.4. Few research participants credited the previous government's introduction and funding of the Agriculture Services Training Centre (ASTC). The research participants claimed that the ASTC programme provided good training sessions for the farmers. Additionally, tractors and other mechanised equipment were on hire at affordable rates. The new administration removed the farmers' subsidy under the previous government. Therefore, the programme came to a standstill. Even the staff of ASTC lost their jobs, highlighting the problem of continuity of policies as a result of the change in political government.

Beyond the apparent frustrations that the majority of the research participants have with the role of government in the farming community, Research Participants 19 and 21 were hopeful that the government could play its role in supporting agriculture and the Nigerian economy:

"Agriculture should be the mainstay of the country's economy [...]. So, if we have a government that is really serious about agriculture, gives farmers the necessary input, creates the enabling environment, I think the sky is the limit for farming in Nigeria."

"The major thing that the people need is government intervention. To provide: security; to subsidise the cost of inputs that the farmers need, and then also create the market linkages."

RP21

A minority of the research participants suggested incorporating practical agriculture in the school curriculum from primary to secondary school to provide hands-on farming experience. On the contrary, other research participants strongly feel that the agricultural sector's liberalisation and more private sector participation will provide a better solution. Research Participant 31 strongly suggested that the government should play a role in the creation of an enabling business environment:

[Banging the table very hard] "These things [agricultural development programmes] should not work only solidly under government circle, it will fail [...] it should be a private and public partnership programme, where the private sector can come in and sustain it because anything that starts up and ends with government, one government comes in and supports it, another government comes in and condemns. So, change in policies affects government programmes."

RP31

A small minority of the research participants referred to the excellent relationship and support that they received from the government. During outbreaks of Influenza on poultry farms, the support farmers received was when government officials visited some of the farms and assisted in the culling of the infected birds, including the farms' fumigation. Some research participants mentioned the introduction of better farming methods such as greenhouse vegetable farming introduced through the ASTC programme:

"It was the government initiative that started this idea of greenhouse farming. Because it was the Plateau State government that started this ASTC that gave birth to people actually knowing and having access to greenhouse farming first-hand, then also replicating it across Plateau State."

The government's role in supporting the farming community is the most emotive factor expressed by a large majority of the research participants during data collection. Table 6.4 summarises the research participants' perception of the government's role (Federal, State and Local) in their farming business. At the end of the recording, or where some research participants specifically asked for the recording to be stopped, they used strong negative words to describe the nature of governmental interventions in the agricultural sector. The entrepreneurial farmers struggled to understand how a responsible government fails to provide essential public services. For example, reliable electricity, adequate water supply, roads, suitable storage facilities, and facilities for preserving and processing perishable farm produce. Additionally, the absence of agricultural extension services from the Ministry of Agriculture to visit farms to provide expert advice and support farmers resulted in the research participants engaging private agricultural extension consultants' services at a considerable cost.

6.4.4 Security Conditions affecting Investment Decisions

The herdsmen and farmers' clash in Jos Plateau (Onyema, Gideon, and Ekwugha, 2018; Krause, 2011) crucially affected the peace in Jos's three local government areas and the farms' productivity. In Section 6.3.6, only one research participant considered the security around the farming community at the start of the business. However, a minority of the research participants provided some accounts of the destruction of lives, the farm produce, and farm properties as a result of the violent clashes between farmers and herdsmen:

"The Fulanis [herdsmen] that are around that area are a menace. Sometimes they will just let go of their cattle and destroy your farm. There is a particular year, 2016, I did an experiment on Tamba (Finger/African Millet), very beautiful if you saw the heads, but I did not pick a single grain from that farm. They just let their cattle inside before we know because my daughter had to come home."

RP20

"When I started my farm, for instance, I had no fence around it, so it was always vandalised. That is a very big problem because you farm, the

products are doing well, and someone will come and vandalise, and that is a very big challenge."

RP27

"[...] you can imagine these are businesses owned by individuals without any aid coming from the government side, and look at the herdsmen that have come and are killing us."

RP29

The research participants are sceptical about making any further investment in their remote farmlands because of the local areas' insecurity. The lack of government guarantees on the safety of farmers and their farms affects future investment plans. The insecurity around the farms will affect food supply, as suggested by research participant 30:

"I have been doing my little research on how food supply is going to be next year, and this is based on the fact that the recent crises had left lots of farmland destroyed, burned [...] before then there was food scarcity so what will happen to those who have lost their farmland with no access to irrigation farming?"

RP30

Although the overwhelming assertion by the research participants, as shown above, is the negative impact that the clash between the herdsmen and farmers has on their farming business, one of the research participants expresses an excellent collaborative working relationship that he enjoys with the Fulani Herdsmen:

"Because we have them around, everybody knows his responsibility, his role. We do not want anything to happen to their cows, and at the same time, they protect the cows against trespassing into our crops. That has always been the clash between farmers and herdsmen, as you may have heard."

The farms' insecurity affects further investment into the farming business: insecurity impacts the farms' food supply and sustainability, and food scarcity is not suitable for the local economy.

6.4.5 Market Conditions

The markets are not well regulated, causing considerable confusion for the farmers. The prices of farm produce fluctuate during the harvesting season, where supply exceeds demand. A large majority of the research participants involved in poultry farming struggle during this period to not only dispose of their products but to generate enough money to maintain their farms:

"The little challenge with poultry farming is once in a while we have egg glut [...] So, when there is a glut, the price of eggs keeps fluctuating it then crashes the price to the extent where you find it a bit challenging to even feed the birds from the proceeds of the eggs sold."

RP04

"So, some farmers will look at the situation and would want to dispose of what they have at all cost."

RP05

Finding a market for the farm produce is frustrating for the farmers who have to dispose of their farm produce at any cost after a tiring farming season. The uncertainty in market conditions threatens the farms' profitability, with wholesalers (middlemen) exploiting the situation to the farmers' detriment. These middlemen, as suggested by Research Participants 16 and 21, are the primary beneficiaries of the unregulated markets:

"One of the big challenges that we have is in marketing. I think a lot is left to the middlemen. They are the ones who determine the price of our products [...] All the farmers on the Jos Plateau, we do all the hard work, but when it comes to the final stage, we leave it to the middleman who makes all the money."

"You will find a middleman buying something, say for #500 [£0.94], but you will find the middleman selling it for #1200 [£2.26]. It is expensive in the market, but the farmers do not make anything much from it."

RP21

Some farms are mainly into large scale crop or vegetable production. The farmers have a market to sell their farm produce but still struggle to meet the demands of their buyers:

"[Farmer's Wife] One thing about the farming, there is always a demand for the produce [farmer – very well]. Like on our farm, we have a contract with the Chinese people, they need 600kg of tomatoes every week, other people need 1000kg, we cannot meet the demand you know, so most of the vegetables you see in Shoprite, they import it. That is why it is so expensive as well."

RP23

There must be a regulatory body that advises farmers on improving the quality of their farm produce sold at an appreciated price that benefits the farmer. Research Participant 23 usually sends out notices to other farmers to bring their farm produce. If the quality is deemed good enough, they get added to the stock supplied to their customers.

6.4.6 Disease Control on the Farm

The problem of diseases on the farm is predominantly a thing of concern for the poultry farmers as it affects the productivity of the farm and, in some cases, even the survival of the farming business:

"One of the major challenges of poultry farming is poultry diseases, especially the bird flu that is crippling poultry farmers at an enormous cost to the farmer."

RP10

"I have a friend whose mum lost 120,000 birds for lack of information. She did not know bird flu was in the area. She is trying to breakeven after two years; she lost 120,000 birds in Jos East."

RP30

Apart from issues with bird flu on poultry farms, blight disease also affects potatoes production resulting in low yield at the end of the farming season, as highlighted by one of the research participants:

"I have planted potatoes before, and this is the 4th year that potatoes are having blight disease. The government have done absolutely nothing, to even research on what this disease is and how they can get a cure for it."

RP27

Manual labour is available to the farming community, although it is not always affordable. The majority of hired farmworkers work on their farms during the farming season and therefore provide their services on an ad-hoc basis. A minority of the research participants, especially poultry farmers, suggested that the dishonest attitude of some of their workers has had an impact on the productivity of the farm:

"No sincerity, you know in egg production, it is very tempting. When they [workers] pack the eggs for the day, it is usually very much. Sometimes we get 100 crates in a day, and when we started experiencing the drop in production, we wondered whether the outbreak had reoccurred, but it was due to insincerity and greed."

RP22

The insincerity and greed of the workforce go beyond poultry farming. Other research participants also had some issues with their farmworkers:

"When people help you on the farm and particularly when it is far away, you cannot even supervise. Sometimes even the resources that you sent are diverted by the workers, so the yield is further reduced, and then people blame it on the weather or some animals, the monkeys or something."

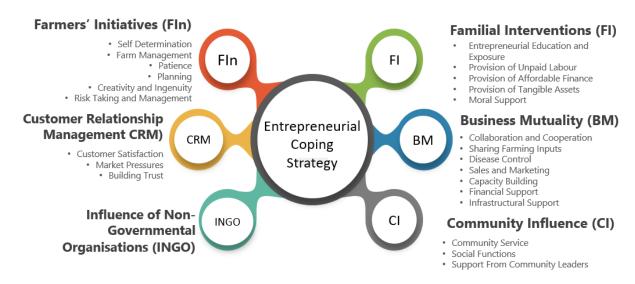
RP26

Dishonest farmworkers discourage farmers from reinvesting some farm proceeds unless they have reliable farm managers to supervise the workers. The majority of the research participants resorted to using close family to manage the farms to mitigate farm produce and farm inputs theft.

6.5 Entrepreneurial Coping Strategy

Given the backdrop of the challenging context that the research participants operate under in Chapter Five, this section explores the process of their everyday entrepreneurial activities and their behaviours within the constrain of available resources and an uncertain business environment.

Figure 6.4: Entrepreneurial Coping Strategy



Source: Author generated

In Chapter Five, the majority of the research participants claimed that they had not achieved some of their expectations at the start of their farming business.

Although the farmers did find job satisfaction in what they do, their views on the context of their everyday entrepreneurial activities reveal a lack of sufficient resources to stay in business and grow or expand the business. Therefore, the entrepreneurial farmer's decision-making process centres on how the entrepreneur can leverage accessible resources from family or local networks to survive before contemplating growth. Business development is a difficult proposition for the entrepreneurial farmer because the reality of the local business environment is expensive, and difficult to access the required resources. The substitution of rational planning with nuanced bespoke approaches becomes apparent to maximise available resources but does not neglect the demanding social responsibility placed on the entrepreneurial farmer by the family and community. Figure 6.4 provides a breakdown of the six coping strategies adopted by the entrepreneurial farmers presented in turn:

6.5.1 Familial Interventions

The family unit is instrumental in exposing the research participants to farming at a very young age. As a family tradition, there is an obligation on every family member to be involved in a farming activity to provide financial or moral support to the farmer. The availability of land or structures to start farming was also crucial to the decision-making process to start, survive in business, and grow the farming business. Table 6.5 shows some of the responses of the research participants on the intervention of family in their farming business:

Table 6.5: Familial Interventions

Familial Interventions	Research Participants' perspective on the interventions of Family in their Farming Business	
Entrepreneurial Education and Exposure	 "Farming is an inheritance from forefathers, and we feel we should continue in it. I will encourage my children to farm because it is an inheritance, and we cannot do without it." (RP11) "I just observed the way our parents' farm even though my father is a civil servant, he is still engaged in farming, so I observed and learned things." (RP24) "I grew up on a farm literally. I grew up where farming was a family preoccupation. Then I used to do it as a chore, then I grew up to love what I was doing." (RP27) "My son can pick a tomato, different from a pepper. He is two years old. Sometimes he tells me, let us go to the farm and see the tomato. He may not be able to pronounce the word very well, but he understands. (RP28) 	

Familial Interventions	Research Participants' perspective on the interventions of Family in their Farming Business
Provision of Unpaid Labour	 "Children are already into it, already participants [] forced labour (laughs)." (RP23) "Well, they [children] have been involved in farming because when we are doing it, they also help by working there on the farm. Every parent would like the family business to continue." (RP05) "Certainly, all my children are part of the workforce on the farm." (RP13)
Provision of Affordable Finance	 "There was money [] at home [from family] to start the poultry farming." (RP14) "I saved part of my National Youth Service Corps (NYSC) allowance, and when I started it, my husband supported me." (RP22)
Provision of Tangible Assets	 "As for our scale at the moment, we pretty much need the land. With land, we are able to do the crop farming then." (RP01) "There was [] space and structures at home [from family] to start the poultry farming." (RP14)
Moral Support	 "The first thing is if we have family in the house, then the family would be there to help." (RP01) "I will ask for help first of all from family members or close friends. My neighbours and other fellow farmers will be willing to help me if they are able to do so." (RP15)

Source: Author

6.5.1.1 Entrepreneurial Education and Exposure

The family unit plays a crucial role in exposing the majority of the research participants to farming. As shown in Table 6.5, there is a knowledge transfer between parents and children on continuing the family farming business as an integral component of the family inheritance. In most cases, such knowledge transfer takes the form of on-the-job training and is an indispensable resource in building a farming enterprise. The power of observation is key to the learning process, as suggested by Research Participant 24 in Table 6.5. More knowledge is caught and assimilated by observing parents' dedication to the farm than can be taught. For the majority of the entrepreneurial farmers, it may have started as an unpleasant chore. However, such grounded training and responsibility at an early age resulted in the launch of their farming business, as claimed by Research Participant 14:

"I have been involved indirectly from childhood. Growing up, my mum used to have farms, and she always had animals in the house, particularly birds."

We also had other domestic animals who also serve as a means of livelihood, like turkey. I grew up in a house where we basically had farm animals. That has fuelled my passion for farming."

RP14

The African tradition emphasises primogeniture, where the first-born child acts as the primary custodian for passing on the family training and skills to the other children. When the first child becomes enthused about farming, it is easier for the younger siblings to emulate them. Traditionally, when it comes to farming, the expectation is that the eldest boy child in the family becomes the custodian of the farming skills to pass on to the younger children. It is, therefore, not surprising that Research Participants 7 and 30 got their exposure and education on the farming business from their elder brothers:

"I have been encouraged and mentored by my elder brother, who was Programme Manager of PADP for many years. So, I more or less copied a lot from him because he is also into farming. [...] I have learned a lot from him."

RP07

"I watched my brothers doing it while I was growing up."

RP30

The farming education that most research participants received from their parents motivated them not only to continue in the farming business but to further pass the knowledge and experience to their children as a continuation of the family tradition:

"With my little son, he is so excited whenever we go behind to feed the rabbits. I think he has picked interest already."

"They [children] do a little hoeing even at six years and five years of age. I think they can identify a number of crops, particularly from the garden."

RP26

The involvement of children in farming operations is crucial for the family business's sustenance and, by extension, the local economy's socio-economic development. The entrepreneurial farmers are fully aware of the reality of operating in a challenging and uncertain business environment. Where resources are scarce or difficult to access, transferring knowledge resources from family to the entrepreneurial farmer influences the farming business's goals and performance. For example, as part of the daily process, after the manual labour of farm work, the entrepreneurial farmers will typically return to their homes. The participants speak of congregating around the cooking pot on charcoal or firewood to recount the day's activities and achievements. Sometimes, game hunted from around the farm is roasted over the fire, and a rather romantic picture is presented of the evening moonlight and the sound of crickets and other nocturnal insects, bats, and owls in the background. At these moments, the family's entrepreneurial tales are usually being told and retold, in a form of learning transference. Family legends of resilience and opportunism, repeated and embellished to reemphasise the necessary entrepreneurial education around the family farming methods, farming seasons, disease or pests' control, and more. The majority of research participants consider such knowledge transfer as part of the legacy they received from their parents to then pass down to the next generation. Another critical resource that the family unit provides to the farming business is the farm workforce, presented in the following section.

6.5.1.2 Provision of Unpaid Labour

The education and exposure that the family get on the farm require their active participation in the farming activities, usually without receiving a direct payment for their services. The provision of accommodation, feeding and other needs of family members is claimed by Research Participant 18 as compensation for the free participation of the family in the family farming business:

"We are living in a house that they [children] do not pay for, and if they have any needs, the needs are paid for, and we tend to be very understanding in that area that payment may not actually have to be made."

RP18

The supply of farm workforce from close family is an essential cost-free resource available to the entrepreneurial farmer. Equally, when the entrepreneurial farmers encounter dishonest workers, and the trust between the farmer and workers no longer exists, the farmer relies on their siblings or children to manage the farm or supervise the farming operations, as expressed by Research Participant 30:

"Two of my brothers are involved, and that is because I actually needed someone in the family for trust purposes."

RP30

The participation of children or other family members on the farm perhaps is a strategic business decision that the entrepreneurial farmer makes to cope with the limited resources available to the farmer. Unpaid labour from family is an existing resource that the farmer has immediately to support the entrepreneurial process. Therefore, the assumption that participation in the farming business is just part of what the family does paints an incomplete picture of the reality within a resource-constrained farming environment.

6.5.1.3 Provision of Affordable Finance

Securing affordable finance is one factor that the research participants highlighted in section 6.4.1 as directly impacting the farm's growth and productivity. Securing credit facilities with high-interest rates impacts the procurement of farm inputs and equipment required in farming operations. As a coping mechanism, a minority of the research participants heavily rely on the intervention of family to provide affordable finance when the alternative from the banks is expensive or difficult to access, as suggested by Research Participant 13:

"There are some of my siblings who are into a cooperative which they can give loans to farmers. So, through them, I was able to get some loans to help me in the business. Because the loan from the bank was more expensive [...] My siblings had to step in to pay back some of the loans I collected."

RP13

Financial support from family is a crucial resource for the resource-constrained entrepreneurial farmer as most farms are not insured. Such support from family further augments the entrepreneurial farmer's savings at the initial stages of the farming operations or when considering further expansion of the farming business, as shown in Table 6.5. In some cases, as claimed by Research Participant 13 above, the family's intervention includes the payment of loan facilities, thereby safeguarding the entrepreneurial farmer from repossession of the farm by the banks or facing an additional financial penalty from defaulting on the payment of the credit facility. Therefore, any failure to pay off the loan could result in the farm business's confiscation or other valuable assets used as collateral to secure the loan.

6.5.1.4 Provision of Tangible Assets

The research participants identified land or structure availability in Chapter Five as a critical resource that the entrepreneurial farmers needed to start their farming business. The available land, in most cases, is part of the ancestral family land, where parents give out portions of the family land to the children to use for crop production as part of their inheritance. For poultry farmers or small livestock farmers, the family's intervention by providing available space or structures within the family house was crucial for the children to start rearing domestic animals for sale. Like the provision of affordable finance, this intervention from the family reduces the cost of production and, by extension, supports the farming business's survival and growth. Figure 6.5 shows an example of farmland for vegetable production and another used for rearing domestic animals.

Figure 6.5: Farmland cultivated for strawberry production and the rearing of domestic animals



Land cultivated for strawberry production



Land for rearing domestic animals

Source: Author's collection (Fieldwork photograph)

The acquisition of more land to expand the business is complicated for a majority of the research participants due to the scarce resources they have to purchase available land to grow the business. The dominant and most reliable source of getting additional land to cultivate for the resource-constrained entrepreneurial farmer is to go back to the family to ask for an additional plot, or plots, of land. This process also brings in its challenges as the family has to balance the need of one family member for additional land against that of other family members, as was the experience of Research Participant 24:

"I tried to acquire land from my own extended family for expansion. I tabled that request, but up till now, I have not gotten a tangible reply for that."

RP24

Urbanisation, citing schools and other social amenities within the local communities, lures some farmers to sell their ancestral lands for the large sum of money they get as compensation for their land. Failure to reinvest the money in purchasing additional farmland in or outside the farmer's community could potentially impact the decision-making process to grow or expand the family farming business.

6.5.1.5 Moral Support

The entrepreneurial farmer relies heavily on close family support to navigate some of the local economy's contextualised difficulties. Decision-making becomes problematic when the entrepreneurial farmer uses scarce financial resources to solve a pressing family need like sponsoring a wedding or purchasing essential farm inputs. In such a scenario, the farmer solicits family help and support first, as the family always comes first before asking other neighbouring farmers for their assistance. Resorting first to the family for important decisions in the entrepreneurial farmer's personal and business life was suggested by Research Participant 13 as ingrained in the African culture:

"Family, in Africa, family first. Sure, my neighbours will be able to help if they can." The farmer receives moral support from family during the low or difficult periods of the farming operations. For example, during a low farm yielding season or when the farm is not producing as expected, the family unit comes together to provide moral support to the farmer by encouraging the farmer to remain resolute and continue to persevere in the farming operations, as illustrated by Research Participant 21:

"When there is a low turnout, or before the farm starts producing, it is usually hard, so I need extra external support from my husband most times for that."

RP21

It is difficult to measure or quantify familial intervention's magnitude on the farmers' everyday entrepreneurial activities. The provision of tangible assets, affordable finance, unpaid labour, moral support, and transfer of knowledge resources from family to farmer shapes the entrepreneurial farmer's decision-making process. Familial intervention is crucial when resources available to the farmer are tightly constrained, and access to more resources within the local economy is difficult.

6.5.2 Business Mutuality

In the previous section, some research participants acknowledged that they could rely on their neighbouring farmers' moral support in the absence of family support. Such support is crucial to the entrepreneurial farmer without governmental interventions in the local economy. Therefore, the farmers' strategic alliances play a pivotal role in farming operations in the community. Table 6.6 groups the support received from other farmers into the following categories: Collaboration and Cooperation, Sharing Farming Inputs, Disease Control, Sales and Marketing, Capacity Building, Financial Support, and Infrastructural Support.

