UNIVERSITY OF KWAZULU-NATAL

INYUVESI YAKWAZULU-NATALI

Strategies for Re-engineering the Growth and Sustainability of Small to Medium Enterprises (SMEs) in the Agrarian Sector in the Eastern Highlands, Zimbabwe

By

NGONI MUNYAWARARA

217081888

A Thesis Submitted in Partial Fulfilment of the Requirements

For the Degree of PhD

Supervisor: Prof. Krishna Govender

November 2019

DECLARATION

I   Ngoni Munyawarara   declare that

➢ The research reported in this dissertation/thesis is my original study.

➢ This dissertation/thesis has not been submitted for any degree or examination at any other university.

➢ This dissertation/thesis does not have some individuals' data, pictures, graphs or other information, unless specifically acknowledged as being sourced from other persons.

➢ This dissertation/thesis does not contain other persons' inscription, unless specifically acknowledged as being sourced from other researchers. Where other written sources have been quoted, then:

   ▪ their words have been re-written but the general information attributed to them has been referenced;

   ▪ Where their exact words have been used, their writing has been placed inside quotation marks, and referenced.

➢ Where I have reproduced a publication of which I am an author, co-author or editor, I have indicated in detail which part of the publication was actually written by me and have fully referenced such publications.

➢ This dissertation/thesis does not contain text, graphics or tables copied and pasted from the Internet, unless specifically acknowledged, and the source being detailed in the dissertation/thesis and in the References sections.

Signature:

Date:

ACKNOWLEDGEMENTS

I would like express my genuine gratitude to the following people who supported my study:

- My mentor, Professor Krishna Govender, for his devotion and assistance towards the accomplishment of my cram. I benefited immensely from Professor Govender's unwavering and priceless support throughout my study, although at times it seemed unattainable.
- My most heartfelt thanks go to Angela Pearce, for an ever- ready administrative guidance.
- My family and friends
- Glory be to God Almighty is the glory!

Signature ………………………………………. Date ……………………….

Ngoni Munyawarara

TABLE OF CONTENTS

ABSTRACT

Small and Medium Enterprises (SMEs) in the agrarian sector play a considerable role in poverty reduction and economic growth. Governments across the globe have emphasized SME re-engineering as a policy thrust for economic development. It is against this background that this research aimed to evaluate strategies for re-engineering the growth and sustainability of Zimbabwean agrarian SMEs. The primary purposes were to understand the challenges experienced by agrarian SMEs in re-engineering their growth, critically examine the re-engineering strategies, namely government policies, agricultural support mechanisms, SME development strategies, gender dynamics, SME management, and develop a framework to re-engineer agricultural SMEs in Zimbabwe.

Hypotheses were developed from an in-depth literature review to examine the relationship between the strategies for re-engineering SMEs in the agrarian sector in Zimbabwe. Random and purposive sampling techniques were used to survey 380 SMEs and 30 key Policy-makers and Agricultural Field Marshalls from the Eastern Highlands in Zimbabwe. The data was analysed using SPSS to perform descriptive and inferential analysis.

The main findings, based on regression analysis, showed that there is an association between government policies and the success of the re-engineered SMEs. Furthermore, there was also a strong relationship among agricultural support mechanisms, gender, management and techno-innovative strategies in re-engineering SMEs, as they all contributed to economic growth. Based on these results, it is suggested that policy-makers focus on developing SME-linked policies and skills development, so that the re-engineering processes can be successful and ultimately lead to the agricultural and economic development of Zimbabwean agrarian SMEs.

LIST OF TABLES

LIST OF FIGURES

APPENDICES

OPERATIONAL DEFINTIONS

The following definitions are provided to support the bibliophile to contextualize a range of relationships and input theories used in the line of investigation.

Strategies can be considered as careful plans or methods which are aimed at bringing about a desired future or achieving an evolutionary success or goal to a challenge (Ifekwem and Adedamola, 2016).

Food security is the accessibility at all times of sufficient, healthy, varied, fair and modest humanity food provisions of essential produce to maintain a stable development of food utilization and to offset fluctuations in production and cost (Belay, 2012; Castro, Orjuela & Jaime, 2017).

Re-engineering is the methodical revolution of an existing structure into an innovative appearance to appreciate superiority improvements in operation, system aptitude, functionality, presentation, or advance ability at a lower cost, program, or risk to the consumer (Bokor, 2017).