Table 6.6: Business Mutuality as a Coping Strategy

Business Mutuality	Research Participants' perspective on the Business Mutuality that exists within the Farming Communities
Collaboration and Cooperation	 "We try to network with one another; we pick each other's brains some are more experienced, so we exchange views, opinions, and ideas. They are quite helpful." (RP04) "Yes, we do cooperate with other farmers in the sense that in a situation where it is time to work on my farm, they will come and assist me, and when it is time to work on their own farm, I will likewise support them." (RP24)
	• "New people coming in, we tend to advise them on where they can get veterinary doctors, which veterinary doctor we use, who can be helpful [] We tend to collaborate in that way and share the information, which is usually very helpful." (RP01)
Sharing Farming Inputs	 "I borrowed a gas brooder from someone that we have related with. She lent me her brooder, and it was very helpful. There are others too who have borrowed from me." (RP16) "We cooperation with farmers; we meet and share ideas about
	how to go about the business and exchange of seedlings. We do give gifts and moral support. With our good relationship, we can ask for help whenever required." (RP11)
Disease Control	• "In the area of disease on the farms, we exchange ideas, you know, in terms of what your other partner used and what he did not use. Whatever information you have that can be helpful to share with other farmers." (RP06)
	"We also consult when we have diseases, how do we handle it, where do we go, which of the Vets are the best?" (RP19)
Sales and Marketing	 "Those that have a bit of advantage can assist with information and can use their networks to dispose of some of the farm products to their network." (RP10) "I cooperate with other people who raise the same types of birds as me. We exchange notes in raising them, and when it comes to selling, we can also contact each other in one way or the other." (RP14) "Well, we cooperate in terms of when we want to sell our products. We consult to fix prices." (RP19)
Capacity Building	 "I have met a lot of people that are into the rabbit business and even mentored some that even started their rabbit farms in the form of a consultation, but it is usually free to encourage people to keep rabbits, especially in their backyard." (RP15) "Many people who come in here, work and stay for two months, got the idea, and go away. We are very happy with that; you give another person the knowledge you have." (RP23)
Financial Support	 "We also help each other financially. When somebody is in need because it is difficult to get those financial facilities from the government, we help ourselves when there is a requirement to." (RP01) "I would rather say financial help, the borrowing of money from each other and sometimes when they harvest and sell their products, they then pay you back." (RP17)
Infrastructural Support	"We repaired the road to our farm. We constructed the culverts and so on." (RP08)

Source: Author

6.5.2.1 Collaboration and Cooperation

The communal way of living in the local community depends on how farmers interact with one another. Although competition still exists among the entrepreneurial farmers, the resource-constrained business environment fosters a good spirit of collaboration and cooperation among the farmers, particularly in sharing ideas and information. When faced with difficult situations in the farming operations, the farmers learn from other farmers' experiences to make informed decisions on how to deal with their difficult circumstances at a reduced cost, as claimed by Research Participant 02:

"In the area of cooperation, yes, because nobody is an island. Once in a while, one will experience some difficulties, you will have to ask somebody when you experience this, what did you do? How did you go about it? That sharing of idea will help one to achieve results more and to reduce cost."

RP02

The absence of agricultural extension services to advise the farmers creates a void in specialist knowledge on crop and livestock production. A farmer who has successfully grown a particular crop over time becomes an expert in that crop. Other farmers will then rely on the experienced farmer's services on their farms. There is also the exchange of services and skills from one farmer to another, as aptly described by Research Participant 03:

"Collaboration is the way forward for extensive expansion of agricultural ideas. [...] the guys who work for me in planting the strawberries and other things, are from Vom. They are the number one leading guys on strawberries they come and provide services here, but when they need some other things, they come here, and I give them, so cooperation is the way forward."

RP03

Sharing of ideas can be through formal meetings in farming associations or informal interactions among farmers through the use of digital communication platforms:

"In the course of doing this business, sometimes you share your experience, and a farmer could call you and say, hey my sister, my birds are purging, what do I do, how do I manage it? [...] You know a few of us are educated, and we use WhatsApp or email or other social platforms that farmers belong to. So, we share ideas."

RP29

The research participants further collaborate in other ways, for example, by helping out with some of the farm work on other farmers' farms, supervising work done on neighbouring farms, or protecting the farms from the herdsmen's invasion. They also collaborate in the sharing of farm inputs. Also, when it is challenging to pay farmers for the work done on the farm, the farmers agree to work and agree to be paid later, in most cases closer to the Christmas festivities:

"There is a good working relationship with some of them that are nice. Sometimes they help in the farm activities, and we pay them. Sometimes even when we do not have money, when the pressure is much, they will say, okay, we want you to give us our money towards Christmas so that we can buy Christmas things."

RP20

Collaboration also involves pulling resources together to pay for services like hiring a tractor to work on many farms. The effectiveness of the cooperation and collaboration among the farmers can be problematic, as highlighted by research participant 21:

"Well, sometimes it works well. One major challenge is those that you might look up to really do not want to tell you everything about it because I think they have the fear of you growing better or having better output than them, it is a competition."

Competition among entrepreneurial farmers is inevitable as they grow their farm business. However, the challenging resource-constrained context forces the farmers to share ideas and cooperate to maximise the scarce resources available in the local economy to sustain and grow their respective farming businesses.

6.5.2.2 Sharing Farming Inputs

The competition among the farmers does not deter them from sharing ideas and farm inputs to alleviate some of the farmers' problems due to the absence of government support and the scarce resources available in the business environment. The lending of farming inputs to support other farmers happen organically at no extra cost to the receiving farmer. These farming inputs include seeds, generators, and other farming inputs, as highlighted in Table 6.6 and described below by Research Participant 01:

"If there is the need for some sort of irrigation and a friend's generator is not working, then he will just take my generator, fuel it, use it and return it [...] We also do the informal borrowing of equipment if somebody has something that one person needs."

RP01

The sustainable agricultural practices in the farming community described in Chapter Five (5.3.4) facilitate the exchange of farm waste from one farm that becomes essential to another farm. The chicken droppings from the poultry farm are exchanged for the chaff of excess green products like cabbage to feed rabbits, as stated by Research Participant 27:

"I have a greenhouse farm. I have a friend that has a poultry farm, so and we work together closely. I use the chicken droppings that I can get from his poultry farm and apply them on my farm. He has rabbits as well, so when I have the chaff of my green products like my cabbage and the rest, I give it to him to feed his own livestock [...] So that reduces cost for me and reduces cost for him as well."

Sharing farm inputs is necessary to ensure that the lack of available farm inputs does not hinder the entrepreneurial farmers' farm operations.

6.5.2.3 Disease Control

The majority of poultry farmers highlighted that farm diseases affect their farm business's productivity and growth. To control farm diseases, the entrepreneurial farmers rely on their strategic networks to get information on farms that have been affected and practical ways of mitigating or controlling the spread of diseases on the farm. The effect of a farm disease, for instance, in the case of bird flu, can be devastating for the farmers, as suggested by Research Participant 13:

"Bird flu affected me seriously, I had to lose a farm, 300 layers just started laying within three months, so that is about #600,000 (£1116) gone into the drainage, the feeders, all my crates, everything, I had to condemn them so that it does not spread to the next farmer."

RP13

When a farm has a disease infestation, the farmer relies on private veterinarians and consultants or other experienced farmers' disease control measures. The professional advice helps to control the spread of diseases to neighbouring farms. For example, Research Participant 23 provides valuable information and advice on disease control measures to other farmers:

"The gentleman that came in now, he bought seedlings from us, he comes back to us when he has a problem with his plants or infestation of diseases on his farm, or people send me pictures of their diseases or their insects' problems, and I advise them on what to spray."

RP23

Such information sharing among the farmers through their strategic networks helps control the mortality rate of farm animals and plants during seasons of

disease infestations, which are crucially needed in the absence of governmental interventions.

6.5.2.4 Sales and Marketing

As shown in Table 6.6, cooperation among farmers helps in the marketing and sale of farm produce. When a farmer has a customer and cannot meet the demand, they can cascade the information to other farmers to bring in their products on time before the buyer's arrival. This process helps farmers who struggle to have viable outlets to sell their farm produce. The cooperation in marketing and sales further ensures the steady supply of the farm produce to keep reliable customers, as described by Research Participants 21 and 25:

"I have two farmers that I cooperate with, interaction on the market because once you have an order and your produce is not enough, and you call another farmer to supply."

RP21

"Even at the level of marketing too, sometimes we will have eggs, and maybe we do not know the outlets in which we need to sell it out, you could introduce some people by saying that I have customers here, why not bring the eggs, and I will sell it to them."

RP25

Price control is another crucial area where the research participants cooperate to standardise the prices of the farm produce to control price fluctuations and ensure better price value for the farm produce:

"We try to come together and cooperate to have one voice to standardise pricing, but we have not achieved this yet."

RP10

The marketing of the farm produce is usually done by word of mouth through the various strategic alliances built in the farming community. It takes time to build such marketing and sales networks, and these require mutual trust and cooperation among entrepreneurial farmers. When the farmers cooperate

effectively by coordinating their farming operations, they benefit more from the pull of information and resources necessary for the marketing and sale of their farm produce, notably at the right price.

6.5.2.5 Capacity Building

More experienced farmers supply training and mentoring to other farmers to augment the general knowledge and skills required in the farming community. Research Participant 06 claims that the training and support received from experienced farmers is a means of building the necessary skills and experience of the farmers within the farming community:

"In terms of capacity building, some of them do send their staff for training, we do send our own staff to go and train also...We build each other, and we would learn from one another we come together, and then we exchange ideas."

RP06

As highlighted in Table 6.6, the capacity building could start from free consultations on the viability of farming a particular crop or livestock, sometimes at a small scale in the back garden. It can then take the form of mentoring and job training where farmers send their farmworkers to spend some time on a particular farm to learn a particular method or strategy to then bring it back and apply it on the other farm. The free sharing of information and knowledge facilitates introducing a new or improved variety of seeds or modern farming methods like greenhouse farming.

6.5.2.6 Financial Support

Securing affordable finance was identified in Section 6.4.1 as one of the factors affecting farm productivity and growth. In Table 6.6, farmers can mitigate this problem by providing affordable loan facilities to other farmers. Equally, as suggested by Research Participant 30, the entrepreneurial farmers give out loans to other farmers to help with the maintenance of the farm and the purchase of vital farm inputs:

"Most times, they ask for a loan, especially when it comes to the maintenance of the farm. They usually will not have a problem with the seedling or space. They usually have a problem with maintaining their farms: buying chemicals that they need, buying fertiliser, paying labourers, hiring tractors, they usually have a problem with that."

RP30

Research Participant 20 claims that the loan facilities given out to farmers may not necessarily be in cash, but in the loaning out of farm equipment to use with payment made at the end of harvest season after the sale of farm produce to use the money to pay for the use of the farm equipment:

"Sometimes when they do not have and are pressurised by the farming activities, particularly, tractor services, sometimes you give them a loan [make use of the tractor], and you say at the end of the harvest you payback."

RP20

Securing loan facilities in a resource-constrained context is usually tricky with high-interest rates. The collateral facilities that the farmers have may not be sufficient to guarantee the loan facility. Therefore, the financial support that the farmers receive from other farmers in the community is vital for the sustenance of the farm operations, farm productivity and growth.

6.5.2.7 Infrastructural Support

The availability of infrastructure to help with farming operations is a challenge for most rural Nigerian farmers. When the government fails to provide such facilities, farmers find it difficult to access their farms during heavy rainy months. Lack of adequate road access to the farms, drainage issues, and lack of reliable electricity from the national grid increases production costs. Research Participant 05 claimed that he repaired the road leading to his farm and constructed drainages, helping other farmers get to their farms, as shown in Table 6.6. Similarly, Research Participant 05 brought electricity from the national grid to the farm area:

"We are the first to take the light [electricity] to the area the people are using [...] That keeps the relationship fine."

RP05

The provision of infrastructural facilities such as roads is capital-intensive. Farmers rely on the government to provide such facilities. When the government cannot do so, it is difficult for the farmers to get to their farms and particularly difficult to move their farm produce from the farms to the markets. An example of a poor road network leading to a large farm is provided in Figure 6.6. The farmers have to carry their harvested farm produce on motorcycles or bicycles or on their heads to the main road where the trucks will be parked. The local community welcomes the construction and provision of quality infrastructure such as motorable roads, which also benefits the wider community.

Figure 6.6: Poor road network



Main road into the farm areas

Connecting road into some of the farmlands

Source: Author's collection (Fieldwork photograph)

6.5.3 Community Influence

The entrepreneurial farmers live within close-knit communities where the strategic relationships between the farmers and the community play a crucial role in the farming business's sustenance and socio-economic development of the local business area. The entrepreneurial farmers' responsibilities and service to the community are closely intertwined, as highlighted in Table 6.7. Specifically, the farmers have assumed responsibility for providing food and employment to their local communities, attending social functions, and soliciting local community leaders' support as an essential component of their entrepreneurial process.

Table 6.7 - Community Influence as a Coping Strategy

Community Influence	Research Participants' perspect Community in the Entrepreneu	
Community Service	 "They are so happy over the little improvements of the road. There was a time that we took a bulldozer to work on the uprooting of the big trees, and we made sure that it also worked on the laterite road and the dam. The Fulanis there; they are so excited. They have a good source of water year-round." (RP08) "Life goes on with neighbours and people who really come even from areas you do not know and are crying that they do not have food. What we do a lot of times is to keep some bags for those who people who may come, and we share it with them." (RP18) "Most of us are from the same community going to farm in the same community. Our farms are in the same area. There are few outsiders though. Basically, it is a community life, we share a lot together." (RP26) 	
Social Functions	 "Here in Nigeria, or rather here in Plateau State, you cannot be an island to yourself. We interact very well with neighbours, [] So, whenever there is a funeral or a wedding, or whatever we do attend." (RP07) "Yes, we socialise. If your neighbour is having such an occasion, we all converge to celebrate with him. In the same vein, if there is any misfortune that befalls any of us, we put our heads together and to see how we can assist." (RP09) 	
Support from Community Leaders	Positive We try to put heads together with community leaders and other farmers to find solutions to challenges that we face as farmers." (RP10) "Community leaders are always supportive [] The biggest support they give you is security." (RP27)	Negative • "We get on well, but they can connive or encourage your staff to steal things to then sell to them at lower prices, unfortunately. That happens, [laughs]." (RP16)

Source: Author

As shown in Table 6.7, the research participants see their farming business serve the community where they provide some of their farm produce or make financial contributions during the community's social functions. Community life is enhanced because most entrepreneurial farmers come from and live in the same community and feel obliged to contribute to their socio-economic needs. The influence of the community on the entrepreneurial process is presented in the following sections:

6.5.3.1. Community Service

Community service is at the centre of the business planning process for some research participants. Starting the farming business includes an objective to provide for some of the community's needs. These could be providing food, caring for the less privileged in the community, creating jobs, and, as shown in Table 6.7, the repair or provision of infrastructural facilities. Serving the community becomes more relevant in the absence of governmental interventions in providing necessary infrastructural facilities and social amenities in rural communities. For example, Research Participant 12 reminds his workers of the importance of community service in the pursuit of the commercial goal of the business:

"My farm started as a result of a passion for it and to serve the community. So, most of the things I produce, I make them available to people in my community. I tell my workers anything we do here is, first of all, service to the community before selling it out. So, if people in the community want something from the farm, they should be able to get it, not just selling the farm produce outside the community."

RP12

The provision of critical resources by the farmers to their local communities is seen by research participants 19 and 28 as an integral part of the African tradition:

"Mostly in African tradition, you do not see a brother suffering, and you just neglect him. Our culture teaches us to be our brother's keeper, so that dimension we do."

"If you tell me as a farmer that it is actually bad economically to give away your farming produce for free, but in Africa, you cannot run away from that [...] Most of these farms have to exist within a particular community."

RP28

These proactive reaching out and providing support to the farming community members help the farmers cope with their resource-constrained business environment challenges. The majority of the research participants extend the African tradition beyond the farming business to provide life skills training opportunities to their local community, as claimed by Research Participant 30:

"For the women, we do more of empowering them to bake, do other soft skills, and for the young girls, we try to do other training, like video, photography, computer coding and a whole lot of stuff."

RP30

In contrast, research participant 20 argued that some farmers are abusing the generosity of farmers in their community:

"The farmers that are here, some of them have actually abused the privileges that I have given them, to the extent that they would rather have the services for free. I had to buy the fuel and do the cultivation for them at no cost. I said that is not possible. If you want my assistance, buy the diesel, I will do the land cultivation for you."

RP20

Whilst the abuse of farmers' generosity was only mentioned by Research Participant 20, such behaviour, if prevalent, can affect the strategic alliances required within the farming community to exchange ideas, share farm inputs, and transfer knowledge from one farm to another. Any assistance given by a farmer to other farmers within the community must not adversely impact the farmer's business's productivity and growth.

6.5.3.2. Social Functions

Attendance at social events builds trust and enforces the spirit of cooperation within the community. When a farmer has a wedding or occasion to celebrate, the farmer sends invitations to other farmers who generally contribute food items, money, and other resources to the celebrant. Such generosity is part of living in an African farming community, as suggested by Research Participants 01 and 10:

"We live like a community, [...] if people have events like: wedding, naming ceremony, [...] you try to make sure you attend. That increases the burden of trust, confidence-building and a number of things."

RP01

"In our African context, it is almost by default that we party together when there is a wedding in the community you attend and be a part of and vice versa, and others attend your own parties when you organise it. We usually give some of our products like chicken to neighbours to assist them during celebrations like their children birthdays."

RP10

Hence, the communal way of living influences a sense of togetherness among farmers. The generous contributions that the farmers received during big occasions and celebrations reduce the disbursement of scarce resources needed in the farming operations. Equally, farmers undergoing bereavement received financial and moral support from other farmers. Such interactions help to foster a stronger collaborative working relationship among the farmers and their families. Perhaps, the attendance at social functions and the interaction among the farmers' children help to build a more robust and successful network, as suggested by Research Participant 14:

"We sit together, we talk, we watch our children play together, we support one another in terms of income too, during big occasions like weddings, burials, we live in a community, so we network successfully."

RP14

Although some research participants never received an invitation to attend social functions, as claimed by research participant 08, they still support the farmers as part of their contribution to the community:

"But they have never invited us for any of their social functions, but definitely when they do, we will respond accordingly. But we do also respond either by giving them something little also to help them [laughs]."

RP08

Again, the findings reinforce the community's influence in supporting the entrepreneurial process by building trust among the farmers and providing crucial resources that influence the entrepreneurial farmers' decision-making processes. The culture encourages lavish spending during special social events like weddings. The farming community's contribution to these social functions reduces the celebrating farmers' burden to use more of the scarce resources required in their farming operations.

6.5.3.3. Support from Community Leaders

The support the farmers receive from their community leaders paints a mixed picture of the two-way relationship with local leaders. There is evidence of a collaborative relationship between the community leaders and farmers in finding solutions to mitigate the community's challenges. In contrast, as shown in Table 6.7, some leaders plot with farmworkers to steal some of the farm produce. Nevertheless, there is an expectation to secure community leaders' support before venturing into a farming business, especially if a farmer is not an indigene of the community.

The experiences of Research Participants 08 and 31 suggest that an excellent collaborative working relationship between the farmers and their community leaders is beneficial to the farmers' business operations in the community. The farmers, in return, give their local community leaders gifts in appreciation of their support:

"Even the local chief there, most of the time we pay homage to him you know just to appreciate him [laughs] either from the harvest we just give him a gift, since our moving into that place, life has changed for the people there, most of them were not into the type of crops that we are farming, so they all picked up, particularly maize."

RP08

"Anything that you are dealing with the community does not make a mistake to just go in like that, let the traditional rulers know so that if you ran into a problem, you could report back to them."

RP31

The collaborative relationship between the farmers and their local community leaders helps find reasonable solutions that benefit the entire community either in providing job opportunities, security, or the resolution of disputes within the farming communities.

The farmers depend on family intervention, strategic alliances, and the community's influence to start and grow their farming business. We have seen the entrepreneurial farmers' measures to navigate the challenging everyday entrepreneurial context described in Chapter Five. The next section presents some of the personal initiatives that the farmers use to cope with the challenging context of their everyday entrepreneurial activities.

6.5.4 Farmers Initiatives

Previously in this chapter, we have seen how the entrepreneurial farmers could navigate the challenging context of their everyday entrepreneurial activities through family intervention, reliance on strategic alliances, and community influence in their decision-making processes. Through these interventions, the farmers have demonstrated their resilience in dealing with limited available resources within their local business environments to start and grow their farm businesses. The entrepreneurial farmers exhibit some personal skills and farming approaches to cope with the challenges associated with their everyday entrepreneurial activities. Table 6.8 highlights some of the farmers' initiatives to cope with the problematic context of their everyday entrepreneurial process:

Table 6.8 - Farmers Initiative as a Coping Strategy

Farmers Initiative	Research Participants' description of the initiatives they take in response to the challenges of their everyday entrepreneurial process
Self Determination	 "We cope because we made up our minds to be farmers, and we cannot do without it." (RP11) "For some of us, we have managed to keep on. We have refused to give up even though it has come at a cost." (RP17) "But what keeps us going is that you are looking at the future. Generally, you have to make a lot of sacrifices, you have to drive an old car, you cannot change your clothes []" (RP16)
Farm Management	 "Because of the Fulani (herdsmen) challenges, we do not do open grazing. We do intensive feeding/fattening (of the rams) ourselves." (RP06) "So, after using the limited resources that we have, we now start the nursey outside so that by the time we are eliminating the old plants, we can reintroduce the new ones to replace." (RP21). "Try to minimise loss by picking out birds that are not laying eggs or are unproductive quickly and selling them to minimise cost on feeds." (RP10)
Patience	"The building has been attacked by Mareks, and we have to leave it for some time before we can start poultry again, then we went into piggery (RP18)
Planning	 Proper planning reduces the risk of everything. You cannot have everything at every time, so you will need to plan properly. Then your forecast, you make provisions in advance of what you need [] You need to know how to manage your resources." (RP12) "In 2013, I started at Kuru not so far from our house, I used zinc structure with 50 birds, then 100, then 200 and then 300. 300 is the maximum that I kept at home." (RP22)
Creativity	 "As you can see, instead of importing metal greenhouses, I do it locally, in other words, it is bush poles and timber. This is my design as well. It is called the gothic type of greenhouse." (RP23) "I will go to the market, buy a few pack bags. At the time, I did not even know about sealers; I used to use candles and brooms to improvise my sealing methods. I will bend the broom into the candle and use the wax to seal the bags." (RP30)
Risk-Taking and Management	"At the moment, yes, because my fingers have been burnt in the past, so I am more careful in terms of sinking any money, especially that we are not very big, and every resource really counts." (RP01)
	 "Well, you take a calculated risk. At least you do some background checks of feasibility and viability. You can weigh the opportunity and risk before making a decision to pursue the opportunity." (RP04)
	"For good planning, one will not take the whole of his capital and put it in such a business. There should be something that should serve as a buffer when it fails that one can fall back on." (RP18)

Source: Author

The following sections will present the impact of the farmers' initiatives on their entrepreneurial process.

6.5.4.1 Self Determination

The myriad challenges of the context of the entrepreneurial farmers' everyday entrepreneurial activities do not deter them. They demonstrate a firm mental resolve to persevere with their farming operations, sometimes at a high cost to their business and family, as shown in Table 6.8. Although active engagement in farming is challenging where resources are tightly constrained, the farmers are determined to provide a better future for their children, as suggested by Research Participants 16 and 23:

"Well, you are just determined. You pull from the little salaries that you are paid; you build on. You do not want your children to suffer in the same way that you have done. So, you make up your mind and say, this is what we have so we can improve on it.

RP16

"We just want to be persistent so that people can see it and go into it [farming] to help our community and our generation."

RP23

The determination comes from the joy and satisfaction that the research participants get from their farming business. Similarly, a good understating of the challenges of farming in a resource-constrained business environment helps the farmers cope with the losses they encounter in their businesses. Research Participant 27 articulates this conundrum below:

"I just love to farm. Before I started farming, I knew that these challenges would come. So, when the challenge comes, you absorb the loss, count your losses, count what you have left, and map out how you can grow out of those challenges."

RP27

As highlighted in Table 6.8, entrepreneurial farmers make daily sacrifices to safeguard their farm business's prospects. The entrepreneurial farmers make sacrifices in their everyday entrepreneurial activities by forfeiting some personal comfort, for example, driving a new car or buying new clothes to save money and

invest in the farming business. The farmers' challenging context of their everyday entrepreneurship breeds ingenuity and introduces new farm approaches. The farm management approaches adopted by the entrepreneurial farmers will be discussed in the following section.

6.5.4.2 Farm Management

Farm management must cut down on waste and ensure that all farm operations are streamlined to keep the scarce resources in the entrepreneurial farmer's hands. This may involve mixed cropping planting of two or more varieties of crops on a piece of land, as shown in Figure 6.7. As shown in Table 6.8, poultry farmers quickly sell birds that are not laying eggs to cut down on the cost of feeds, while crop farmers vary the stages of growing plants to ensure better crop yield.

Figure 6.7: Mixed Vegetable Farm – Scotch Bonet, Bell Peppers and Green Beans



Source: Author's collection (Fieldwork photograph)

A minority of the research participants emphasised that the farm's effective management is to cope with security, disease control, and farm losses. Research

Participant 19 suggested that being a good farm manager necessitates taking precautionary measures to secure the farm against intruders:

"We have been trying to cope as I said, you have to be a very good manager. You need to manage your farm very well, and you need to take precautionary measures. You have to keep your farm secured, very, very important security. You do not allow people to be going in and out of your farm anyhow."

RP19

The demand for the farm equipment outweighs the number of equipment available for the farmers to hire. The research participants adapt their farming operations to cope with this problem. For example, Research Participant 08 decided to start his farming operations earlier than usual by hiring a tractor that was in short supply to work on his rice farm:

"This year, we had to go into the rice farming earlier than last year because if we did not do that, we may not even be able to cultivate the rice farm at all because the demand, the awareness of people going into the farming is overwhelming and government cannot meet up with the few tractors that they have at hand."

RP08

Although the farmers have been able to cope by changing their farming methods to mitigate the impact of the resource-constrained context on their farming operations, this potentially could affect the ability of some of the research participants to launch into large scale production.

6.5.4.3 Patience

Participation in a farming activity is challenging when resources are so tightly constrained. Similarly, the surrounding business environment's challenging characteristics determine the availability and cost of essential farm inputs that the farmers require on their farms. Research Participant 12 claimed that when farmers

apply the virtue of patience in their everyday entrepreneurial processes, it helps them to cope with the many challenges that they face:

"Certainly, I do have challenges; I have had a lot of problems. Sometimes you have to be patient to cope. You cannot solve everything, or things happen overnight. You have to be patient. They say time heals everything."

RP12

After an outbreak of the disease on a farm, as shown in Table 6.8, the farmers have to be patient to suspend their farming operations until the farm has been fumigated and the disease eradicated. If the farmer does not have another income source or land to cultivate during this period, it could be a tough farming season for the affected farmer.

6.5.4.4 Planning

The cooperative relationship among the farmers facilitates sharing of ideas and information on new farming methods and strategies. Even when the farmers as enthused about such new revelations that can potentially transform their farm business, considerable planning goes into the decision-making process to maximise the opportunity with the scarce resources they have at hand. As illustrated by Research Participants 3 and 25 below, this could take the form of staggering the farming operations to ensure that whatever is being introduced works before expanding the farm or introducing different crops or animals on the farm:

"We had to reduce instead of farming like 7 to 8 things at the same time; You reduce to 2 or 3. You grow these three things, and when they are stabilised, and you understand the way to farm them, then you can expand. So that is the way we have grown to manage some of them."

RP03

"In poultry farming, you put them in stages, you do not just say I have 3000 birds, and you put them at once. What normally happens is that you stagger them. Like if supposing you have six months, then you put another one after those six months."

Therefore, planning is critical to entrepreneurial farmers, particularly where resources are tightly constrained, opportunities are limited, and the business environment is perceived to be uncertain.

6.5.4.5 Creativity

The challenging and highly dynamic context of the entrepreneurial farmers' everyday activities demands some creativity and improvisation of farm equipment to cope with difficulties accessing and affording essential farm equipment. The entrepreneurial farmers do fabricate their farm equipment using locally sourced materials as described by Research Participant 21:

"We had to use buckets and bowls to apply water on the plants, which is not efficient because you either over apply or under apply water. So, for me, because I could not afford the drip system, I had to improvise. I fabricated my own drip system."

RP21

Figure 6.8 is a locally fabricated rice and 'acha' (fonio) threshing mill that an entrepreneurial farmer uses on his farm but also hires out to other farmers at a discounted rate.

Figure 6.8 Rice and Acha Mill



Source: Author's collection (Fieldwork photograph)

Fabrication of farm equipment is more sustainable for the farmers as the imported alternative is usually too expensive for most farmers to acquire. For example, Research Participant 27 was able to construct his greenhouse using locally available materials from the information he got on the internet, cutting the cost of the construction of the greenhouse by more than half:

"So, the first thing I did was to spend some money, to go online to watch videos on how to construct a greenhouse myself [...] I just downloaded videos on YouTube, then I went to the market to buy galvanised tubes and then constructed everything with my own hands. It reduced the cost of construction by more than half."

RP27

Figure 6.9 shows a properly made greenhouse constructed with good quality materials and, therefore, did not get damaged by the heavy rainfall and wind.

Conversely, Figure 6.10 was an attempt to fabricate a greenhouse using poor locally sourced materials that got damaged under heavy rainfall.

Figure 6.9 Good quality Greenhouse



Source: Author's collection (Fieldwork photograph)

Figure 6.10 Poorly constructed Greenhouse



Source: Author's collection (Fieldwork photograph)

In Table 6.8, Research Participant 31 used locally sourced materials such as cassava flour as sealants for her processed farm products, making do with what was available at hand. These creative fabrications and methods are crucial for the farmers to navigate their everyday entrepreneurial activities' challenging context. Risk-taking and management are presented in the following section.

6.5.4.6 Risk-Taking and Management

Chapter Five describes the entrepreneurial farmers' disparate evolving entrepreneurial context that creates a challenge for pursuing and maximising business opportunities. The resource-constrained farmers exploit opportunities in the local economy not by choice but by business necessity to maximise available resources and possibilities as they emerge. Because resources are tightly constrained, research participants are risk-averse when pursuing new business opportunities. They take calculated risks to survive and grow their farming

businesses, weighing all available options before investing their scarce resources in the business. When it comes to pursuing local business opportunities, most research participants are cautious, as articulated by Research Participants 02 and 14:

"I will play safe in the sense that I will put in what even if it did not turn out well, I am still stable. When it works out well, I now put in more. Because as I said earlier, farming is a risk, so it is always good to play safe."

RP02

"It always comes down to funds. It is important that you weigh options carefully. While we would love to go in and make the profit, we also need to be careful that we do not sink completely all our resources."

RP14

The difficulty in securing affordable business finances forces the entrepreneurial farmers to consider what they can afford to lose before starting or evolving their farm business. This may result in the sale of valuable assets, as was the experience of research participant 28:

"Funding is very difficult to come by. I had to sell one of my cars at some point to be able to raise funds. So, you have to be very careful if you are going into a new business. I know of some people who have sold a lot to survive."

RP28

Affordable loss consideration also involves the limiting of the size of the farm or farming activity as a means of managing the risk to the farming business:

"I try to limit the size of the farm that I will cultivate and the number of bags that I will use as seeds to manageable levels so that I do not lose much."

"Farming is what I always like doing, but also a source of income. So, you do not want to go in putting all your income, and then at the end of it, you are left stranded. So, the usual thing is to start small, test it in a very low and small scale so that even if it goes bad, it will not completely take you to your knee."

RP27

Contrary to the risk aversiveness demonstrated by most research participants, research participant 31 claims that he can take a risk in the pursuit of business opportunities by relying on insurance cover:

"Well, you see, we are supposed to insure some of these things; people like us, we take a risk. If you really want to progress, you should learn to take the risk, but that is why insurance is supposed to be there to cushion the effect of the risk [...] Innovations do not just happen like that, they have to be tested, somebody has to take the risk to get it through especially if you are a professional."

RP31

Therefore, whether insurance cover can be secured or not, as demonstrated by most research participants, where resources are tightly constrained, the entrepreneurial farmers are cautious in pursuing and exploiting business opportunities to control the farm business risks. It would also be beneficial for the entrepreneurial farmers to study other established businesses or embark on personal research about the business opportunity before venturing into the business as an essential element of their risk-taking and management strategy.

6.5.5 Customer Relationship Management

Having reliable customers to buy the farm produce is vital to the farmers at the end of the farming season. The absence of adequate storage facilities and the

processing of raw farm produce creates an excess supply of farm produce during the harvesting season. The entrepreneurial farmers rely on excellent relationships with their customers to ensure that their farm produce reaches the market and sells at reasonable prices. Building trust with customers helps to mitigate market pressures and ultimately secure the continuous patronage of farm produce. Failure to have good and reliable customers could impact the survival and growth of the farming business. Table 6.9 outlines the experiences of the farmers in the business relationships that they have with their customers:

Table 6.9: Customer Relationship Management as a Coping Strategy

Customer Relationship Management	Research Participants' description of their Customer Relationships Management as a Coping Strategy of the Farmer in the Business
Customer Satisfaction	 "Well, we are getting on well. When the product is there, we do have good patronage." (RP09) "You will need to satisfy the customers, so as a farmer, you have to be patient with the customers sometimes because you cannot eat all that you produce." (RP12) "What has helped us so far is the consistency in the business that we do. Most times is the one-on-one relationship that we have with our customers." (RP30)
Market Pressures	 "There are some that we get on well. Some are fair-weather customers. The customers we categorise them into two. So, we have some people that even when there is an egg glut, they still come and pick the eggs. While there are people who will not." (RP25) "We do not have so much as a challenge to sell our products except, of course, when you have seasons towards the end of the raining season where the traditional irrigation has started, and then you discover that a lot of local tomatoes are available in the market. So, some of the people or hotels who are your basic clients would now, at that point, switch back to the open market." (RP28)
Building Trust	"In fact, I have one customer that normally buys and transports the eggs to Abuja. That one is more reliable. That customer, sometimes if I run short of money for feeds, I will ask him to give me a loan, then he will come and pack eggs without paying at least from the money he has given in advance, and it has been helpful." (RP22)

Source: Author

Ensuring that the customers are satisfied with the farm produce is the responsibility of the farmer. Building trust between the farmer and the customer is necessary for the successful sale of the farm produce. However, the farmer and

customer relationship get tested by the market pressures where prices are not standardised. The middleman dictates the farm produce's movement and sale, usually at the disadvantage of the farmers. These points are further presented in the following sections.

6.5.5.1 Customer Satisfaction

Maintaining a close and good relationship with the customer is crucial to purchase the farm produce. A good customer relationship secures patronage of farm produce and facilitates the sale of farm produce either on the farm or when taken to the market. Farmers who have gained the trust of their customers are not, in most cases, affected by the fluctuating market prices for farm produce, as suggested by the majority of the research participants:

"For egg production, there were customers we kept. Actually, they came to the farm and bought, and they will tell you, do not fail us, and we tried not to fail them, so while the business lasted, it was a good time with my customers."

RP18

They [customers] will arrange or ask my daughter to take the products to the market at whatever price they will buy. Because they know what I am giving them is properly processed and of good quality."

RP20

However, developing a strong customer relationship takes time to build. A suitable feedback mechanism ensures that the farmer can understand and satisfy some of the needs of the customer, as suggested by research participant 15:

"I think I have improved a lot. When we started, we did not really understand how to satisfy the needs of the customer. But, from the feedback we get, we now know, and people really enjoy what we serve, both the life rabbits and the one that is prepared, ready to eat. Quite positive feedback."

RP15

Some research participants have only an exigency business relationship with their customers. When the demands or needs of the customer are met, the relationship is cordial. However, outside of that, there seems to be no favourable relationship, as suggested by Research Participant 17:

"[Sighs] My customers, it is kind of exigency relationship when you have products or goods, fine. If you do not have products or goods, that is all. They do not come to support you in anything that you are doing."

RP17

In highly dynamic and uncertain market conditions, the farmer finds it difficult to meet future customers' demands and assumptions. However, through local social networks and other strategic alliances, the farmer can identify, secure, and maintain a good relationship with key customers to ensure that the farm produce is sold reasonably. This relationship sometimes is tested by some market pressures to be presented below.

6.5.5.2 Market Pressures

The importance of having credible and reliable customers cannot be overemphasised, especially in highly dynamic and uncertain market conditions. Such market pressures affect the customers who may not have the required finances to buy the farm produce. Farmers are also affected by market pressures. Some farmers sell their farm produce to the customer on credit to assist them, but the risk is not getting their money or farm produce back. Research Participant 21 claims that a strategy to cope with such market pressures from experience is to receive payment first before supplying the farm produce to the customer is given the farm produce:

"Well, some come and buy a few kilos of what they want, some place orders to make supply elsewhere. What I grew to learn is that they have to pay before you supply; else, you run the risk of losing your goods and money, which has happened to me also [laughs]. I learned the hard way. But the majority of my market comes from other farmers who have high demand."

When supply exceeds demand, it affects the relationship between the farmers and their customers. The customer looks for avenues to buy the farm produce at a lower price, especially if the customer is a wholesaler. Excess farm produce and difficulty in selling the surplus sometimes impacts on relationships built over time, as was the experience of Research Participant 24:

"My customers let me say, the relationship sometimes is cordial, but we usually have a problem when there are too much of the goods in the market. Sometimes you have been doing business with some people and because most of my goods are perishable products when you bring it expecting they will accept it. However, when it is too much in the market, they will sometimes reject you, sometimes treat you in an unfair manner."

RP24

Therefore, it is incumbent on the farmer to build and maintain a good business relationship with the customer to cope with the uncertainty of the highly dynamic market conditions.

6.5.5.3 Building Trust

Farmers who, over time, have identified, secured and regularly maintain a close relationship with their key customers could, as suggested by Research Participant 10, allow their customers to take away farm produce and pay at an arranged date in the future. The mutual trust that exists between the farmer and the customer facilitates such an agreement:

"I have a good relationship with our customers, and I get well with my customers. There is mutual trust in the sense that they can take crates of eggs and pay later in a week or even more."

RP10

Some research participants claim that providing a 'buy now and pay later' option to their customers helps in the farm produce's a quick sale. However, as

highlighted by Research Participant 16, the lack of available money from the sale impacts the purchase of other farm inputs like feeds required in poultry farming:

You have a few that are very faithful, they pick your products and pay the same day, but most of them take a week. The guy we supplied eggs to at Makurdi, we supplied eight days ago, but he has not paid us half the price, so where are we going to buy feed?"

RP16

The sale of farm produce on credit based on trust to some customers is suitable for perishable goods. However, it can expose farmers to risks where the customers cannot pay back the money and cannot return the perishable farm produce that may have already gone bad.

6.5.6 Influence of Non-Governmental Organisations (NGOs) - Charities

Charity organisations, local or international, are commonly known as Non-Governmental Organisations (NGOs) in the local communities. The NGOs include philanthropic individuals or organisations, feed companies, and religious organisations. They provide vital support to the farmers in the absence of the government by creating awareness of the new or improved variety of seeds, farm chemicals like fertilisers, and how to secure affordable finance and market outlets for farm produce. Research Participants 24 and 28 claimed that the NGOs also provide coaching sessions to the farmers to see themselves as entrepreneurs and the farming operation as a viable business:

"We received training from The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) on Irish potatoes farming, so we form a cooperative. GIZ is one international organisation. One of their objectives is to train farmers, enlightening farmers to know that farming is a business."

RP24

"The initiatives that I would like to praise are those of multinational agencies and indigenous foundations. For instance, the Tony Elumelu Foundation is doing a very wonderful job for entrepreneurs. It is not restrictive, and you

can apply as a farmer or tech person [...] I think that model is more sustainable."

RP28

Similarly, poultry feed companies provide training sessions to poultry farmers on the application of feeds to the birds and general farm hygiene and maintenance:

"Most poultry feed companies, yearly they organise farmers forum just to market their own products. So, they will now call farmers together to teach them how to keep their farms clean, the hygiene of the farm, the workers and your birds, and you know, that is just it."

RP29

Religious leaders also play their part in helping farmers cope with the challenging and highly dynamic context of their everyday entrepreneurial activities. The teachings and counsel of religious leaders motivate and encourage the majority of the research participants to remain hopeful, as suggested by research participant 03:

"Whatever idea that you nurse that has a God-given approval, resources will come."

RP03

The services provided by the NGOs and other charity organisations are crucial to the survival and productivity of some farms in the absence of government extension services in the local farming community.

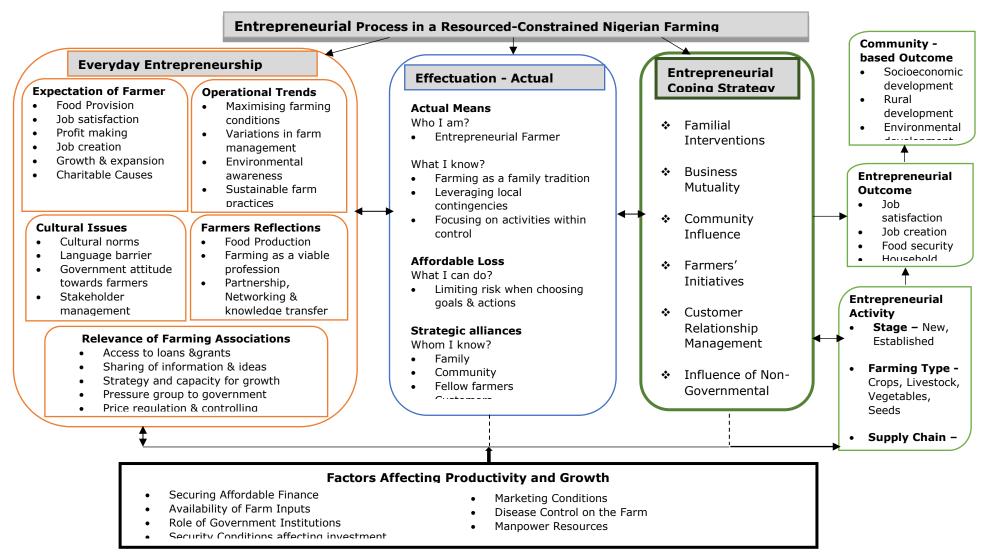
6.6 Research Findings Analytical Map

Entrepreneurial Coping Strategy presented in this chapter is highlighted as a key finding of the thesis. Figure 6.11 emerged from further development of the conceptual model in Figure 3.1, inspired by the empirical aspect of the study. The map combines the findings on the everyday entrepreneurial context in Chapter Five with the entrepreneurial process and behaviour of the entrepreneurial farmers

in Chapter Six to show the practice of entrepreneurship in a resource-constrained Nigerian economy. The outcome of everyday entrepreneurship on the entrepreneur, family and wider community is depicted on the map. Effectuation as an explanatory and analytical construct describes the behaviour of the entrepreneurial farmers and their decision-making logic under conditions of uncertainty (McKelvie et al., 2019). There is generally relatively little research that addresses the coping strategies of entrepreneurial farmers within a resource-constrained and uncertain environment. As a result, research on entrepreneurs' coping strategies "remains fragmented" (Ferreira, Fernandes and Kraus, 2019). For instance, Pathak and Goltz (2021) suggest that "entrepreneurial task characteristics and contextual factors, such as decision autonomy, role centrality, the number of team members, and size of the initial investment, can affect entrepreneurial coping" (p.2). The premise of their study is a recognition of the role of emotional intelligence (EI) as a coping strategy employed by entrepreneurs in dealing with stress-related situations.

Other scholarly contributions in entrepreneurship coping strategy focus on one or two factors. For example, Nguyen, Ngo, and Tran's (2021) quantitative study focus on the impact of the COVID-19 pandemic on the financial performance of companies in Vietnam. Entrepreneurs in Vietnam employ either "growth-focused strategies, or/and cost-cutting strategies" to survive the global economic and social crises. Similarly, Hundera et al. (2020) are quantitative study found that women entrepreneurs in Ethiopia alternate their coping strategies in response to the changing level of "role conflict intensity" with diverse financial or /and nonfinancial impacts on entrepreneurial success. Pathak and Goltz (2021) further recommend combining both cognitive and emotional dimensions entrepreneurship to extend our understanding of the coping processes employed by entrepreneurs to endure stress-related situations. This study explores the entrepreneurial process within a resource-constrained farming community in Nigeria to critically investigate how the farmers cope and navigate their challenging resource-constrained context. The emotional competency model of coping proposed by Pathak and Goltz (2021) has adaptability, flexibility, acceptability and optimism as its key attributes.