Innovation can be defined as a development of translating knowledge or a discovery into a good or service that creates a change or is a purposeful function of realities and inventiveness in deriving significance from capital (Serban, 2015; Arunachalam, Ramaswami, Hermann & Walker, 2018).

Sustainability is a procedure of preserving transformation in an unprejudiced method, of utilizing resources, improving technology and upholding institutional changes in accord to present and future to meet individual aspirations. It can further be defined as development in pursuit of a common ideal (Burch, 2017).

SMEs are non-subsidiary, self-regulating firms which make use of a small number of employees, are different from large companies and they play a central role in poverty reduction (UNCTAD, 2012).

Agriculture is the venture by which natural ecosystems are altered into obligation to food production (OECD, 2016; Sujová & Čierna, 2018). It symbolizes a main method in which human beings impact global ecosystems and it involves the inherited adaptation of plant and animal order, as well as the management of resource accessibility in quest of improving food security (Sims, 2017).

Economic growth is the boost up in real gross domestic product (GDP) (Katua, 2014).

Government Policies are procedures or protocols and they merely guide actions towards achieving a desired outcome (Aremu, Salako, Adedina, Ogunbayo & Adebisi, 2017).

ACRONYMS

ASMEC	American Small Medium Enterprises Corporation
AAG	Affirmative Action Group
AIS	Agriculture Information System
AFC	Agricultural Finance Corporation
AC	Agricultural Cluster
ACGFS	Agricultural Credit Guarantee Funds Scheme
AU	African Union
AES	Agricultural Extension Services
AGRITEX	Agricultural, Technical and Extension Services
AIKIS	Agricultural indigenous knowledge information systems
COMESA	Common Market for Southern Africa
CGC	Credit Guarantee Company
CGS	Credit guarantee schemes
EC	European Commission
EMA	Environmental Management Authority
EPAS	Economic and Poverty Alleviation Strategy
EC	European Commission
FTLF	Fast Track Land Reform
GDP	Growth Domestic Product
ICT	Information Communication Technology
IKS	Indigenous Knowledge System
IDBZ	Infrastructural Development Bank of Zimbabwe
MN	Mother Nature
MDG	Millennium Development Goal
MFG	Multi- Factor Growth
ROA	Return on Assets
ROE	Return on Equity
RBZ	Reserve Bank of Zimbabwe
R &D	Research and Development
PAIS	Presidential Agricultural Inputs Scheme
QMS	Quality Management System
SMEAZ	Small to Medium Enterprises Association of Zimbabwe
SDGs	Sustainable Development Goals
SMEs	Small to Medium Enterprises

SPSS	Soft Packaging Services
SADC	Southern Africa Development Corporation
SMEDCO	Small to Medium Enterprise Development Corporation
TNCs	Transnational companies
USITC	United States International Trade Commission
UK	United Kingdom
VCCZ	Venture Capital Company of Zimbabwe
ZIMASSET	Zimbabwe Agenda for Socio-Economic Transformation
ZISO	Zimbabwe Informal Sector Organization
ZCIEA	Zimbabwe Chamber of Informal Economy Associations
ZVTA	Zimbabwe Vendors and Traders Association

CHAPTER ONE:
CONTEXT OF THE STUDY

1. Introduction

An attempt to unlock the agricultural sector potential to enhance food security has necessitated governments and entrepreneurs to develop a collective agenda to maximize output, specifically that of SMEs in the agrarian sector (Eniola, 2014; WFP, 2014; Ameyaw, Korang, Twum & Asante, 2017). However, rigorous research on the best mechanisms that can be applied to agricultural SMEs is very limited, leaving entrepreneurs without clear guidance on which strategies to implement to re-engineer the growth and sustainability of the SMEs (ACET, 2015; OECD, 2016). The aforementioned is prompting an increase in scientific research to boost the sustainable growth of agricultural SMEs.

In the 21st century, governments are contributing to the development of SMEs in general, since they (SMEs) generate employment and improve economies (ACET, 2015). The SME sector has become a subject of investigation among authorities on how best the sector can positively impact economic growth and to equitably distribute income among the poor (Fidrmuc & Gundacker, 2017).According to the Minister of Women Affairs, Community, Small and Medium Enterprises (2018), a survey carried out by Finmark in 2012 among 2 748 890 SMEs, revealed that they (SMEs) are contributing 60% to GDP, and employing 2.9 million people. Despite this, the economic crisis, environmental changes and governance complexities, are aggressively forcing the Zimbabwean government to poorly implement SME policies, resulting in growth miscarriages of SMEs (Rurinda, Mapfumo, vanWijk, Mtambanengwe, Rufino, Chikowo & Giller, 2014; Chingwaru & Jarkata, 2015; Ameyaw et al., 2017; Dzinotizei, 2019).