Figure 6.11 Research Findings Analytical Map



The importance of entrepreneurs' mental and physical well-being and their ability to endure stressful situations cannot be neglected. However, the entrepreneurial farmers in this study navigate complex and challenging contexts in their everyday entrepreneurship to start, survive and grow their farming business. As such, the social, cultural, operational, environmental, and spatial contexts of the lived experiences of the farmers are relevant to our understanding of the entrepreneurial process within a resource-constrained sub-Saharan local economy. Equally, the entrepreneurial farmers face intense role conflict with their varied demanding responsibilities within the family unit, friendship groups and local community service (Hundera et al., 2020). Thus, maintaining a good work-life balance is a daily challenge due to the drudgery associated with their everyday entrepreneurial activities. Therefore, entrepreneurial farmers employ a more nuanced approach by limiting risk when choosing goals and actions. The farmers focus on activities within their control and leveraging local contingencies to cope with economic and social crises.

It is well documented in prior research on entrepreneurship, particularly effectuation and causation, the importance of understanding the context in which entrepreneurs operate and the role of uncertainty in influencing the decision-making approach in new venture creation (Shirokova et al., 2017). This study responds to the call to consider other antecedents that affect the choice of either effectuation or causation decision reasoning or a combination of the logic where applicable. Also, to further contextualise the environmental factors that may affect the entrepreneurial process (Shirokova et al., 2017; Welter and Smallbone, 2011). Thus, as depicted in Figure 6.11, employing effectuation as an explanatory concept combined with the reality of everyday entrepreneurial contexts and the coping strategies of the entrepreneurs enhances our understanding of the entrepreneurial process of Nigerian entrepreneurial farmers within a resource-constrained farming community.

6.7 Chapter Summary and Conclusion

The challenging and highly dynamic context of the entrepreneurial farmers' business environment has not deterred them from starting and growing their small farming enterprise. This chapter shows that the entrepreneurial farmers resorted

to using the means at hand provided by family and community to make available critical resources required in the farming business. The adopted creative approaches to survive in business and the caution applied when investing in new opportunities were also identified as coping strategies that the entrepreneurial farmers employed in their everyday entrepreneurial process.

The chapter investigated the reasons and motivations that the entrepreneurial farmers had to start their farming businesses. The generation of farming ideas came from the entrepreneurial farmers' experiences whilst growing up in a farming community. Early knowledge and experience in farming make it easy to launch a farming business to continue the family tradition after considering other available business options. The provision of food to sustain the family is an important reason to start the farming business. Equally, the entrepreneurial farmers saw profitmaking out of the farming business as crucial to augmenting the household income and providing quality education to the farmers' children. After retiring from the civil service, farming as a good source of income was highlighted by some research participants as an essential consideration while still in active service. Although only one research participant started his farming business due to unemployment, farming can employ many jobless youths in the local community searching for employment after graduation from university.

Also, most entrepreneurial farmers made do with the available resources at hand to launch their farming enterprise. The majority started with the availability of tangible assets such as ancestral farmlands, providing a crucial cost-free resource to start the farm business. The increasing rural-urban migration by some families to take up jobs in the cities resulted in some of the ancestral farmlands left fallow. Some entrepreneurial farmers took advantage of the situation to acquire more farmland to expand their business. The entrepreneurial farmers suggested that sourcing affordable finance required at the start of their farming business was difficult. Therefore, most entrepreneurial farmers made do with the savings they had in hand to start their farming business. Access to mechanised farming equipment is difficult to procure or hire. Therefore, the entrepreneurial farmers used traditional farm tools like hoes to cultivate their farmlands.

Additionally, in the absence of a reliable supply of essential utilities and infrastructural facilities like water, electricity, and roads, the entrepreneurial farmers invested in their self-generating power plants to pump water from their dug boreholes to water their farms. Self-generation of power required on the farm comes at a high cost to the entrepreneurial farmers. Also, the insecurity around the farming communities brought about by the violent clashes between the farmers and herdsmen impacted the investment decisions at the start of the farming business. Although the entrepreneurial farmers encountered these challenges to acquire the resources, they desperately needed at the start of their farming business, they leveraged the available resources at hand and strategic networks to start or grow their farm business.

Furthermore, the lack of these critical resources affected the growth and productivity of the farming business. The entrepreneurial farmers desperately required adequate farm inputs at the start of their farming business. In most cases, the absence of modern farming inputs leaves the farmers with no option but to resort to traditional farming methods. The entrepreneurial farmers attributed the lack of available farm resources to the absence of strong government involvement in the agricultural sector, impacting finance affordability, quality farm inputs, and farm diseases. The government's failure to provide essential infrastructural facilities directly impacted production costs as the farmers had to provide the electricity, water supply, and roads to the farms. Equally, the farmers must rely on their family and social networks to source affordable finance to procure these essential infrastructures and markets for their farm produce. Marketing farm produce is another big challenge highlighted by entrepreneurial farmers, especially during the harvesting season. The middlemen take full advantage of the unregulated markets and excess supply to haggle down the farm prices to the farmers' disadvantage. The insincerity and greed of the hired workers are detrimental to the farms' income, affecting expansion and growth plans.

Given the many challenges that the entrepreneurial farmers face in their everyday activities on the farm, they adopted many organic and unique methods and approaches to their social, operational, and cultural context. These challenges did not deter the entrepreneurial farmers. Instead, they relied on the generosity of their family unit to shape and define their decision–making processes and make

available resources that the farmers require to start, survive, and grow their farm business. Similarly, the farmers' strategic alliances and business mutuality fostered a good spirit of collaboration and cooperation, resulting in the sharing of vital information, farm inputs, and measures adopted by entrepreneurial farmers to control farm diseases. This collaborative relationship facilitated the farmers in sales and marketing and provided financial and infrastructural support to farmers.

Additionally, the local community's influence was evident in the daily farming operations by providing community services and rendering support to farmers during big social events. The farmers' determination to persist in their farming business was evident in the many creative personal initiatives they brought to their business, ensuring that they only invested their scarce resources in opportunities that they could afford to lose. Maintaining good customer relationship management was also instrumental in selling and marketing farm produce. When supply exceeds demand, customers shop around for cheaper farm produce. The entrepreneurial farmers found services provided by NGOs beneficial to their farm business and relevant in the absence of government extension services.

In this chapter, the farmers' entrepreneurial process is shaped by their determination to make the most of available resources through leverage on their family, community, and other strategic alliances to start, survive in business, and expand the business. Reliance on a deity was also seen as a motivation and inspiration to persevere and hope for scarce resources to become available despite the challenging, highly dynamic resource-constrained context of the farmers' everyday entrepreneurial activities.

CHAPTER SEVEN: DISCUSSION OF RESEARCH FINDINGS

7.1 Introduction

This study has gained unique insight into the everyday entrepreneurial experiences of entrepreneurial farmers in Nigeria. Consequently, Nigerian entrepreneurial farmers can start and grow their businesses by leveraging support and resources in social, family and community-based contexts. These findings are considered in two broad areas: those related to the informative nature of the social and cultural context; and those related to the processes undertaken in interacting with these contexts. Chapters Five and Six presented the themes and core categories which can be constructed from the data.

First, Chapter Five provides an exploration of the research participants' social, operational, and cultural contexts and how this informs their everyday entrepreneurial activities. The myriad of challenging contexts in the farmers' everyday entrepreneurial activities within the resource-constrained context is not considered a deterrent to the entrepreneurs' active engagement in farming. Instead, the farmers' joy in their everyday farming activities laid the foundation to start their small farming enterprises, including the decision-making process to grow or expand the farming business. The entrepreneurial farmers carefully thought through considerations as they navigated the challenging contexts of their everyday entrepreneurial process; for example, a lack of crucial infrastructure limited formal farming education, access to affordable finance and mechanised farming equipment. Being entrepreneurial for these farmers is not necessarily centred on opportunity identification and exploitation but more on negotiating and interacting with the various elements of their contexts to survive in business and contribute to their local communities' socio-economic development.

To complement this exploration of entrepreneurial context(s), Chapter Six provides an account of the entrepreneurial process and the behaviour of the resource-constrained farmers as they navigate the challenges and dynamism presented. As such, the ways in which the entrepreneur interacts with their contextual setting are understood. For instance, family and community provided critical resources required in the farming business. Thus, the entrepreneurial

farmers made do with the available means and adopted creative approaches to start and survive in business. Although caution is usually applied by the farmers when investing in new business opportunities, the lack of available resources and the competing demand of the family and community on the farmer are seen to force them to maximise every available opportunity to survive and grow the farming business. Therefore, the farmers' entrepreneurial process is shaped by their awareness of the challenges in their situation, as they make the most use of available resources and leverage their family, community, and other strategic alliances to start a farming business, survive, and expand. A discursive analysis of these findings in relation to what is known in the extant literature on entrepreneurship context and processes are presented in the following sections. In such a way, the work looks to understand further what it is to be an entrepreneur in a resource-constrained context and how this critically differs from more common conceptualisations of entrepreneurship.

7.2 The Farmers' Everyday Entrepreneurial Process Contexts

As shown in Chapter Five, the context of the research participants' everyday entrepreneurial activities paints a mixed picture. Positively, the analysis shows the farmers' strong perceptions of the favourable climatic farming conditions in Jos, their evident joy in being a farmer, and their contributions to their respective families and local communities. Conversely, the challenging and changing operational trends reflected in the lack of critical available resources for practical entrepreneurship (Ataise et al., 2018; Anderson and Anderson, 2016) and strong governmental support create a challenging environment for the farmers to thrive in their farming business. Additionally, the farmers' desire to send their children to schools outside of the farming community affects the continuation of the family farming business with reduced labour to work on the farms. Many youths do not return to their local communities upon completing their higher education. Instead, they remain in the big cities to find jobs commensurate to their professional training and qualification. A minority of the entrepreneurial farmers lament the disappointing trend of younger members of their communities not returning to the farm after their studies. Instead, they stay in the big cities, 'wasting their time looking for paid jobs.' Some of the farmers initially sponsored their children in pursuit of other professions. With the poor economic conditions across the country,

the preference of the entrepreneurial farmers is to have their children return to the farm instead of roaming the streets in the big cities in search of jobs. The societal expectation places responsibility on the elderly to continue to provide for their extended family. Even with the drudgery of the farming operations and lack of available and affordable farming inputs, the entrepreneurial farmers were seen to persist and persevere in their farming operations to cater for their household and community needs.

The local farming community's cultural norms, working and living standards, and community-centric focus describe the entrepreneurial farmers' rurality. The entrepreneurial farmers operate within a culture that emphasises social connections and creates a supportive environment for entrepreneurs (Laskovia, Shirokova and Morris, 2017). The influence of the diverse and integrated culture on the entrepreneurial process (Murithi, Vershiina & Rodgers, 2019) significantly impacts the decision-making process of entrepreneurial farmers. Scholars such as Welter and Baker (2021) and Anderson, Warren and Benemann (2019) suggested that entrepreneurship occurs within multiple boundaries. Welter (2011) describes these multiple boundaries in four categories: business, social, spatial, and institutional.

Similarly, Gaddefors and Anderson (2019) see entrepreneurship's social, spatial and economic boundaries as rurality descriptors. However, the spatial dimension as a key descriptor of 'rurality' seen in extant literature with a primary focus on the geographical dimensions or remoteness of the location is not a predominant descriptor of rurality in this thesis. Rurality is beyond the location of the entrepreneurial activity but more on the economic and social engagement of the local community as distinct from the business and social environments in the major cities. The entrepreneurial farmers surveyed were seen to feel isolated from the government. They lament the lack of investment in the provision of basic infrastructural facilities, social amenities and agricultural extension services in the rural areas. The poor state of infrastructural facilities, access to affordable finance, and modern farming technology and equipment affects the productivity of the small farming enterprises and further contributes to the rural nature of the farming communities. Perhaps this explains the preference of younger community

members to remain in the big cities with better infrastructure and social amenities instead of returning to the rural areas to continue the family farming tradition.

Interestingly, the researcher observed the presence of Chinese nationals farming within the local community during data collection. The active engagement of the Chinese citizens in the farming community in Nigeria potentially shows the economic viability of a farming business even with the challenging and changing resource-constrained context. So, what is meant by rural in this context is the social and economic circumstances of the entrepreneur, not the geographical place per se. The ability of the entrepreneurial farmers to respond and adapt to the challenging and changing resource-constrained context presented in Chapters Five and Six provides insights into the contexts and processes of everyday entrepreneurial activities within the farming community. Therefore, it is proposed that the context of the everyday entrepreneurial process for the Nigerian entrepreneurial farmer is predominantly influenced by the socio-cultural dimension of rurality and not so much by the institutional, economic, business, or spatial dimensions.

Equally, Sarasvathy's (2001) effectuation approach primarily focuses on expert entrepreneurs' economic considerations and behaviour. In contrast, the socially constructed reality of the entrepreneurial farmers shapes their everyday entrepreneurial process. Thus, the socio-cultural context informs what the individual farmers do. For example, as shown in Section 5.2, the farmers' main priorities are: to provide food to support their extended families, create job opportunities within their local communities, and support charitable causes to address some of the communities' socio-economic needs. Similar to other entrepreneurial studies (e.g., Lent, 2020; Reypens, Bacqs and Milanov, 2021), the study's findings did not reflect the notion of wealth and job creation as the main output of entrepreneurship. Instead, the analysis in Section 5.2 shows that the overwhelming expectation of the farmers is the joy and satisfaction they get in their entrepreneurial farming activities. Profit generation was mainly seen to be instrumental in augmenting the household income and addressing community needs. As such, the farmers' job satisfaction and community expectation change the enterprise's main focus - a shift from the traditional wealth and job creation outcome of entrepreneurship to more of food provision, financial support to family and community, and sustainable farm practices. The premise that entrepreneurship is all about wealth and job creation was further challenged by Welter et al. (2017). They argue that the context in which entrepreneurship happens, including the reasons, purposes and values for why and how it emerges, is an essential consideration in understanding the concept and practice of entrepreneurship.

7.3 The Decision-making Process to Become an Entrepreneurial Farmer

The varied and changing everyday entrepreneurial contexts of the farmers provided in Section 7.2 show a more organic and developmental process of effectuation that explains how enterprises emerge and survive in a sub-Saharan African economy despite a critical lack of resources. The everyday entrepreneurial context and process of the entrepreneurial farmers in this study contrast Shane & Venkataraman's (2000) traditional entrepreneurship approach that connects enterprising individuals with the discovery, evaluation and exploitation of opportunities, including acquiring resources. The 'opportunity-individual nexus' construct presented by Shane & Venkataraman (2000) acknowledges that entrepreneurship is not just the discovery of opportunities by individuals but also the exploitation of opportunities to create a product or service. On the contrary, the construct does not account for detrimental external conditions within a local area, such as poor infrastructural facilities, poor business regulation, and security challenges that influence the decision-making process of the enterprising farmer to start a small farming business. The entrepreneurial farmers do not have the choice or luxury to adequately evaluate the attractiveness of the opportunities around them, develop an entrepreneurial strategy or plan, acquire the needed resources and then exploit the opportunities. The burden on the farmers to provide for the family and the reality of poverty and unemployment in the local community motivates the farmers to start an enterprising farming business or continue the existing family farming business.

Equally, Sarasvathy's (2001) construct of effectuation rooted in economic theory provides a narrative where enterprising individuals acknowledge who they are, their abilities and experiences, and how they leverage their social or professional

networks to create possible effects (Fisher, 2012). The effectuation construct fails to explain in practice the variety of ways that the effectuation processes unfold, specifically where crucial resources are scarce. Sarasvathy's focus on expert entrepreneurs who have access to a range of opportunities within their predictable superfluity of networks does little to explain the entrepreneurial processes within a developing economy with limited resources and a more unstable institutional and market environment. The opportunity construct and effectuation theory provide insight into the entrepreneurial event in Western settings where decision-making logics are presented as a choice in an often-abundant environment (Lingelbach et al., 2015). However, the study's findings and analysis in Chapters Five and Six suggest that effectuation logic dominates when resources are scarce and uncertain future environments. Using effectuation theory as an explanatory mechanism, we can fully investigate the role context plays in determining how an enterprise develops through the configuration of means and contingencies (Read & Sarasvathy, 2005). Becoming an entrepreneurial farmer in a sub-Saharan African resource-constrained context is not about free will but a product of the challenging and changing context of the business environment. As such, the majority of the entrepreneurial farmers learned how to farm from family instruction and entrepreneurial exposure within the local community. Some farmers left the farming community, got educated, and tried other trades or professions, including the civil service, before returning to farming, for some, as a retirement plan.

Similar to extant literature (Jiang & Tornikoski, 2019; Smolka et al., 2018), the study's findings and analysis in Chapter Six highlight uncertainty's role in predicting the entrepreneurial behaviour and subsequent decision-making process of farmers. Audretsch, Kuratko and Link (2015) argue that entrepreneurial behaviour is "context-free" as it happens and can be identified in any organisation, whether small or large. The rationale for engaging in an everyday entrepreneurial activity for the farmers is the conviction that maximising scarce resources within the uncertain business environment is desirable and achievable. The level of uncertainty generally in a farming business is incalculable and impacts the farmer's decision-making process (Leonard et al., 2020). However, the study's findings and analysis in Chapters Five and Six show that uncertainty is never a deterrent but a reason to persevere in the farming operations, given the limited choices available to the entrepreneurial farmers. Adopting effectual reasoning by working with the

means available and relying on family and local community interventions to provide critical resources controls the uncertainty for the farmers. Therefore, an upsurge in response to uncertainty creates more impetus for effectuation.

Studies have shown the tremendous challenges still facing the African continent despite the progress made in recent years (Jayne, Chamberlin & Benfica, 2018; Adam et al., 2017). Notably, food insecurity, low rural incomes, a worsening balance of trade, and poverty are at the centre of the continent's daunting challenges. These challenges resulted in farming as the primary source of employment and livelihood in rural communities (Jayne, Chamberlin & Benfica, 2018; Adam et al., 2017). The rate of unemployment in sub-Saharan Africa is closely associated with poverty. As seen in other Western settings, unemployment can be a catalyst, a sort of entrepreneurial energy for both the entrepreneur and the local community (Gaddefors & Anderson, 2018).

Additionally, Anderson & Lent (2019) claim that rural poverty is a function of distance. The authors identified three types of distance as a function of poverty: physical, social, and economic. However, the challenges and benefits of the rural contexts for the entrepreneurial farmers are more socio-cultural than geographically or structurally inclined. There is no significant physical and social remoteness resulting in poverty in the three local councils in Jos from the research finding and analysis in Chapter Five. The economic distance, especially securing affordable finance to procure farming inputs, impacts the socio-economic conditions within the rural farming communities. The economic conditions influence the decision-making process of the entrepreneurial farmers during start-up and when considering the growth and expansion of the farming business.

The identity and traits of the entrepreneur (see, e.g., Janker, Vesala, & Vesala, 2021; Suvanto, Niemi and Lähdesmäki, 2020) generate much attention in entrepreneurship literature where the lens of the entrepreneurial process is focused more on the entrepreneur. For example, Janker, Vesala, & Vesala (2021) found that farmers are less satisfied with their jobs than small business owners in rural areas. In contrast, most entrepreneurial farmers in this study find job satisfaction simply in their everyday farming activities. Equally, the agency of the entrepreneur in terms of being innovative, a visionary and a risk-taker is a less

critical consideration for the entrepreneurial farmers. Farming is a family tradition for most entrepreneurial farmers and a means of augmenting household income and addressing the local community's needs.

There is little evidence from the data that suggests poverty, unemployment, and uncertainty are the dominant reasons that led individuals within the Nigerian rural communities to become entrepreneurial farmers. Conversely, the data and analysis in Section 6.2 mainly point to the joy of being a farmer, the continuation of family farming tradition and the satisfaction derived from farming activities as the stronger motivations for the individuals to become entrepreneurial farmers.

7.4 Familial Intervention - Agency for Generating Critical Resources

There is an increasing shift in extant entrepreneurship literature, emphasising small and upcoming everyday entrepreneurial enterprises rather than larger, more established, high growth and technology-enabled firms (Steyaert & Katz, 2004; Welter et al., 2017; Kellermanns et al., 2016). This new emphasis is important for sub-Saharan African economies like Nigeria, where everyday entrepreneurship is a constant battle to balance the enterprise's survival and sustainability agenda (Darcy et al., 2014). The study's findings and analysis in Section 6.5 show that when faced with a lack of critical resources to start and grow their businesses, as highlighted in Chapter Five, the farmers resorted to the family unit to provide the critical resources they needed. Thus, the family's obligation is interwoven with the active involvement in entrepreneurial activities in a resource-constrained and uncertain business environment.

The influence of parents and siblings was identified in Section 6.5.1 as one of the reasons and motivations the entrepreneurial farmers had to start their farming business. The generation of farming ideas came from the entrepreneurial farmers' experiences whilst growing up in a farming family. The early knowledge and experience in farming made it easy to launch a farming business to continue the family tradition after considering other available business options. Acquisition of relevant training and practical experience is an important consideration for start-up businesses (Cunningham & McGuire, 2019), particularly from childhood (Jones

& Li, 2017). The entrepreneurial farmers identified good habits such as hard work and doggedness during childhood as instrumental in equipping them with relevant practical experience at the start-up of their farming business. This valuable experience is more than what they would have gained through a formal educational institution.

Studies conducted by Shirokova et al. (2017) and Ilonen, Heinonen and Stenholm (2018) highlighted the role of formal institutions, particularly universities, as an important agency for providing a conducive learning environment for entrepreneurial interventions and knowledge transfer. In contrast, the analysis in Section 6.5.1 shows that the family unit is seen as the principal agency for entrepreneurial intervention and knowledge transfer. The findings and analysis in Section 6.5.1 further show the impact of entrepreneurial education on the behaviour and experience of entrepreneurs (Rauch & Hulsink 2015). It is important to note that entrepreneurial education and exposure are not a choice for the entrepreneurial farmers but an integral component of being a family member and growing up in a local farming community.

Additionally, the social context of the family influences the outcomes of the entrepreneurial process in terms of resource availability. The challenge of resource availability is mitigated by the intervention of family in the entrepreneurial process. As suggested by Jack and Anderson (2002), social embeddedness, being a part of the local structure of the business area, opens local business opportunities and social networks. The analysis in Chapter Six shows that the family unit opens up business opportunities through mentoring and instilling the 'entrepreneurial way of the family' through practical hands-on sessions on the farm and the evaluation of the farming methods at various gateway review points in the farming calendar (e.g., for crop production: ploughing, ridging, sowing, weeding, harvesting). Therefore, the intersection of social systems and interactive effects of close family members (including extended family members and business networks) is crucial in establishing a new business by providing high-quality resources and wider experiences (Jones and Li, 2017) for entrepreneurs to explore.

Unlike previous studies on how entrepreneurs use pre-commitments and strategic alliances to generate resources from external sources to support their new

ventures (e.g., Eyana, Masurel & Paas, 2018; Sarasvathy, 2001), the study's findings and analysis in Chapter Six show the leveraging of resource contingencies as the dominant decision-making logic used by agricultural entrepreneurs in a resource lean environment context. Familial intervention is shown as central to the means available for the entrepreneurs (Dias et al., 2019). This study, therefore, expands on the antecedents of entrepreneurial decision-making logic and responds to the call for more empirical data in a real-life setting to supplement our understanding of the entrepreneurial process in research (Gupta, Chiles & McMullen, 2016), particularly in the context of the agricultural sector (Dias et al., 2019) in an emerging sub-Saharan African economy (Lingelbach et al., 2015; Eyana, Masurel & Paas, 2018).

Similar to Aldrich and Cliff (2003), the analysis in Section 6.5.1 shows the entrepreneurial farmers relying on family for guidance, moral support and future direction of the small farming enterprise. A key area of support that the entrepreneurial farmers receive from the family is access to a wealth of essential resources (Anderson et al., 2005) to start, survive and grow the farming business. Thus, familial intervention substantially contributes to start-up and survival capital when tightly constrained resources are available. The influence of family in the context of sub-Saharan Africa was found to be integrated with much of what an entrepreneurial business entity is and does (Khavul, Burton and Wood, 2009; Ukanwa et al., 2018).

Given the above discussion, familial interventions, therefore, shape the decision-making processes of the agricultural entrepreneurs in a resource-constrained and uncertain environment through the provision of critical resources that the farmers need. As shown in Chapter Six, the entrepreneurial farmers navigate the challenging resource-constrained context by relying on family and their local community to provide tangible assets, affordable finance, free labour, entrepreneurial education and exposure at various stages of the farming operations. Sirmon and Hitt (2003) recommend that smaller or younger entrepreneurial firms with limited competitive resources develop their competencies and find other ways of gaining access to critical resources to compete effectively. The resource-constrained farmers build strategic relationships with other small businesses in their local communities to source locally fabricated

farming tools and equipment in exchange for farm produce or to make payments later, usually after the harvesting season. The critical resources provided by the family and the local community are open-ended, with numerous unspecified alternative likely uses for farm survival and growth (Gaddefors, Korsgaard and Ingstrup, 2020). Therefore, by focusing specifically on the role of family interventions in the farmers' everyday entrepreneurial activities; our understanding of the entrepreneurial process is enriched by viewing the decision-making logic of the entrepreneurial farmers in a tight and specific context, demonstrating that enterprise approaches may not be one of choice, but more directly determined by the characteristics of the immediate surroundings.

7.5 Critical Assets for Business Growth and Productivity

The quality of available resources is crucial for practical entrepreneurship (Ataise et al., 2018; Anderson & Anderson, 2016) and more relevant when resources are tightly constrained. The study's findings and analysis in Chapter Six have shown that the entrepreneurial farmers rely on family and their local community to access critical assets such as land, space, structure and rudimentary farming tools, focusing on the means available within the entrepreneurs' surroundings. Making the most of available means and contingencies as they emerge is consistent with the effectual decision-making approach (Sarasvathy, 2001; Dias et al., 2019). In addition, the family background and local circumstances (context) provide bounded local resources to the entrepreneurial farmers to create value (Gaddefors & Anderson, 2019). The farming experience of the majority of the entrepreneurial farmers began with the availability of tangible assets such as ancestral farmlands, space, or structure within the family house, providing a crucial cost-free resource to start the farm business. However, the increasing rural-urban migration with more younger members of the farming community taking up jobs in the cities resulted in the selling of some ancestral farmlands. The availability of the ancestral farmlands created an opportunity for some entrepreneurial farmers to acquire more farmland to expand their business. In contrast, other farmers relied on their family unit to expand or grow the farm business by acquiring additional land from the family inheritance.

Similarly, the socio-cultural characteristics of the farming community based on communal reciprocity and collaboration facilitate the free flow of critical assets such as farm tools and equipment among farmers. The study's findings and analysis in Chapter Six show the lending of power generators and other equipment to neighbouring farmers free of charge and, in some cases, at a cost to the lending farmer, especially when the equipment gets damaged. A piece of damaged equipment beyond the cost of repairs could potentially delay a farming operation. Whereas the farmer who was loaned the equipment returns to his/her farm, the lending farmer is left with the logistics of repairing the damaged equipment or finding an alternative solution. Before the field study, the researcher expected some monetary fee or charge to be levied when lending farm equipment to cover damages. However, chapter six's findings show that the lending of farm tools and equipment is given free of charge, expecting that the kind gesture will be reciprocated when the need arises. Thus, the notion of entrepreneurs leveraging on strategic alliances, professional networks and connections to improve performance and grow the business, as described by Sarasvathy (2001) and Eyana, Masurel and Paas (2018), is different for the entrepreneurial farmers due to the socio-cultural dimensions and expectations of their local communities.

Maximising opportunities when resources are tightly constrained requires combining the resources at hand (Baker & Nelson, 2015). While extant literature focuses on the external sourcing of critical resources (Sarasvathy, 2001, Read & Sarasvathy, 2005; Sirmon and Hitt, 2003) to support the growth and productivity of an enterprise, the entrepreneurial farmers suggested that sourcing critical assets such as mechanised farming equipment to increase productivity and grow the business is difficult to procure or hire from both national and international sources. Therefore, some entrepreneurial farmers used traditional farm tools and equipment like hoes to cultivate their farmlands and locally fabricated greenhouses for vegetable farming.

The entrepreneurial farmers desperately required adequate farm inputs to start and grow their farm businesses. As shown in Section 6.4, the lack of these critical assets affected the growth and productivity of the farming business. In most cases, the absence of modern farming tools leaves the farmers with no option but to resort to traditional farming methods and tools. Additionally, with the failure of

governmental institutions to provide a reliable supply of essential utilities and infrastructural facilities like water, electricity and roads; the entrepreneurial farmers are left with no other option but to invest in their self-generating power plants to pump water from their dug boreholes to water their farms and the construction of roads to the farms. Self-generated power and the construction of roads and drainage required on the farm come at a high cost to the entrepreneurial farmers.

In most cases, the investment in the provision of critical resources is not an option for the farmer but a necessity to survive and grow the farm business. Therefore, Sarasvathy's (2001) affordable loss as a transactional notion of effectuation where entrepreneurs choose the cheapest alternatives or make investment decisions based on what they can afford or are willing to lose to achieve a particular entrepreneurial activity does not fit the culture of the local farming community. For example, the entrepreneurial farmers provide their boreholes to generate water and self-generating power plants to provide electricity to the farm at a high cost to the business. Infrastructural investment is not the cheapest available alternative to the resource-constrained farmers or a course of action that they are willing to take, but crucial to the survival of the farm business. By pulling resources together and leveraging on their local networks, the entrepreneurial farmers provide insurance cover within the community to survive and grow their businesses without reliable governmental support and credible financial and insurance institutions.

Unlike some studies (e.g., Lent, 2020; Coker et al., 2017) that found gender imbalance in socio-economic status as a limitation to accessing critical resources, this study found no evidence of gender imbalance in accessing critical assets. The tools and characteristics of the effectuation process are different for the entrepreneurial farmers impacting the productivity and growth plans of both male and female farmers. The focus of the entrepreneurial farmers is primarily to keep the community's wheels functioning and further provide a market for the farm produce. Marketing farm produce was seen as a challenge, as shown in Section 6.4.5, especially during the harvesting season. The middlemen take full advantage of the unregulated markets and excess supply to negotiate down the farm prices to the farmers' disadvantage. The insincerity and greed of the middlemen and

market administrators are detrimental to the farms' income, affecting expansion and growth plans.

7.6 Community Influence and Expectations on the Entrepreneur and the Enterprise

The discourse in Section 7.4 shows the intervention of the family and local community as pivotal in the generation of critical resources to the entrepreneurial farmers. The evidence provided by the entrepreneurial farmers in Chapters Five and Six suggests a strong social capital available to the farmers through the local social relationships, social networks and support generated from extended family connections. Although the support from the local community is predominantly stronger at the early stages of the small farming business, nevertheless, the social capital available to the entrepreneurial farmers augments the effects of lack of experience, insufficient financial capital and entrepreneurial education that is required for a successful start-up and subsequent growth of the business. Such social embeddedness in the local community creates business opportunities and networks (Jack & Anderson, 2002) and opens up access to locally bound resources (Korsgaard, Müller and Welter, 2020). Yessoufou, Blok and Omta (2018) suggested that access to locally bounded resources such as cheap labour benefits the farmers and the local community in job creation and poverty reduction. However, the local community expects the farmer to support local communitybased initiatives irrespective of the farm's profitability, impacts on productivity, and future growth plans. The resource-constrained local community is also influencing the farm enterprises by changing the community's behaviour, which in turn changes the behaviour of the farm enterprise. Because the entire community is resource-constrained, the entrepreneurial farmers have to adapt and provide for the needs of the local people in their respective communities. An enterprising farm is not a charity. However, the community expects that it is in the farmers' best interest to engage in the community actively, sell to, and maximise the locally bounded resources in the community.

Equally, the influence of the supportive local networks on the entrepreneurial farmers is the trust and feedback that the farmers receive from their local community, aided by the mantra of common benefit for all people. Interaction

between the entrepreneurial farmers and key selected stakeholders identifies and secures commitments to the business, including 'cocreating' (Sarasvathy, 2008; Sarasvathy et al., 2014) where possible—as such, pulling scarce critical resources together for the benefit of the enterprise and wider community. The primary focus of the majority of the small farming enterprise is not on wealth creation (Lent, 2020, Reypens, Bacqs, Milanov, 2021) but food provision and active participation and support of local community events and functions seen as critical social responsibilities of the entrepreneurial farmers. Community service is thus central to the business planning process, one of the tangible outcomes of the small farming enterprise. As shown in Section 6.5.3, the influence and expectation of the wider community change the enterprise's main focus – a shift from the predominant wealth and job creation to more food provision and financial support to family and community.

The emphasis on food provision and food security for some entrepreneurial farmers goes beyond the local community. The "feeding the nation" agenda motivates the entrepreneurial farmers to continue to farm despite the challenging environmental context and the drudgery of the farming operations outlined in Section 5.3. The resource-constrained context does not deter the farmers from adopting sustainable farm practices, notwithstanding the increased gravitation towards large-scale production. Recycling farm waste to meet some of the community's expectations was evident from the findings and analysis in Section 5.3.4. For example, the entrepreneurial farmers distributed poultry waste free of charge to the community and religious leaders to use on their farms to honour community 'elders'. In turn, community leaders play an important role in supporting farming operations, especially in providing security around the farms and settling disputes between farmers and the wider community. Also, a requirement of being a good 'neighbour' demands supporting those in need, especially the elderly and poorer members of the community who cannot secure fertilisers and other farm inputs. A part of being a good neighbour is to also show respect to other neighbours by not polluting the air or disposing of farm waste out in the open fields. Sustainable farm practices are further seen to manage present resources to sustain and preserve future resources. Adopting sustainable farm practices is more important to the entrepreneurial farmers than the clamour for climate change or meeting the UN sustainable development goals campaigns by the respective national, regional and local governments.

7.7 Business Mutuality within the farming community

Given the many challenges that the entrepreneurial farmers face in their everyday activities on the farm, as shown in Chapter Five, the entrepreneurial farmers adopted many organic and unique methods and approaches to their local contexts presented in Section 7.2. The research findings and analysis in Section 6.5.2 show entrepreneurial farmers' strategic alliances and business mutuality fostering a good spirit of collaboration and cooperation within the farming community. Juma and Sequeira (2017) suggested that a combination of factors in the external environment directly impacts new venture creation and performance. The collaborative relationship among the farming community and the extended family and the wider local community's support resulted in sharing vital information, farm inputs, and effective measures adopted by entrepreneurial farmers to control farm diseases. This collaborative relationship facilitated the entrepreneurial farmers' sale and marketing effectiveness and provided financial and infrastructural support.

Although the entrepreneurial farmers encountered challenges acquiring the critical resources, they desperately needed at the start of their farming business, they leveraged the available resources within their local area. Stakeholder selection and management as a principle of growing available means suggested by Sarasvathy et al. (2014) is different from the entrepreneurial farmers. Whereas the expert entrepreneurs that Sarasvathy et al. (2014) referred to can self-select the stakeholders they require in their businesses from an expanded network, the entrepreneurial farmers mainly rely on their limited social local networks and family to start and grow their farm business. The 'who you know' component of the effectual decision-making construct (Sarasvathy and Drew, 2005) in a resource-constrained and uncertain sub-Saharan African business environment generates a different stakeholder network compared to a Western economy network. For example, the Nigerian rural farming stakeholder network does not have the various experienced business and professional experts available in a British farming stakeholder network. Also, the Nigerian entrepreneurial farmer has

limited access to agricultural grants, insurance cover, and mechanised farming equipment compared to their British counterparts. Building a sustainable and effective stakeholder network for the Nigerian entrepreneurial farmer involves a combination of the entrepreneur's personal capacity to identify stakeholders that can support his/her farming operations within the local community, as well as the ability to source and access additional stakeholder networks if and where necessary or required.

Cele and Wale (2020) argue that the business mindset of South African small business owners is to receive free inputs from Government, including extension services. Such an expectation is similar across sub-Saharan Africa. However, scholars have identified the absence of a credible agricultural policy or programme, infrastructural facilities, agricultural extension services and a lot more from the Nigerian Government as factors impacting the growth and development of the Nigerian agricultural sector (The World Bank, 2019; Sertoglu, Ugural and Bekun, 2017; Ogunmodede, Ogunsanwo, Manyong, 2020; Nwigwe et al. 2009). Furthermore, the entrepreneurial farmers attributed the lack of available farm resources to the absence of strong government involvement in the agricultural sector, impacting finance affordability, quality farm inputs, and the control of farm diseases. Research Participant 17 claimed that the Nigerian Government is irresponsible by not supporting agriculture:

"The Government is talking about people should go back into agriculture, yet they seem to be folding their arms and allow the farmers to do it on their own. We have seen many schemes that never worked in the past, simply because the Government became irresponsible."

RP17

Research Participant 02 argues that the entrepreneurial farmers are left on their own to provide the essential infrastructural facilities that they require on their farms:

"There is practically nothing from Government. The electricity we pay for it, I run a borehole as I do not depend on the local water supply."

(RP02)

The Government's failure to provide essential infrastructural facilities directly impacted production costs. The entrepreneurial farmers had to rely heavily on their family and social networks to source affordable finance to procure these essential infrastructures and markets for their farm produce. Similarly, entrepreneurial farmers combine resources and ideas to provide security and protection around their farms without credible law enforcement institutions in the local area.

The unregulated market conditions were shown in Section 6.4.5 as a barrier to growth and productivity. The lack of effective and competitive markets as a viable outlet for entrepreneurial products and services (Anderson & Lent 2019; Guzman et al., 2020) impacts the business effectiveness of small businesses in sub-Saharan Africa; either in the acquisition of critical farm inputs and equipment or an outlet for farm produce. The entrepreneurial farmers leverage the support from their farming community to mitigate the influence of middlemen in price regulation and secure competitive markets for the farm produce.

7.8 Organic Entrepreneurial Collaboration

The farmers' unique and organic entrepreneurial collaboration in response to their challenging contexts is not a transactional barter process of providing services or products in return for an equivalent, but rather keeping the community turning over in the generation of critical farm resources and markets for farm produce. Instead of competing for access to crucial resources or a greater market share, collaboration replaces competition by sharing scarce resources within the entrepreneurial social networks (Rashid and Ratten, 2021). Furthermore, as suggested by the entrepreneurial farmers in Section 5.6, the approach to farm growth is through building effective partnerships, good collaborative networks, and knowledge transfer of vital information within the farming community, as suggested by Research Participant 11:

"We cooperate with farmers; we meet and share ideas about how to go about the business and exchange of seedlings. We do give gifts and moral support. With our good relationship, we can ask for help whenever required."

Access to relevant and tailored training is an essential technical resource for entrepreneurs in emerging economies (Chifupa & Wale, 2018; Magagula & Tsvakirai, 2020). Farming associations are an important vehicle for training, sharing ideas, capital for growth, knowledge transfer and better cooperation among the farmers. Knowledge transfer and sharing of information within a farming association are done in an advisory way at no cost to the farmers. The associations bring in external consultants, e.g., from seed producing companies, to educate their members about new varieties of seeds or engage the services of feed companies to provide information about best practices in feed application and storage. Figure 7.1 shows samples of high-quality seeds grown and marketed by one of the research participants.

Figure 7.1: High-quality Maize and Rice Seeds



Source: Author's collection (Fieldwork photograph)

In addition, the farming associations bring in local or international researchers, including veterinary consultants, to advise the entrepreneurial farmers on the prevention and spread of farm diseases. Besides the information received from the external consultants, the major knowledge transfer comes from the interactions among the entrepreneurial farmers either through the farming associations or within their local social networks.

An important aspect of the organic entrepreneurial collaboration seen in the thesis data is the everyday mode of living between the male entrepreneurs and their wives or partners in the case of female entrepreneurs. In the interview session with Research Participants 08 and 23, it was apparent from the start of the sessions that the farm business is a joint venture between male and female entrepreneurs. Although the cultural norm that requires the women to be less vocal when men are talking still existed at the beginning of the sessions, when the interview started, it became more of a joint interview with the male farmers constantly consulting with their female counterparts to answer the interview questions. At a point, Research Participant 23 mentioned that his wife is the 'real owner' of the farm, while Research Participant 08 proudly talked about his daughters' efforts on the farm.

Similarly, there was no sense of a gender disparity regarding access to crucial resources mentioned in the sessions with only female entrepreneurial farmers that is materially different from the experiences of the male entrepreneurs. I had an open conversation with the female entrepreneurs, similar to the sessions with the male entrepreneurial farmers. Research Participants 10 and 22 employ and pay their brothers-in-law to manage some aspects of their farm operations. Nevertheless, as Coker et al. (2017) argued, gender imbalance in socio-economic status in Nigeria still limits access to crucial resources for women, especially in rural areas.

There is overwhelming evidence of successful women-led enterprises in the agricultural sector in Africa (see Coker et al., 2017; Ojinta and Halkias, 2019), but still more needs to be done. Given the arguments for the active involvement of women entrepreneurial farmers on their farms and in the local communities, entrepreneurship scholarship still does not fully acknowledge and appreciate the

major role that women entrepreneurs play in the agricultural sector in Africa (Adam et al., 2017). Equally, Smith and Warren (2021) aptly challenged the dominant focus on the 'heroic' male entrepreneur while the wives are ignored even after playing a pivotal role in the establishment and success of the enterprise. The authors recommended a 'deeper understanding of the personal sides of entrepreneurial couples and the long-term financial stability that a steady partnership brings to an entrepreneurial venture'. Other factors affecting the productivity of women entrepreneurs in the agricultural sectors are Microfinance (Duttaa and Banerjeeb: Ukanwa, et al., 2018), Agricultural extension services and marketing limitations (Adam et al., 2017) and more.

By understanding the multiple contexts of the everyday entrepreneurial activities in a resource-constrained sub-Sharan African agricultural community, we are better informed on how the farmers become entrepreneurs. Also, we can identify the processes that the entrepreneurs go through to interact with their context. The whole picture put together paints a unique picture of what is it to be an entrepreneur in a resource-constrained environment. We learn more about the entrepreneurial farmers coping strategies when starved of crucial resources. Instead of giving up, they change the way they do things, altering their processes by understanding the context and adapting to it. The entrepreneurialism of the farmers is rooted in their ability to adapt to their challenging and changing context leveraging on the social capital existing in the closely knitted communities held together by strong ties of 'communal work and shared life experiences (Smith, 2006).

7.9 Chapter Summary

This chapter provides a detailed discussion of the research findings and analysis provided in Chapters Five and Six. The everyday entrepreneurial context and process within a Nigerian farming community were presented using the guiding lens of effectuation theory as an explanatory and analytical concept. The study's findings paint a mixed picture of a challenging and uncertain resource-constrained business environment on the one hand and the adoption of unique and organic approaches by the entrepreneurial farmers to cope with and navigate the changing contexts of their everyday entrepreneurial process.

The theory of effectuation assumes the existence of opportunities within disparate evolving contexts. As a result, entrepreneurs make the most of the available means to start a new venture. Stakeholder engagement and management, including building social networks, are essential to the effectual approach. The study's findings and analysis suggest that the traditional notion of opportunity identification and exploitation as a choice does not fit the lived experiences of the entrepreneurial farmers. Also, the entrepreneur's identity is less considered when resources are tightly constrained. Instead, the changing contexts of everyday entrepreneurship inform what the agricultural entrepreneurs do and the contribution of the small farming enterprise to their families and the wider local community. Employing an effectuation approach as a construct in this study enables us to understand entrepreneurship as an interactional process of how an entrepreneurial farmer (agent) interacts and adapts to the changing resource-constrained context(context), at the same time being influenced by the sociocultural diversity of the local community.