Mugozhi and Hlabiso (2017) argue that SMEs are dynamic and engender economic growth, hence the clarion call for improved government support (Saberi & Hamdan, 2019). This is more so because re-engineering is a system that is gender- sensitive, seeking to provide socio economic benefits through adopting new value addition systems that place more emphasis on gender balancing and /or plural agriculture, to equitably distribute income to the less privileged communities in order to avert hunger (Broegaard, 2013;AFDB,2013; FAO, 2017; Fidrmuc & Gundacker, 2017).Therefore, the Ministries of Agriculture and SMEs must play a major role to ensure food security is attained in Zimbabwe through re-engineering the agricultural sector.

1.1. Background of the Study

Traditionally, agrarian SMEs are always searching for new solutions to their management problems, which are threatening their existence (Koranteng, Osei-Bonsu, Ameyaw, Ameyaw, Agyeman & Dankwa, 2017; Meyer & Meyer, 2017). In order to address the challenges being experienced by SME, Zimbabwe developed various policies which are important in developing SMEs (Bindu & Chigusiwa, 2013; Majoni, Mutunhu & Chaderopa, 2016).The state implemented strategies and policies which saw the establishment of the Ministry of Small to Medium Enterprises (Bomani, Fields & Derera, 2015). In addition to this policy, there are various SME support policies such as , the Rindell Commission (RC) (1981), the SME Policy (SP) (2002), the Zimbabwean Agriculture Investment Plan (ZAIP) (2013-2017), and the Zimbabwean Indigenous Economic Empowerment Policy (ZIEEP) (2008), have contributed to a surge in informal activities which are playing a major role in improving livelihoods in Zimbabwe.

FAO (2014) points out that SMEs in the agrarian sector need to be in clusters so as to be re-engineered through collaboration, so that they easily share experiences, knowledge, capabilities and resources to enhance their growth and sustainability (Fuglie & Rada,2013;Fornahl, Hassink & Menzel ,2015; Wolfe & Gertler, 2016).This is because engendering the growth of SMEs can provide food security, since Zimbabwe has been relying on food imports and donors for a period spanning over seventeen years (ZimVac, 2016; WFP, 2014). Agriculture is essential for economic development, since it is a primary source of income and it promotes the growth of other related sectors (Fidrmuc & Gundacker, 2017).The agricultural sector in Zimbabwe remains dominant and the majority of Zimbabweans rely on agriculture, not only for food security, but also for income generation (Anseeuw, Kapuya & Saruchera, 2012; English, 2016; Mhembwe, Chiunya & Dube, 2019). The world's emerging economies have been growing rapidly due to the SMEs juggernaut and many countries have developed programs which primarily support the growth of SMEs (Frumina, 2016) Brazil and India have radically redesigned SMEs to promote livelihoods through effective government policies and services (USAID, 2012; Chowa & Mukuvare, 2013; Eniola & Entebang, 2015), Taiwan was able to achieve a world-renowned "economic miracle" due to the activities of Taiwan's SMEs. These initiatives have witnessed several SMEs becoming transnational companies (TNCs), thereby ensuring food security and income generation in emerging economies (Anseeuw, Kapuya & Saruchera, 2012; Vineles, 2017).

Besides the significance of agrarian SMEs in modern Zimbabwe, adverse government policies and poor services are threatening their growth inclination, and re-engineering the sector is a decisive pre-condition for growth (Eniola, 2014; Ameyaw et al., 2017). Therefore, the main SME challenge in Zimbabwe is lack of sustainability to make meaningful contributions to economic development (Bouazza, 2015). Ostensibly re-engineering the SMEs in the agricultural sector will stimulate them to radically transform into competitive transnational companies and catalyze industrialization through increased raw material supply (Bahramnejad, Sharafi & Nabiollahi, 2015; Irungu & Arasa, 2017). Furthermore, the SMEs in the agrarian sector in Zimbabwe warrant re-engineering, since their growth will ensure food security through value-addition and increased productivity (Anseeuw, Kapuya & Saruchera, 2012; WFP, 2014; Arudchelvan & Wignaraja, 2015). The long-term sustainable growth of SMEs will create more jobs and promote this sector to end food insecurity (ACET, 2015).From this discourse, this study will critically examine strategies for re-engineering SMEs in the agrarian sector in Zimbabwe, as a means to enhance competitive growth, food security and improve livelihood.