The description of rurality in this study is more on the socio-cultural dimensions of the local area than the geographical, structural, institutional or economic dimensions. Poverty and unemployment are challenging realities in most sub-Saharan African countries. However, the evidence from this study does not show a substantial influence of poverty and unemployment on the decision-making process of becoming an entrepreneurial farmer. Instead, the joy of life as a farmer, continuation of the family farming traditions, provision of food, and supporting community events were some of the reasons and motivations to become an entrepreneurial farmer.

The study's findings and analysis suggest the centrality of familial and community interventions in generating critical assets, including start-up and survival capital. The entrepreneurial farmers rely heavily on family and community connections without governmental support to provide a conducive business environment. The influence and expectations of the community place a responsible on the entrepreneurial farmers to address some of the community needs and adopt sustainable farm practices.

The evident strong social capital within the farming community enables good cooperation and organic entrepreneurial collaboration to make the most of available resources for the common benefit of people in the local community. There is some evidence from the study's findings of the pulling together resources to support community events, including constructing roads and drainage. Although some of the entrepreneurial farmers did not benefit from joining a farming association, the research findings suggest that farming associations are important in knowledge transfer, price regulation, controlling the influence of middlemen, and the lobbying of government institutions to secure crucial farm inputs. In summary, the environmental context fosters collaboration in the farming community through formal and informal networks and partnerships.

The song of the late Nigerian afrobeat musician Fela Kuti 'Suffering and Smiling', takes a different meaning when placed in the context of the experience of the Nigerian entrepreneurial farmers. The song was originally a commentary on the theocracy and brash perspective of the Nigerian religious politicians offering a better future in life after death as an antidote to the present suffering experienced by the poor. On reflection, as a researcher, I had an expectation of how the farmers would behave and operate in a farming business given the difficult and changing business environment contexts. The entrepreneurial farmers challenged my preconceived ideas by their evident joy in what they do and the value they place on family and community, in some cases at the detriment of their farm business' profit-making prospects or survival. The challenging context of the entrepreneurial farmers creates a sort of 'suffering', particularly with the drudgery of the farming operations and lack of crucial resources. However, the farmers are 'smiling' because of the evident job satisfaction in their everyday entrepreneurial activities, including their value to their families and wider local communities.

In the next chapter, the research objectives will be addressed. The study's implications regarding the contributions to knowledge will be presented. The chapter concludes with recommendations for policy, practice and future research considerations.

CHAPTER EIGHT: CONCLUSION AND RECOMMENDATIONS

8.1 Introduction

The overall aim of this study is to explore the context of the everyday entrepreneurial activities of rural farmers in Nigeria and to understand the impact of the context on the farmers' entrepreneurial process. Additionally, the study also aimed to understand the coping strategy of the entrepreneurial farmers as a response to the demands of their everyday context. The Nigerian business and agricultural environments were discussed in Chapter Two, while the study's methodological approach was detailed in Chapter Four. The research findings were presented in Chapters Five and Six, with a critical discussion of the findings offered in Chapter Seven underpinned by the relevant extant literature presented in Chapter Three.

This chapter aims to conclude the research by articulating the contributions made and how the work addresses its objectives. Firstly, the chapter restates the key research findings in Chapters Five and Six by identifying the context of everyday entrepreneurship in a Nigerian farming community and how the context informs the entrepreneur. Equally, the findings also identify the entrepreneur's processes to interact and adapt to this context. Secondly, the chapter addresses each of the individual research objectives outlined in Chapter One. Third, the thesis's original contributions to knowledge and methodology; and implications for theory, policy, and practice are presented. Fourth, recommendations of possible directions for future research were offered. Finally, the thesis concludes with some final thoughts.

8.2 Summary of Key Findings

The original findings of this study, provided in Chapters Five and Six, reveal the context and process of everyday entrepreneurship in a sub-Saharan African farming environment. Chapter Five explores the entrepreneurial farmers' social, operational, and cultural contexts and how this informs their everyday entrepreneurial activities. To complement this exploration of entrepreneurial context(s), Chapter Six provides an account of the entrepreneurial process and the

behaviour of the resource-constrained farmers as they navigate the challenges and dynamism presented within the context which hosts them. As such, how the entrepreneur interacts with their contextual setting is understood. The following sub-sections restate the key findings from the two findings chapters.

8.2.1 The Context of the Entrepreneurial Farmers' Everyday Entrepreneurship

The key research findings derived from the analysis of the challenging and changing context of everyday entrepreneurship for entrepreneurial farmers are summarised below in Figure 8.1. Although the absence of strong government involvement in the agricultural sector, especially in the provision of effective institutions, infrastructure, and farm inputs, affected the effectiveness of the farmers' everyday farming operations, they were not deterred from engaging in their respective farming businesses. The joy and satisfaction that the farmers derive from farming motivate them to start, grow, and expand their farm businesses. Thus, being entrepreneurial for the farmers is not necessarily one of opportunity exploitation and growth but of negotiating and navigating the various elements of their everyday context to add value to their family and the local community. The entrepreneurial farmers are also fortunate to farm in favourable climatic conditions ideal for farming.

Figure 8.1: Summary of Research Findings: Context

- The myriad of challenging contexts in the farmers' everyday entrepreneurial activities are not considered a deterrent to the entrepreneurs' active engagement in farming.
- Being entrepreneurial for these farmers is not necessarily one of opportunity identification and exploitation but more of negotiating and interacting with the various elements of their contexts to survive in business and contribute to their local communities' socio-economic development.
- The entrepreneurial farmers were operating in favourable climatic conditions, ideal for farming.

- There is an inadequate supply of government waste disposal systems or facilities available for the farmers to dispose of their farms' waste, and virtually nothing goes to waste.
- The absence of strong government involvement in the agricultural sector impacts finance affordability, quality farm inputs, and control of farm diseases.
- Formal membership of farming associations is an important vehicle for better cooperation among farmers, including access to vital information and knowledge transfer.
- Being in a different tribal and language group was a barrier to joining formal farming associations to access government subsidies and loans.
- The entrepreneurial farmers perceived the government to have a nonchalant attitude towards the farming community's plight.
- Community leaders play an important role in supporting farming operations, especially in providing security around farms.
- Food production is a priority for entrepreneurial farmers to feed the local community's growing needs.

Source: author generated

8.2.2 The Entrepreneurial Process and Behaviour of the Entrepreneurial Farmers

The farmers' entrepreneurial process is shaped by their determination to make the most of available resources and leverage their family, community, and other strategic local alliances to start, survive in business, and expand the business. The challenging and highly dynamic context of the entrepreneurial farmers' business environment presented in Section 8.2.1 did not deter the farmers from starting and growing their small farming enterprises. Instead, the entrepreneurial farmers resorted to using the means at hand provided by family and community to make available critical resources required in the farming business. They adopted creative coping approaches to survive in business, as outlined in Figure 8.2 below. Although the lack of critical resources (infrastructure, farm tools, farm input, and competitive markets) affected the growth and productivity of the farming business, the strong social embeddedness and business mutuality within the farming community ensured that crucial resources were made available to the farmers at

different stages of the farming operations. The availability of ancestral lands and the support of the family unit were pivotal in the generation of farming ideas and start-up resources.

Figure 8.2: Summary of Research Findings: Process

- Family and community interventions provided critical resources required in the farming business.
- The entrepreneurial farmers' joy in their everyday farming activities laid the foundation to start their small farming enterprises.
- The entrepreneurial farmers use available resources and leverage their family, community, and other local strategic alliances to start a farming business, survive, and expand.
- The caution applied when investing in new opportunities was identified as a coping strategy that the entrepreneurial farmers employed in their everyday entrepreneurial process.
- The generation of farming ideas came from the entrepreneurial farmers' experiences whilst growing up in a farming community.
- Starting a farming business is primarily made possible with the availability of ancestral farmlands and the desire to continue the family farming tradition.
- Profit-making is crucial to augment the household income and provide quality education to the farmers' children.
- Farming is seen as a good retirement plan for some civil servants.
- Access to mechanised farming equipment is difficult to procure or hire.
 Therefore, the entrepreneurial farmers used traditional farm tools like hoes to cultivate their farmlands.
- The entrepreneurial farmers adopt good sustainable practices.
- The lack of critical resources (infrastructure, farm tools and input)
 affected the growth and productivity of the farming business. Some
 entrepreneurial farmers provided infrastructure for their farms and
 neighbouring farms and community.
- Lack of price regulation and the detrimental influence of 'middlemen' impact on expansion and growth plans. Finding competitive markets for farm produce is a challenge.

Source: author generated

The study's findings and analysis show that entrepreneurial farmers navigate their challenging and changing everyday contexts using entrepreneurial processes to start and grow their businesses. Equally, the resource-constrained context forces the farmers to rely heavily on family and community to generate critical assets, including start-up and survival capital, as a coping strategy in the absence of strong governmental support. Subsequently, the influence and expectations of the community place a responsibility on the entrepreneurial farmers to address some of the community needs and adopt sustainable farm practices to protect the environment.

8.3 Addressing Research Objectives

Jos Plateau in North-central Nigeria was chosen to generate rich real-time primary data to address the thesis research objectives. Jos Plateau has favourable climatic conditions ideal for crop production and livestock farming. Agriculture plays an important role in creating jobs, food security and poverty reduction in Jos Plateau (Plateau State Government, 2020). Given that agriculture is central to the socioeconomic development of Plateau State, this study, therefore, sought to identify and examine the entrepreneurial processes of the everyday entrepreneurs engaged in agribusinesses in Jos to understand the process of entrepreneurship within such a narrow context that transcends beyond the job creation, wealth acquisition and welfare argument. The main research goal of the study is to critically investigate how farmers use entrepreneurial processes to navigate a resource-constrained context. Subsequently, the study seeks to address five objectives to paint a whole picture of what it is to be an entrepreneur in a resourceconstrained context. The study's aims have been realised with a summary of how each objective was addressed throughout the thesis, with a summary presented in the following subsections.

8.3.1 Summary of Objective One

The importance of small businesses as agents of socio-economic growth and development at community, regional and national levels was presented in Chapter One. Similarly, entrepreneurship as an indispensable instrument for stimulating

socio-economic growth and development is shaped by and exists in multi-layered contexts. As such, entrepreneurship as a social phenomenon involves people, their lived experiences in their specific social and cultural settings, and their contributions to the local economy (Anderson and Starnawska, 2008, Steyaert and Katz, 2004). The context that entrepreneurship happens in influences the process of entrepreneurship and the resultant outcome. In sub-Saharan Africa, the context of entrepreneurship is especially impacted by the limited availability of supportive resources and uncertain business environments. Against this background, the study's first objective is to explore how micro and small-scale business owners start and sustain their businesses in a resource-constrained context.

Given the challenging and changing resource-constrained context presented throughout the thesis, many factors impacted the entrepreneurial farmers' decision-making process to start and survive in business. Firstly, the findings show the pivotal role of familial intervention starting with the entrepreneurial exposure to farming that the entrepreneurial farmers received from childhood. The exposure comes through relevant hands-on training and practical experience for starting and sustaining a business from childhood (Cunningham & McGuire, 2019; Jones & Li, 2017). Shirokova et al. (2017) suggest that such exposure develops a sense of 'self-awareness, reflection and emotive responses' that requires the entrepreneurs to evaluate their motivation to go into a farming enterprise given the resource-constrained context summarised in Section 8.2.1. The thesis also found that the desire to continue with the family farming tradition influences the decision-making process of individuals from the local community, with some entrepreneurial farmers leaving their other professional jobs in the civil service to return to farming or go into farming as a retirement plan.

Secondly, educational intervention and support come from the farming community by sharing ideas through formal farming associations or informal local social settings. Learning about business creation and survival skills from informal settings such as from family or among friends and peers is suggested by Hulsink and Koek (2014) to be more effective than acquiring these skills through traditional education. Dias et al. (2019) argue for introducing targeted entrepreneurship programmes for farmers, including agricultural students at higher education

institutions, to improve entrepreneurship skills. However, the knowledge transfer through informal local social settings should not be neglected as it offers a practical learning experience for entrepreneurs, as exemplified by the entrepreneurial farmers.

Thirdly, the difficulty in accessing critical resources required at the early stages of the farming business is mitigated through the intervention of family and the local community. Acquisition of critical resources such as affordable finance, infrastructure, farming inputs, farming equipment, and a lot more for the entrepreneurial farmers flows from the farming community's socio-cultural characteristics based on communal reciprocity and collaboration.

Therefore, the thesis provides a better understanding of new venture creation and survival when entrepreneurs are not in the context of plenty of resources. Initial start-up and survival capital are made available through the intervention of family and the local community as part of the everyday entrepreneurship process within a resource-constrained context.

8.3.2 Summary of Objective Two

This study examines the decision-making logic of entrepreneurs in Chapter Three when it comes to identifying and creating a business opportunity. The dynamic nature of the entire entrepreneurial process makes it possible for both effectual and causal reasoning logic to be applied in a given opportunity. Ilonen, Heinonen and Stenholm (2018) suggest a hybrid approach that combines both approaches concurrently or independently without accepting any of the two decision-making logics. Effectuation assumes that a range of opportunities exists before discovery by the entrepreneur (Sarasvathy, 2001; Shirokova et al., 2017). Objective Two explores the factors that influence effectuation processes of entrepreneurs as they engage in entrepreneurial decision-making.

This study's findings reveal that Shane and Venkataraman's (2000) notion of opportunity identification, evaluation and exploitation is not a choice for the everyday entrepreneurial farmers. The entrepreneurial farmers do not have the choice or luxury to adequately evaluate the attractiveness of the opportunities

around them, develop an entrepreneurial strategy or plan, acquire the needed resources and then exploit the opportunities. While studying the entrepreneur as an individual is never enough, the current opportunities must also be considered. We also have to account for detrimental external conditions within a local area, such as poor infrastructural facilities, poor business regulation, and security challenges that influence the decision-making process of the everyday entrepreneurial farmer to start a small farming business. The weight of expectation to provide for the family and the reality of poverty and unemployment in the local community motivates the farmers to start an enterprising farming business or continue the existing family farming business. By adding the many contextual lived experiences of everyday entrepreneurial farmers to the opportunity nexus arguments of Shane and Venkataraman, this study furthers the process of entrepreneurship to include the myriad of entrepreneurial activities happening in the course of everyday human interactions. These everyday entrepreneurs play a crucial role in providing a better quality of life to their immediate families and contributing to their local community's socio-economic development.

Effectuation offers a meaningful but incomplete construct to address the research aim and objectives as a decision-making construct. It provides a narrative for accessing the critical resources that the entrepreneurial farmers require, the available means for the entrepreneur and to leverage on the pre-commitment of self-selected stakeholder networks to start and grow the business (Sarasvathy et al., 2014; Chandler et al., 2011; Fisher, 2012; Cai et al., 2017). Thus, in resource-constrained contexts where resources are scarce, difficult to access or expensive, entrepreneurs adopt an effectual approach to the entrepreneurial process (Daniel, Di Domenico and Sharma, 2014). Effectuation emphasises 'control over prediction' (Sarasvathy et al., 2014). Employing an effectuation approach as a construct in this study contributes to our understanding of entrepreneurship as an interactional process of how an entrepreneurial farmer (agent) interacts and adapts to the changing resource-constrained environment (context) at the same time being influenced by the socio-cultural diversity of the local community.

The perception of uncertainty may influence the different decision-making logic of entrepreneurs (Jiang and Tornikoski, 2019). Eyana, Masurel and Paas (2018) associate transitional or emerging economies with higher environmental

uncertainties due to underdeveloped institutional systems. The research findings in Chapters Five and Six show that uncertainty can be both a catalyst and a hindrance to the entrepreneurial processes within a resource-constrained farming environment. The Nigerian farmer is faced with the threat of famine, starvation, food insecurities, and political uncertainty; and is expected to operate in an environment with limited availability of supportive resources, for example, modern farming equipment, affordable finance, electricity, good transportation networks, storage facilities and quality political governments. Thus, starting, growing, or surviving in business in such an environment is challenging for entrepreneurs. An upsurge in uncertainty, e.g., political instability and uncertain market conditions, further affects the availability of crucial resources required in farming. Notwithstanding this, it also creates an impetus for more interaction and collaboration within the local business areas to respond to the higher environmental uncertainties. Therefore, the threat of uncertainty is controlled by adopting effectual approaches and leveraging local partnerships and collaborative relationships among the Nigerian entrepreneurial farmers and their local community, suppliers, and customers.

8.3.3 Summary of Objective Three

Jack and Anderson (2002) argue that social embeddedness, being a part of the local structure of a business area, creates business opportunities, sustains the business, and improves firm performance and profitability. The focus of Objective Three is to evaluate the effects of social embeddedness on the entrepreneurial process.

The everyday entrepreneurial process is a procedure or practice centred on human relationships and interactions (Butler and Williams-Middleton, 2014). This study's findings show a more organic support network within the farming community with the provision of moral support, and infrastructure provision to the farms and community by some entrepreneurs. Also, the farmers regularly socialise through special occasions such as birthdays and weddings as some of the nuances of the interactions among the farmers. Having a supportive local network within the farming community is another way of navigating the challenging resource-

constrained and uncertain business environment, particularly at the emergent stages of the farm business. Overall, the uncertainty of the resource-constrained context shapes the reciprocal interaction and supportive network between culturally embedded and closely connected entrepreneurial farmers and their local community (Lindgren and Packendorff, 2009).

Being embedded in a local community has positive and negative effects on rural entrepreneurs. The effects of the social embeddedness shaped by cultural norms and social interactions in the local community influence the decision-making process of entrepreneurs opening up access to locally bounded resources (Korsgaard, Müller and Welter, 2020). Being part of the local structure of the business area further creates local business opportunities and productive social networks (Jack & Anderson, 2002; Laskovia, Shirokova and Morris, 2017). For instance, Korsgaard, Ferguson and Gaddefors (2015) suggest that being embedded in a local community with access to local strategic networks creates opportunities for rural entrepreneurs to pool together ideas and resources that benefit their small enterprises and the rural regions. Similarly, access to locally bounded resources such as cheap labour that farmers receive by being socially embedded in their local community benefits the farmers and their local community in creating jobs and reducing poverty. However, the local community's expectations of the farmers to support local community-based initiatives, irrespective of the farm's profitability, impact productivity and future growth plans.

The interaction of the Nigerian entrepreneurial farmer with the resource-constrained and uncertain business environment is not driven by the pursuit and maximisation of business opportunities or ownership of strategic resources but by the social embeddedness that exists in the local business environment. For example, entrepreneurs rely on local partnerships and networks to access finite local resources for the enterprise. Also, the influence of the local farming community on the decision-making process of the farmer on what type of crop to produce and which competitive markets to sell to.

8.3.4 Summary of Objective Four

There is generally relatively little research that addresses the coping strategies of entrepreneurial farmers within a resource-constrained and uncertain environment. As a result, research on entrepreneurs' coping strategies "remains fragmented" (Ferreira et al., 2017). Therefore, the goal of Objective Four is to establish the coping strategies of Nigerian entrepreneurial farmers. The farmers' coping strategies are examined to explain the socio-economic contributions of the entrepreneurial farmers to their local communities despite the challenging context of their everyday entrepreneurship.

Given the backdrop of the challenging and changing resource-constrained and uncertain environment presented in Chapter Six, the entrepreneurial farmers' coping strategy predominantly centred on the interventions of family and their local community in the provision of crucial resources required in the farming operations. Similarly, the entrepreneurial farmers receive moral support from their farming community when dealing with farm diseases, lack of finance, lack of quality infrastructure in the local community, and the absence of governmental institutions. The absence of these crucial resources, especially affordable finance, impacts Africa's entrepreneurial process due to the challenging resource-constrained context (Eyana, Masurel and Paas, 2018). Therefore, being socially and culturally embedded in their local community allows the entrepreneurial farmers to cope with their context through access to a bundle of local resources, business opportunities and support networks (Jack and Anderson, 2002, Korsgaard, Müller and Welter, 2020).

Additionally, the findings in Section 6.5.4 show the entrepreneurial farmers' self-determination and doggedness in navigating their challenging environmental context to use the available resources within their local community to grow their farm businesses. Also, the farmers' creativity is seen in how they alter their farming methods to manage available resources to survive in the business, including dealing with unregulated market pressures and customer relationship management. Furthermore, the findings in Section 6.5.6 reveal the intervention of non-governmental organisations (NGOs) in the local community, particularly in providing financial support and training on some of the farming operations, which

is crucially necessary in the absence of extension agricultural support services for the farming community.

The challenging and highly dynamic context of the entrepreneurial farmers' business environment has not deterred the farmers from starting and growing their small farming enterprise, mainly due to the interventions of family and the community in the farm business.

8.3.5 Summary of Objective Five

The fifth and final objective identifies the key social-cultural challenges of everyday entrepreneurship and makes recommendations on entrepreneurship context and Firstly, the thesis' findings pose similar resourceprocess in rural settings. constrained and structural challenges consistent with extant scholarship on entrepreneurship in a rural setting (see Jones et al., 2018; de Guzman et at., 2020; and Lent, 2020). The resource-constrained nature of the rural setting is partly a result of distance from major cities, processing plants, and government influence. The lack of quality infrastructure, e.g., roads, is also a barrier to the free movement of goods and services into and out of rural communities. Also, the unstable electricity supply to some rural areas affects the preservation of perishable farm produce, electric-powered brooders and drinkers for poultry farming, and electricity at night-time to allow research activity. Equally, the entrepreneurial farmers lament that the unreliable electricity supply impacts their quality of life for entertainment purposes and to stay informed online or through television programmes. There is also the added cost of petrol to power the selfgenerating power supply during critical farming operations, e.g., chick brooding.

Secondly, the structural challenge of the rural setting in sub-Saharan Africa is seen to limit access to competitive markets within the local areas and, at the same time, opening up new markets in other areas that were once considered isolated due to rapid population growth and increasing demand in urban areas for food (Jayne, Chamberlin and Benfica, 2018). Governmental institutions are perceived to be responsible for not regulating the prices of farm produce and the markets in general. To counteract this challenge, the entrepreneurial farmers rely on their farming community or formal farming associations to regulate the prices of their

farm produce. Some farmers find it difficult to stick to the regulated prices, especially in periods of excess supply during the harvesting season, and the reluctance of middlemen to buy the farm produce at the regulated prices. The pressure of meeting the family needs and other farming operations bears heavily on the farmers who would have to sell their farm produce to middlemen at a lower price. Middlemen take full advantage of the situation to haggle down the prices of farm produce and transport the farm produce to new markets or established markets in major cities at a substantially higher profit margin.

Thirdly, the security challenges in some of the villages due to the farmers and herdsmen's clashes displaced some farmers from their farms. Several rural farmers lost their family members and farm workers to the clashes and now live in internally displaced camps. Other farmers in safe areas of the villages cannot use the vast farmlands on the outskirts of the villages to farm or expand their farm business. The security challenges affect large scale food production with a resultant impact on food security in rural and urban areas.

Some recommendations on entrepreneurship context and process in rural settings are provided in Section 8.5.

8.4 Contributions to Knowledge

This study investigated the challenging and changing resource-constrained context of everyday entrepreneurship in a sub-Saharan African economy and specifically how Nigerian entrepreneurial farmers interact and navigate such context. The thesis makes three key contributions to knowledge. A theoretical contribution is made first, followed by a policy and practice contribution and a methodology contribution. These are discussed in detail in the following sections.

8.4.1 Theoretical Contributions

Three main bodies of literature were substantially considered in Chapter Three. Firstly, literature on who an entrepreneur is, and the field of entrepreneurship, was reviewed to understand the key terms. Equally, the review of the key terms helped to reposition the role of the entrepreneur away from just an agent for job and

wealth creation but to focus on what entrepreneurs do, how and why they do it, and the actual thoughts and behaviours of entrepreneurs when starting a new venture (Perry, Chandler and Markova, 2012). Secondly, literature on the entrepreneurship process and contexts were reviewed. It was shown that entrepreneurship was not restricted to a single process or event but more about the becoming the doing of entrepreneurship in a myriad of contexts – spatial, economic, social, institutional and cultural. Thirdly, Sarasvathy's (2001) theory of effectuation was reviewed as an explanatory and analytical concept of the thesis, given the resource-constrained and uncertain environment of the study.

This section furthers the theoretical contribution made by this research by looking at the role of the entrepreneur, the effectuation process in a sub-Saharan African economy, and the coping strategies of resource-constrained entrepreneurs. These are discussed in detail in the following sections.

8.4.1.1 The Role of the Entrepreneur

Existing research in entrepreneurship has made substantial advances in our understanding of who an entrepreneur is and how the entrepreneur exploits opportunities to create a product or service (Schumpeter 1961; Shane and Venkataraman, 2000). This thesis furthers our understanding of what it is to be an entrepreneur from a resource-constrained sub-Saharan African context. By taking such a contextualised approach, the thesis shows the context of entrepreneurship in a resource-constrained and uncertain environment and how this critically differs from more common conceptualisations of an entrepreneur and entrepreneurship.

Entrepreneurship is looked at from the individual level where the expectation is that the entrepreneur is a bit selfish, clever, and smarter or to succeed in looking after themselves. The resource-based view of entrepreneurship (Barley, 1991) presupposes the availability of essential resources that the entrepreneur can gather to run a business. Physical resources such as shops, business premises and devices, including software, corporate brands, and other resources, become the business. Thus, the role of the entrepreneur is to bring in his/her business acumen

and personal knowledge to make it work. When this works, as in the Westerncentric Silicon Valley models of entrepreneurship, such an entrepreneur is presented as the pinnacle of entrepreneurship (Welter et al., 2017). Such views on who the entrepreneur is and what entrepreneurship should look like based on high capital, big data and advanced technology, intentionally or inadvertently, differentiates entrepreneurs in the United States of America and Europe from their counterparts in sub-Saharan Africa. In addition, the Silicon Valley model view of entrepreneurship in existing literature recognises Western entrepreneurs as 'superior', 'better' or 'expert' entrepreneurs compared to their sub-Saharan African or emerging economy entrepreneurs. The thesis shows that context is where entrepreneurship is enacted. The rural settings in resource-constrained contexts challenge our binary notion of whether an entrepreneur is or not, whether they are expert or novice or rural or urban entrepreneurs. Therefore, the thesis responds to the call for empirical research that recognises the diversity of contexts in which entrepreneurship occurs (Welter, Baker and Wirsching, 2018; Gaddefors and Anderson, 2019).

The diverse contexts in which entrepreneurship occurs may look different from our preconceived notion presented in some extant entrepreneurship scholarship modelled after the Silicon Valley model, where the enterprise must be technologically and high capital-backed or have access to big data. Equally, Shane and Venkataraman's (2020) classical 'opportunity-individual nexus' construct does not consider external conditions within a local rural region, such as institutional void and resource constraints prevalent in sub-Saharan Africa that influence the decision-making process of entrepreneurs. Therefore, such traditional ideas of opportunity identification and exploitation provide an incomplete picture of how the entrepreneurial process occurs in a resource-constrained context. The thesis furthers Sarasvathy's (2001) theory of effectuation by moving the theory away from just the economic contributions that entrepreneurs make when resources are tightly constraint to highlight the social and cultural contributions of the resource-constrained entrepreneurs as they navigate their everyday entrepreneurial contexts to add value to their families and the local community.

Similarly, this thesis challenges categorising Western entrepreneurs as different or superior to those in sub-Saharan Africa. The Silicon Valley western-centric view of entrepreneurship has captured the public's imagination, influencing global public policy and practice (Audretsch, 2021). As suggested by Welter, Baker and Wirsching (2018), the exclusive focus on the Silicon Valley model of entrepreneurship, although effective, presents just a single context of entrepreneurship – Silicon Valley. Thus, the single and narrow focus on the Silicon Valley-type model view of entrepreneurship negates the vital contributions of main entrepreneurship scholarship (Audretsch, 2021), including entrepreneurship. When we focus mainly on Western entrepreneurs and their achievements, we ignore entrepreneurs who are just trying to get through their socio-cultural settings to add value to their families and local economy. The thesis findings support a better understanding of entrepreneurs' critical role in various contexts, including resource-constrained contexts (Zahra and Wright, 2011; Fitz-Koch et al., 2018; Anderson and Ronteau, 2017). Also, the decision-making logic the entrepreneurs adopt during the entrepreneurial process to cope and navigate their everyday context is equally important (Servantie and Rispal, 2018). The entrepreneurial farmers use different combinations of available and finite resources within the local environment to create unique products (Sarasvathy, 2001; Baker and Nelson, 2005). Equally, in the absence of crucial resources such as affordable finance, the entrepreneurs radically re-use available resources to create value for their families and the local economy. For example, the sale of feed bags to potato farmers and poultry chicken droppings to crop producers.

8.4.1.2 Effectuation process in a sub-Saharan African Economy

There is an increasing emphasis in extant entrepreneurship literature on small and upcoming everyday entrepreneurial enterprises rather than on larger, more established, high growth and technology-enabled firms (Steyaert & Katz, 2004; Welter et al., 2017; Kellermanns et al., 2016). This new emphasis is important for sub-Saharan African economies like Nigeria, where everyday entrepreneurship is a constant battle to balance the enterprise's survival and sustainability agenda (Darcy et al., 2014) within specific and diverse cultures, traditions and societal expectations. In such a context, traditional approaches to opportunity-seeking behaviour do little to explain the entrepreneurial process (Shane & Venkataraman, 2000). Instead, this thesis looks to a more organic and developmental process of effectuation to explain how enterprises come to be despite a critical lack of

resources (Sarasvathy, 2001). However, while such theories explain the entrepreneurial event in Western settings, where decision-making is presented as a choice in an often-abundant environment (Lingelbach et al., 2015), this thesis suggests that effectuation logic dominates when resources are scarce and future environments are unclear. Using effectuation theory as an explanatory mechanism, the thesis fully investigated the role context plays in determining how the enterprise develops through the configuration of means and contingencies (Read & Sarasvathy, 2005), including the substantial contributions of family and the local community in the effectuation process.

Similarly, this thesis provides fresh insights into the decision-making process of agricultural entrepreneurs operating in a resource-constrained Nigerian rural context. The context in which the entrepreneurial farmers work is often embroiled in violent clashes between herdsmen and farmers (Onyema, Gideon, and Ekwugha, 2018), providing an uncertain context for developing business resources and establishing opportunities. Additionally, the thesis further responded to the call to consider other antecedents that affect the choice of either effectuation or causation decision reasoning or both where applicable and to contextualise further the environmental factors that may affect entrepreneurial behaviour (Shirokova et al., 2017; Welter and Smallbone 2011). The thesis shows that any causal approach adopted was not in isolation but combination with effectual reasoning, a hybrid approach consistent with other studies (see Ilonen et al., 2018; Engel et al., 2017).

Subsequently, this thesis shows that entrepreneurial behaviour can be impacted by the entrepreneurial environment, family background or general motivations of an individual or community (Shirokova et al., 2017). Thus, entrepreneurship is directly characterised by the surrounding environment. Unlike previous studies on how entrepreneurs use pre-commitments and strategic alliances to generate resources from external sources to support their new ventures (see Eyana, Masurel & Paas, 2018; Sarasvathy, 2001), this thesis looks to the leveraging of resource contingencies as the dominant decision-making logic used by agricultural entrepreneurs in a resource-constrained context. Familial and community interventions are shown as central to the means available for the entrepreneurs (Dias et al., 2019). This thesis, therefore, expands on the antecedents of

entrepreneurial decision-making logic and responds to the call for more empirical data in a real-life setting to supplement our understanding of the entrepreneurial process in research (Gupta, Chiles & McMullen, 2016), particularly in the context of the agricultural sector (Dias et al., 2019) in an emerging sub-Saharan African economy (Lingelbach et al., 2015; Eyana, Masurel & Paas, 2018).

8.4.1.3 Entrepreneurs' Coping Strategy

This thesis shows that the entrepreneurial farmers developed a strong and supportive network because of the challenge of limited resources and institutions in the local business area. Particularly, the support from their family and local community systems provided a mechanism for the farmers to cope with the challenge of limited resources. The provision of critical resources by family and the local community is open-ended, with numerous unspecified alternative likely uses (Gaddefors, Korgaard and Ingstrup, 2020) for farm survival and growth. For example, the sharing of ideas, knowledge, affective support and the meagre resources the farmers have is exemplary in how the effectuation process takes shape and integrates with the surrounding context of the enterprise. Therefore, the challenging and highly dynamic context of the entrepreneurial farmers' business environment has not deterred them from starting and growing their small farming enterprise. Thus, the thesis provides an entrepreneurial coping strategy framework that complements and expands previous Western studies on entrepreneurship by adding fresh insights and contextualised considerations from a sub-Saharan African emerging economy (Anderson and Ronteau, 2017). One of such considerations is highlighting the entrepreneurial farmers' coping mechanism within a resource-constrained context as an entrepreneurial strategy.

The entrepreneurial farmers' coping mechanisms provide a lens to view the "doing of context" (Welter and Baker, 2021) in a sub-Saharan African business environment. The notion of entrepreneurship as simply a wealth and job creation phenomenon negate the farmers' ingenuity and sustainable local approach to running their farm business in response to their everyday entrepreneurship and making tangible socioeconomic contributions to their local communities. Thus, the

quest for individualistic money-making activity is balanced with community-based values (Jackson, Amaeshi and Yavuz, 2008).

The thesis shows that the interaction of the Nigerian entrepreneurial farmer to the resource-constrained business environment is not driven by the pursuit and maximisation of business opportunities or ownership of strategic resources but by the social embeddedness that exists in the local business environment (Jack and Anderson, 2002). Korsgaard, Ferguson and Gaddefors (2015, p.576) posit that being embedded is to be "situated in a context which enables and constrains the activities of actors". As seen in this thesis, social embeddedness is expressed through social responsibility, moral justification for the business practices, and accommodating social obligations that promote or impact farm enterprises' effectiveness or survival. There is a stronger sense of community and responsibility within the farming community. The entrepreneurial farmers can cope with social isolation by being and doing things together. Thus, the community spirit, business mutuality to help one another, and shared social and community values are crucial coping strategies that entrepreneurs require in resource-constrained and uncertain environments.

8.4.2 Policy and Practice Contributions

The policy and practical contributions of the thesis flow from the perspectives of entrepreneurial farmers' challenges in navigating their entrepreneurial context, the insights generated from the substantial review of the literature and the analysis of the thesis findings. Three key policy and practical contributions are made in the thesis. Firstly, the formulation and implementation of effective entrepreneurship policies recognise the importance of involving rural entrepreneurs in formulating policies that consider already established and successful local initiatives. Secondly, targeted investment in local initiatives and quality infrastructure in rural regions can attract more entrepreneurs in the rural regions and control the increasing rural to urban migration. Thirdly, the informal but effective entrepreneurial education and exposure that the entrepreneurial farmers received at an early age from family and community influence needs to be recognised as equally important as the entrepreneurship education taught through formal institutions and innovation accelerator programmes. These contributions are further expanded in the following sections.

8.4.2.1 Effective Entrepreneurship Policies

Entrepreneurship and small business are terms commonly associated with job and wealth creation. According to Anderson, Warren and Bensemann (2019, p 1573), the two terms are "socially and spatially embedded". Thus, understanding the embedding nature of the entrepreneurial process is useful in identifying who enterprises, the place and how the enterprising happens. The thesis findings show that policymakers and politicians often clamour for more entrepreneurship and small business growth and development without properly understanding the specificity of the nature, process and expected outcome of a myriad of entrepreneurial activities. Unveiling entrepreneurial activities in the context of everyday entrepreneurship practices requires comprehensive empirical research (Ilonen, Heinonen and Stenholm, 2018). This thesis helps us better understand that the dynamic and often organic everyday interaction between entrepreneurs and their contexts creates what it is to be entrepreneuring which is not fixed in time and space. Similarly, the interaction of the entrepreneurs with their context categorises who makes decisions in a resource-constrained enterprise, how decisions are made and what type of decisions are made. Therefore, it is incumbent on policymakers to understand the multidimensional nature of everyday entrepreneurial activities by paying closer attention to the interactions of entrepreneurs to their contexts to inform the formulation of policies that benefit the entrepreneurs.

The thesis further extends our knowledge of how entrepreneurship and context interact. That is, context is where entrepreneurship is enacted (Welter 2011). However, the thesis data shows that the context of entrepreneurship is not just a place where entrepreneurship happens but also the socio-cultural dimensions of the place, the local people and their lived experiences and other multidimensional contexts entrenched in the place. Therefore, effective entrepreneurship policies result from careful consideration of the many contexts in which entrepreneurship

occurs and the multidimensional reasons for and outcomes of everyday entrepreneurship across different regions. The synergy between public policy and research is critically important in formulating effective entrepreneurship policies. For example, Jos's Agriculture Services Training Centre (ASTC) programme played an important role in bringing together government officials, entrepreneurs, and consultants from Israel to train local farmers on greenhouse farming technology. The ASTC programme further provided modern farming equipment for the farmers to rent at affordable rates under the previous government in Jos Plateau. With the change of political government, the scale of investment in the ASTC programme was substantially reduced, resulting in the loss of jobs and support to rural farmers. Thus, the continuation of effective policies is important to ensure that the entrepreneurial farmers maximise the benefits of good policies and programmes.

8.4.2.2 Controlling Rural to Urban Migration

The increasing rural to urban migration requires the focused attention of policymakers. The thesis data shows that the older members of the local community are more active in farming operations and even returning to the rural regions to engage in farming activities. In comparison, the younger people move into urban areas, searching for greater and more diverse livelihoods away from the farm. The effects of such migration are a reduction in the farm labour force, slowing of the rural population, the decline of agriculture, and over time, food insecurity (Jayne, Chamberlin and Benfica, 2018).

In addressing the increasing rural-urban migration, policymakers could consider, alongside a rural entrepreneurship and transformation policy, focused investments in local initiatives and locals to attract new people into local communities (Gaddefors, Korsgaard and Ingstrup, 2020). Additionally, policymakers should consider putting fewer new resources into local rural regions that are not beneficial to entrepreneurs or the specific needs of the rural regions. For example, politically motivated investment and location of a food processing plant in a politician's rural region at a considerable distance from where the raw food materials to be processed in the plant are sourced. Instead, policymakers could consider paying more attention to providing quality infrastructure and social amenities, good

educational institutions, family-friendly parks, and security across all rural regions, which are essential in turning the rural regions into more attractive places to live.

8.4.2.3 Entrepreneurship Education and Exposure

Entrepreneurial exposure and education from the family unit and local community is the dominant way the entrepreneurial farmers learn to farm, mainly from childhood. As suggested by Rauch and Hulsink (2015), entrepreneurial education increases the experiences and behaviour of entrepreneurs. However, as argued by Garcia-Rodriguez et al. (2017), the cultural and socio-economic context of the entrepreneur must be considered when evaluating the effectiveness of entrepreneurial education in shaping the behaviour of entrepreneurs. This thesis contribution builds on the work of Jones and Li (2017). They posit that establishing hard work and perseverance habits during childhood provides relevant training and practical experience for start-up businesses. The entrepreneurial farmers benefited greatly from the exposure and education they received from their family and local community from childhood. In particular, instilling at a young age the virtues of patience, perseverance, resilience and determination to make the most out of available local resources and to adapt to their challenging and changing context. More importantly, the entrepreneurial education and exposure that the farmers received were not through formal education, an innovation accelerator programme or an entrepreneurship development programme. Instead, the family or community ways of farming and methods were passed on from one generation to another through the informal channels of the family folklore and learning by doing from parents, siblings, and peers in the community.

Subsequently, the informal nature of entrepreneurship education and exposure presented in the thesis implies different approaches to teaching entrepreneurship in rural sub-Saharan African communities compared to Western communities and institutions. Entrepreneurship scholars rarely teach entrepreneurs how to effectively interact and adapt to their context. Instead, they are taught to write a coherent business plan and stick to the plan. The primary goal of being an entrepreneur is emphasised as revenue generation and profit-making. In contrast, entrepreneurial farmers do not have a written business plan. Even if they had, the challenging and changing business contexts make it difficult to stick to the plan.

Thus, the entrepreneurialism of the farmers is rooted in their ability to interact and adapt to their challenging and changing context instead of following a business plan.

Also, funding mechanisms provided to entrepreneurs in the Western economies are based on a good business pitch, business plan, and a resume or demonstration of competence to start up a business. Grants or monetary awards are provided based on the business plan. If successful, the entrepreneur is given some money to go and implement the plan, sometimes with a mentor to provide support and encouragement. Such a funding mechanism is not the reality for the entrepreneurial farmers in a resource-constrained context. The entrepreneurial farmer cannot tell you where they will be next year, the weather, the security situation within the farming community, or the circumstances and demands of the family and wider community that the farmer will have to respond to immediately. The farmers get on with their farming business without a written business plan by applying the training received from family and the local community and making the most of available resources to meet the needs of their family and the local community. Therefore, the funding of entrepreneurial initiatives and programmes should also include considerations of the varied and multiple contexts where everyday entrepreneurship occurs beyond the development of technological apps and digital products. The funding process should also include clearly outlined processes that the entrepreneurs plan to adopt to navigate their everyday entrepreneurial context.

8.4.3 Methodology Contributions

Firstly, the methodological approach in this thesis contributes to the exploratory research approach within a developing economy context with a dearth of empirical data on the research topic. The understudied entrepreneurs were suspicious about the rationale for the interviews from the onset. The researcher had to reassure the entrepreneurial farmers of the strict confidentiality of their responses by reaffirming the privacy and data protection conditions outlined in the Research Participant Information Sheet. The researcher needed to take time with the interviewees, getting to understand their setting and their worries before being able to speak with them directly on the research topic. Building trust was key to

gaining access to the farmers and being invited into their homes to conduct the interview and avoid the distraction of farm animals and workers during the interview session. Trust was built early with the research participants during the interview sessions by acknowledging, recognising and engaging with their knowledge and experience (Fletcher, 2017). Allowing the farmers to openly share their knowledge and experience on the research topic created a free-flowing conversation that generated rich data on the farmers' decision-making logic, actions taken at various stages of the farming operations, and in-depth reflections on the farmers' everyday entrepreneurial context and process. Gaining the trust of understudied entrepreneurs is part of the data collection process when dealing with areas uncommon as a resource-constrained and culturally suspicious research setting.

Secondly, the thesis offers a degree of originality by providing rich empirical data in a real-life setting from understudied farming communities, offering entrepreneurs in such rural communities a rare opportunity for their voices to be heard. The study evidenced Fitz-Koch et al. (2018) recommendation for a "focus on the agricultural sector in emerging economies to study why and when opportunities for the creation of goods and services arise, by whom, and with what modes of action where informal institutions are dominant and formal institutions are evolving." (Fitz-Koch et al., 2018, p.157). We now understand from the empirical data that the culture of insecurity, unemployment, poverty, and highly uncertain environments does not stifle entrepreneurship. On the contrary, the challenging and changing business environment resulted in farm enterprises' setup in the local communities to cope and adapt to the context.

Thirdly, the use of qualitative data from the resource-constrained context employed in this thesis responds to the suggestion of Gupta, Chiles, and McMullen (2016) that the effectiveness of future research in effectuation hinges on processes with rich qualitative data. This thesis helps our understanding of the context of everyday entrepreneurship and how the context shapes the interactions and adaptations of entrepreneurs to such context. The thesis recognises the contribution of quantitative studies in attempting an economic explanation for how entrepreneurship occurs. However, the social perspectives of the place in which

entrepreneurship happens and the interactions of entrepreneurs within their multidimensional contexts require an interpretive approach. The richness of the perspective of the research participants amplified through their voices and stories is lost when quantitative methods are used. The thesis presents exciting potential for future studies on the entrepreneurial process in other settings to understand the diversity of everyday entrepreneurial activities in multiple contexts.

8.5 Research Recommendations

The following recommendations flow from the contributions to the knowledge presented in Section 8.4.

8.5.1 Entrepreneurial diversity

The diverse contexts in which entrepreneurship occurs shape the different ways the entrepreneurial processes can happen and the outcomes of the entrepreneurial activities. Diversity is seen in the different farming methods and systems, language, cultural norms, and everyday entrepreneurship opportunities and constraints identified in the Nigerian rural setting compared to other recognisable Western entrepreneurial settings in extant literature. Thus, the spatial context of the thesis provides a unique rural context to explore the effect of diverse and integrated culture on the everyday entrepreneurial process of rural farmers.

Additionally, the 'successes' such as more wealth and job creation that some entrepreneurship regions (e.g., USA and European) may have over other less successful regions (e.g., sub-Saharan Africa) is not an indication that the prosperous regions are better or 'expert' entrepreneurs compared to their less successful counterparts. Such assumptions negate the everydayness processes and lived experiences of local entrepreneurs who, over many years, navigate through their local socio-cultural settings and resource-constrained and uncertain environments to create substantial value for their families and local economy.

The entrepreneurial farmers in this thesis are not a homogenous group (Chipfupa and Wale, 2018). Therefore, the heterogeneity of farmers across different regions and their varied farming methods and practices requires closer consideration and recognition in future entrepreneurial context and process research. Therefore, this

thesis extends other entrepreneurial diversity studies (e.g., Welter, Baker and Wirsching, 2019; Murithi, Vershiina & Rodgers, 2019) by adding a rural sub-Saharan African contextualised social, cultural, and economic context and processual dimension that reinforces everyday entrepreneurship process and outcome.

8.5.2 Entrepreneurial educational intervention and partnerships

There is increasing integration of entrepreneurship education and interventions into recent entrepreneurship process research (Shirokova et al., 2017). For example, Ilonen, Heinonen and Stenholm's (2018) study exploring students' decision-making logic following an educational intervention finds that diverse forms of decision-making logic can be known before the practical outcomes of the entrepreneurial effort are apparent. This thesis suggests that entrepreneurship exposure from family and local informal groups shapes the decision-making processes of the entrepreneurial farmers and the subsequent outcomes of their everyday entrepreneurial efforts. Equally, the social capital, evident in social networks and support generated from extended family connections, friendship groups, and community or local social relationships, augment the lack of experience and entrepreneurial education required for a successful start-up.

University partnership with farming associations and public and private sector stakeholders can provide a rich locally bounded resource that supports both the theoretical and practical experience in entrepreneurship and agriculture. For instance, participatory research can lead to the development of entrepreneurship skills and competencies by exposing students and farmers to new ideas, concepts, tools, networking opportunities, knowledge transfer and practices in everyday entrepreneurship (Shirokova et al., 2017) in real-life farm settings. Such entrepreneurial educational intervention initiatives and learning outcomes can effectively support research and innovation on pharmaceutical products, nutritional food production, novel food production, sustainable textile production, afforestation, and more.

8.5.3 Recognition of the contribution of entrepreneurial farmers to their local economy

This thesis shows that everyday entrepreneurship is situated and constructed in specific socio-cultural contexts. The empirical evidence presented in the thesis shows the substantial contributions of entrepreneurial farmers to the socio-economic development of their local economy. As such, their voices and contributions should be amplified in entrepreneurship research and literature. In particular, a change in the narrative of what constitutes a successful enterprise; to change the narrative away from the predominant wealth and job creation goal to an appreciation of the process of 'belonging', how everyday entrepreneurs get through their socio-cultural settings to add value to their families and local economy. An outcome of the thesis is to create a forum that facilitates a dialogue between the entrepreneurial farmers in Jos Plateau and the Plateau State Government officials for a better understanding of the critical role of the rural farmer as not just a job and wealth creator but a primary contributor to the socio-economic development of the local economy.

8.5.4 The role of governmental institutions

The thesis' empirical data will help policymakers understand the key role of government institutions and systems in promoting entrepreneurship, especially in rural areas of Nigeria where there are abundant unused land resources. Governmental institutions play a crucial role in creating a conducive business environment that stimulates economic activities by providing good infrastructure, entrepreneurship education, attractive markets, and macroeconomic stability. Policymakers can invest in the entrepreneurial agency by supporting local entrepreneurial initiatives through affordable agricultural loans and grants, subsidised mechanised farming equipment and technology, and accessible farm inputs. When a conducive business environment is provided by the government, alongside the promotion and establishment of food processing plants in rural regions, it can attract individuals to migrate or return to rural areas and take up farming as a viable profession.

In addition, the provision of credible agricultural extension services in the rural areas is essential to nurture, develop and promote entrepreneurial talent already existing in rural areas. The agricultural extension services should recognise and

work alongside the informal local channels to learn and hone business skills in home cells, religious centres, and specific cultural groups.

8.5.5 Continuation of effective policies and programmes

One of the entrepreneurial farmers' concerns was the poor policy formulation and implementation quality relating to the agricultural sector and rural development. There is no benefit both to the government and farmers to bring in agricultural policies that are effective in western economies but unsuitable to the Nigerian rural areas without the requisite structural and technological advancement as applicable in the western economies. Therefore, it is important for policymakers in consultation with farmers through their farming associations and academic researchers to formulate implementable and sustainable policies in a Nigerian rural setting. When good policy initiatives and schemes are introduced, e.g., the Agriculture Services Training Centre (ASTC) introduced in Jos Plateau by the previous government, such policy initiatives should be sustained even when there is a change in political government. The entrepreneurial farmers claimed that the ASTC programme provided good training sessions for farmers.

Additionally, tractors and other mechanised equipment were on hire at affordable rates. However, the new administration removed the farmers' subsidy under the previous government and practically, the programme did not continue as designed, with many staff of ASTC losing their jobs. The lack of continuity of policies resulting from a change in political government affects the productivity of farmers and subsequently impacts the sustainability of agricultural development in Nigeria.

8.5.6 Private Sector prioritisation and participation in the agricultural sector

The Nigerian government cannot cater to all the needs of the rural farmers, although some entrepreneurial farmers believe the government is capable of meeting all their farm needs. Therefore, the study draws the attention of policymakers to the importance of private sector participation in the agricultural sector in the following seven areas. (a) the provision of affordable access to credit and insurance products and services to all farmers irrespective of the size of the farm and location. The government can facilitate and regulate (a) micro-financing

corporations, crowdfunding initiatives, private equity and other alternative financing schemes to support farmers; (b) government collaboration with private sector agents in structuring and regulating market access issues; (c) private sector providing storage facilities and solutions in rural farming areas at affordable rates for the farmers to store their perishable farm produce. E.g., cooling and cold chain processing and packaging; (d) private sector to lead agricultural mechanisation services, in particular, tractor hiring services in rural farming areas at competitive rates that the farmers can afford; (e) active participation in agricultural extension delivery services, fertiliser distribution system, irrigation services, and the supply of quality agricultural inputs to farmers; (f) Innovative solutions for the processing of raw farm produce and security solutions in and around the farms; (g) collaboration and partnership between farming associations and private sector research institutes to develop specific training content for various farm operations and to find solutions to farm diseases.

8.6 Limitations and Directions for Future Research

Most research projects have some limitations, and this thesis is no exception. However, the limitations of a research study provide opportunities for further research (Jiang and Tornikoski, 2019). First, the thesis may be affected by the culture-based bias where people may tend to answer some of the interview questions based on their cultural norms (Igwe et al., 2020). Some of the interviewees answered the questions either out of emotional disconnection from government or politeness in responding to questions where their real answers may result in the use of strong words in describing the government's negligence in providing the institutional systems that support entrepreneurship.

Second, the purposive snowballing sampling approach (see de Guzman et al., 2020) restricts the number of entrepreneurial farmers that the researcher could have sampled and lacked random selection. However, research saturation was achieved with no other additional new theme emerging after the twenty-third interview session.

Third, the ongoing security challenges in North-Central Nigeria (see Onyema, Gideon, and Ekwugha, 2018) and the limited time and resources available for this research did not allow setting up a focused group to triangulate the thesis' primary data. However, follow-up telephone calls were made to the entrepreneurial farmers to check and confirm some common meanings and themes emerging from the data (Juma and Sequieria, 2017).

Fourth, the primary data originated from the Nigerian entrepreneurial farmers' answers to the questions asked at the interview sessions. There were no documented reports of the lived experiences of the Nigerian entrepreneurial farmers in the three local councils in Jos Plateau State, Nigeria. Future studies that may have access to recorded or archival data of the lived experiences of entrepreneurs in similar contexts can compare and contrast the entrepreneurial farmers 'self-reports' with the documented reports from other studies to further our understanding of the entrepreneurial process in a resource-constrained context. It is hoped that the thesis methodology and findings are transferable to other research contexts.

There are interesting opportunities for further study. First, although this research does not focus specifically on automation and mechanised farming, it came through in the thesis data and is worthy of further investigation. The entrepreneurial farmers engaged in large-scale farming operations by employing youth, cultural or religious groups in the local community to cultivate their lands. However, the drudgery of the farming operations was highlighted by some entrepreneurial farmers as a condition limiting farm growth and expansion. Some entrepreneurial farmers lamented the lack of mechanised farming equipment and automation to support their farming operations. Bowen and Morris (2019, p, 83) suggest that "Farmers would benefit from support in facilitating opportunities for developing off-farm activities to supplement farm income or developing more efficient farming practice through automation", which is important for a more sustainable farming practice in resource-constrained contexts.

The thesis data shows that technology is an enabler of farm growth but as Bowen and Morris (2019) argue, such farm growth can be stifled by a lack of good access to technology. The familiarity with emerging technology through social media

exposure or internet research, especially by the youth in the local communities, resulted in the use of more modern and automated farming methods in the rural regions. For example, an increase in greenhouse farming technology substitutes dry season irrigation farming. Additionally, it is understood from the thesis data and findings that the lack of modern farm equipment in a sub-Saharan African context limits farm growth and expansion but does not deter large scale farm production. The technology-savvy youth partner with local suppliers to fabricate affordable farm equipment such as water pump systems, drinkers, brooders, and greenhouse technology. The locally fabricated equipment is a good alternative to the expensive imported farm equipment that fluctuates with the US dollar exchange rate. Future studies on this locally fabricated equipment are encouraged from an engineering and commercial marketing perspective.

Second, this thesis explored the everyday entrepreneurial activities of Nigerian farmers within a tight and specific rural Nigerian farming context. The study's sample population is taken from three local councils in one state of Nigeria. Future research could focus on other states of Nigeria within the same sector or a combination of sectors. Research can also be undertaken to compare this thesis study with similar resource-constrained studies in other sub-Saharan African countries to create a broader picture of the impact of resource-constrained contexts on the entrepreneurial process in sub-Saharan Africa.

Third, the researcher hesitates to suggest generalising the findings of the thesis beyond rural settings. However, the theoretical and analytical approach employed in the thesis can encourage more nuanced empirical research to understand further the role of a resource-constrained society in influencing small enterprises, specifically by changing society's behaviour, which in turn changes the behaviour of the enterprise. Because the entire society is resource-constrained, the everyday entrepreneur may have to adapt and provide for the needs of people in their respective communities, sometimes beyond the goals of the enterprise. Therefore, should entrepreneurs reduce their involvement in community services to safeguard the future of their small enterprises, given that society and the expectation of people create the context for the small enterprise? Further, while ethically, and for the purpose maintaining validity of arguments generated the data collected from participants, there has been little focus on the potential for 'off the book' and illegal

activities in the everyday operations of rural farming. While there is nothing in this study to suggest such practices were dominant, future studies may wish to focus on the potential and role of this. However, such a focus would necessitate an amended methodological approach.

Fourth, another interesting area of research is to explore the perspectives of government officials and middlemen on their role in agricultural development in a resource-constrained context. In particular, how they contribute to the entrepreneurial process within a severe resource-constrained context and further evaluate the success or otherwise of several governmental interventions in the agricultural sector across different rural regions.

Fifth, the ongoing, unpredictable violent clashes between herdsmen and farmers and the consequent security concerns prevented the generation of data from some entrepreneurial farmers with large farms on the outskirts of Jos Plateau. Thus, future research during a more peaceful time into such agriculturally rich areas would be interesting and will enrich the thesis data.

8.7 Final Statements

The main motivation of the study is to critically investigate how farmers use entrepreneurial processes to navigate a resource-constrained context. The thesis finds that entrepreneurial farmers rely on effectuation logic to plan and develop their enterprise in the context of resource-constrained and uncertain environments. Also, by leveraging on family and community interventions, including local social partnerships, to access critical resources, the entrepreneurial farmers demonstrate that enterprise approaches may not be one of choice but more directly determined by the characteristics of the surroundings.

The entrepreneurial farmers highlighted security within the rural areas in North-central Nigeria as a major area of concern partly due to the violent clashes between farmers and herdsmen. These farmers deserve to be provided at least the security to carry on their entrepreneurial activities in peace. They do not require substantial intervention that may disrupt the way of life of the entrepreneurial farmer. Equally,

the thesis findings show that the entrepreneurial farmers were able to navigate their challenging everyday resource-constrained context to create substantial value for their immediate families and local communities. Thus, there is a need for stability in the country for the farmers to develop their entrepreneurial practices in the manner that works best for them in the context they are in.

Therefore, the government at the federal, state and local level will need to engage community leaders, religious clerics and the various law enforcement agencies for an in-depth discussion on the security situation in Nigeria. All stakeholders must be reminded of the sanctity of life and that every Nigerian life matters. Nobody is above the law regardless of their status or position in society. When the law is broken, the person or group of persons are prosecuted in the courts and face the full wrath of the law if found guilty. Until such strong measures are put in place to guarantee the security of the rural areas, the insecurity of the rural areas will affect large scale production and future agricultural expansion plans. Also, the insecurity of the rural areas will further affect food security and increase the migration of more people from the rural areas to the overpopulated urban centres. Security is the minimum resource these farmers need. The rest they can cope with through the various entrepreneurial processes highlighted in the thesis.

In conclusion, this thesis identified and examined the entrepreneurial processes of the everyday entrepreneurs engaged in agribusinesses in Jos Plateau to understand the process of entrepreneurship within such a narrow context that transcends beyond the job creation, wealth acquisition and welfare argument. The thesis provided numerous inferences for research policy and practice with recommendations and suggested areas for future research.

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APPENDICES

Appendix A - Data Code Sheet

Code Sheet 1

CONTEXT OF EVERYDAY ENTREPRENEURIAL ACTIVITIES WITHIN A RESOURCE-CONSTRAINED ENVIRONMENT

- 1.0 Background and expectations of the farmers in their business
 - 1.1 Characteristics of the farmers
 - 1.2 Food provision for family and nation
 - 1.3 Job satisfaction the joy of life as a farmer
 - 1.4 Profit-making to support the family
 - 1.5 Job creation in the local economy
 - 1.6 Growth and expansion of farming business
 - 1.7 Support from charitable causes
 - 1.8 Farmer as a role model in the local community
- 2.0 Operational trends in farming
 - 2.1 Maximising the farming conditions Climate
 - 2.2 Variations in farm management
 - 2.3 Environmental awareness
 - 2.4 Sustainable/integrated farming practices
- 3.0 Cultural issues
 - 3.1 Cultural norms
 - 3.2 Language barrier
 - 3.3 Perception of government attitude towards farming
 - 3.4 Stakeholder management
- 4.0 The Farmers' reflections on their everyday entrepreneurial activities
 - 4.1 Food production to meet the demands of local communities
 - 4.2 Farming as a viable and rewarding profession
 - 4.3 Partnership, networking and knowledge transfer an enabler to farm growth
- 5.0 Relevance of farming associations
 - 5.1 Accessibility to affordable loans and grants
 - 5.2 Sharing of information and ideas
 - 5.3 Building strategy and capacity for growth
 - 5.4 Pressure group on government
 - 5.5 Price regulation and controlling the influence of middlemen
 - 5.6 Disbenefits of membership in a farming association

- 6.0 Others
 - 6.1 Poverty/hunger
 - 6.2 Career other than farming
 - 6.3 Variety of farm produce
 - 6.4 High exchange rate for imported goods
 - 6.5 Support from religious organisations
 - 6.6 Poultry farming High cost of reliable electric power
 - 6.7 Crop production Poor quality seeds/seedlings
 - 6.8 Counterfeit products fertilisers, insecticides and herbicides
 - 6.9 Lack of transparency in tax administration/multiple tax system

Code Sheet 2

ENTREPRENEURIAL PROCESS AND BEHAVIOUR OF THE RESOURCE-CONSTRAINED ENTREPRENEURS

- 1.0 Reasons and Motivation to become a farmer
 - 1.1 Continuation of family tradition
 - 1.2 Personal Interest, passion and choice
 - 1.3 Subsistence purposes to provide for the family
 - 1.4 Commercial purposes money making
 - 1.5 Retirement plan
 - 1.6 Unemployment
- 2.0 Resources required to start the farming business
 - 2.1 Availability of tangible assets, land and space to farm
 - 2.2 Availability of affordable finance
 - 2.3 Farming inputs and equipment
 - 2.4 Utilities and Infrastructural facilities
 - 2.5 Manpower
 - 2.6 Security considerations
- 3.0 Factors affecting the productivity and growth of the farming business
 - 3.1 Securing affordable finance
 - 3.2 Availability of farming inputs
 - 3.3 The role of Governmental Institutions
 - 3.4 Security conditions affecting investment decisions
 - 3.5 Agricultural extension services
 - 3.6 Infrastructural Issues
 - 3.7 Market conditions
 - 3.8 Disease control on the farm
 - 3.9 Manpower resources

4.0 Entrepreneurial Coping Strategy

- 4.1 Familial Interventions
- 4.2 Community Influence on the farmer and the business
- 4.3 Business mutuality
- 4.4 Farmers' Initiatives
- 4.5 Customer Relationship Management
- 4.6 Influence of charity organisations

5.0 Others

- 5.1 Poor profit margins affecting growth decisions
- 5.2 Challenge of preservation, processing and storage of farm produce during bumper harvest
- 5.3 Spiritual guidance/revelation as a coping strategy
- 5.4 Continuation of policies and programmes during the regime change
- 5.5 Farm research: Word of mouth versus internet search

Appendix B – Research Participants Information Sheet and Consent Form

I have been told that farming is not easy on the Plateau with the many problems that you face as farmers. Yet farming provides a large proportion of Nigeria's income, feeds the people and is a major sector sustaining many families. I want to learn from you to know what it is like to be a farmer, especially in the resource-constrained (finance, water, roads, electricity, market, effective institutions etc.) environment in Jos Plateau. It is a privilege to know your story and write about it so that the world can learn about your experiences and appreciate your contributions to the Nigerian economy.

Before deciding whether to participate, you need to understand why the research is being done and what it would involve. Please take time to read the following information carefully. I will do my best to explain and provide any further information you may ask for now or later.

Background

The Plateau State Government has as an agenda the provision of adequate infrastructure so that the agricultural sector will thrive. The government further plans to invest in irrigation facilities for all-season agro-enterprise and partner with the private sector to explore possibilities of building storage facilities to support the agricultural sector to keep perishable products fresh all year round. These laudable plans will boost the agricultural sector and can serve as a catalyst for the socio-economic development of Plateau State. This study seeks to identify and synthesize key issues and lessons on the interactions of entrepreneurs to understand how they manage and cope with the available resources in the business environment. From the perspective of the entrepreneurs and other local initiatives, the study will understand the local entrepreneurial strategy the farmers use to address the social, economic and environmental sustainability of small businesses in a resource-constrained business environment.

Purpose of the Study.

The study is designed to understand everyday entrepreneurial processes in the context of resource – constraints for small businesses in the Nigerian Agricultural sector. I am required to carry out this study as part of a research degree requirement at The Robert Gordon University (RGU) Aberdeen, Scotland.

What will the study involve?

The study will involve an interview session at your preferred location /time and will be audio recorded, but the information you provide will be treated with the strictest confidentiality.

Why have you been asked to take part?

You have been asked because you are specifically suitable to provide data for this

study. Your participation and experience are important to this research.

Do you have to take part?

Your participation is entirely voluntary, and it is up to you to decide whether or not to take part. I will describe what I aim to find out in this study and go through this information sheet with you when you attend the interview. I will then ask you to sign a consent form to show you have agreed to participate. You are free to withdraw at any time, without giving a reason, and any data that I may have collected from you will be destroyed.

Will your participation in the study be kept anonymous?

All the information collected will only be used for research purposes. Any extracts from what you say that are quoted in the thesis will be entirely anonymous. I will ensure that no indications to your identity appear in the thesis or on any academic publication.

What will happen to the information which you give?

The data will be kept confidential for the study duration, available only to my research supervisors and me. It will be securely stored on RGU servers and an encrypted backup hard drive. Only the researchers will be privy to the notes, documents, recordings, and interview transcripts. These will be destroyed and erased once the research is completed.

What will happen to the results? The results will be presented in the thesis. My supervisors, a second marker, and the external examiner will see them. Future research students may read the thesis. The study outcomes may be disseminated through conferences or published in a research journal. All participants will receive a summary report of the findings if desired. In addition, the thesis will be available on OpenAIR, RGU: https://openair.rgu.ac.uk/

What are the possible disadvantages of taking part?

I do not envisage any negative consequences for you in taking part. It is possible that talking about your experience in this way may bring back unpleasant memories about issues you may have had with limited access to the resources you need to farm in Jos Plateau.

Who has reviewed this study?

The Robert Gordon Research Ethics Committee have given the approval to conduct this study.

Any further enquiries?

Thank you for taking the time to read this Information Sheet and considering taking part in this study. If you need any further information, you can contact me:

Researcher

Tigan D Daspan

Robert Gordon University Aberdeen Business School Phone: +44(0)1224 265000 Email: <u>t.daspan@rgu.ac.uk</u>

If you agree to participate in the study, please sign the consent form.

CONSENT FORM

Iagree to participate in Tigan Danjuma Daspan's research study.
The purpose and nature of the study have been explained to me in writing.
I am participating voluntarily.
I give permission for my interview with Tigan Daspan to be audio-recorded.
I understand that I can withdraw from the study, without repercussions, at any time, whether before it starts or while I am participating.
I understand that I can withdraw permission to use the data within two weeks of the interview, in which case the material will be deleted.
I understand that anonymity will be ensured in the write-up by disguising my identity.
I understand that disguised extracts from my interview may be quoted in the thesis and any subsequent publications if I give permission below:
(Please tick one box :)
I agree to quotation/publication of extracts from my interview
I do not agree to quotation/publication of extracts from my interview
Signed: Date:
DDINT NAME.