1.2. Research Problem

Despite poor skills, the political crisis, inconsistent government policies and a lack of support, Zimbabwean agricultural SMEs have continued to grow (Chowa & Mukuvare,2013; Arudchelvan & Wignaraja,2015).The plethora of challenges face by agricultural SMEs, and the need to speed up growth and development of SMEs into formal companies capable of contributing fully to national development, necessitates a re-engineering process to invigorate their growth and sustainability (Cant , Erdis & Sephapo, 2014; Mutambara, 2016; SMEAZ,2017).SMEs in the agrarian sector are failing to fully capitalize on both technological opportunities and government support initiatives (Saberi &Hamdan, 2019), resulting in food insecurity in Zimbabwe being persistent (ZimVac, 2013; Anseeuw, Kapuya & Saruchera, 2012). Furthermore, the African Development Bank (2013) argues that an attempt by SMEs to survive in a distressed economy is being negated by a myriad of problems compelling the SMEs to remain insignificant contributors to Zimbabwe's GDP. The Zimbabwean government's limited support has resulted in poor agricultural infrastructure, low mechanization, low uptake of technological innovations and distorted value chain systems (Ehrenberger, Koudelkova & Strielkowski, 2015; Baporikar, 2017).

The aforementioned has resulted in the lack of fully developed agro-based industries, resulting in the unnecessary importation of farming related raw materials to support the agrarian SME initiatives. Bagaber, Syed, Syed, Suraya and Mohammed (2014) argue that the increase in population, high unemployment levels and critical food demand are contributing to the urgency for SMEs to be re-engineered to engender their development. Since the year 2000, Zimbabwe's agricultural output has been on free-fall (Chinamasa 2016; Anseeuw, Kapuya & Saruchera, 2012). Idle farm lands, low uptake of agro- technologies, low output by the key agrarian zones, natural calamities such as cyclones, pests, diseases, liquidity crisis, drought, and extreme political and regional polarization in Zimbabwe, are affecting the growth of SMEs (Bebber, Holmes & Gurr, 2014; Jayne, Headey & Chamberlin, 2014).The situation became worse during and after the' fast- track' land reform program (FTLRP) (2000), decelerating SME growth and the process negatively impacting food security. The FTLR (2000) was disruptive to agricultural land and related industrial productivity, while at the same time, assuming that agricultural SMEs were unproductive. As noted above, various researchers allude that re-engineering is necessary, since this will stimulate the growth of SMEs based on principles of good governance practices of accountability and effective management (Bilal, Naveed & Anwar, 2017; Bokor, 2017).

Although the majority of agricultural SMEs are located in the Eastern Highlands of Zimbabwe, they are producing an insignificant output that cannot meaningfully contribute to national food security. This has been attributed to lack of re-engineering of the SMEs to ensure that they attain food security in this region. As such, agrarian SMEs in this region are an important target group to investigate whether re-engineering them could stimulate food production significantly and they can sustainably contribute to the national GDP (Ndangoh, Thomas & Deedam,2018; Sujová & Čierna,2018).Furthermore, previous research on the agricultural sector in Zimbabwe has concentrated on large scale farms, although the agrarian SMEs play an equal, if not more pivotal role in ensuring food security and poverty reduction (Anseeuw, Kapuya and Saruchera,2012; Bindu & Chigusiwa,2013; Christiaensen & Todo, 2013; Mhembwe, Chiunya & Dube,2019).Thus, re-engineering the SMES is necessary as it has the potential to stimulate economic growth in general and provide more objective, fact- based insight into agriculture development. This improves the chances of increasing the agricultural value chain performance (Al-Matari.Abdullah & BtFadzil, 2014; Akinboade, 2015) and re-engineering strategies become a strategic management tool necessary to radically grow the SMEs. Apart from the SME's disjointed farming activities

(Grabowski, Kerr, Haggblade & Kabwe, 2016); it is of particular importance to develop a re-engineering framework for SMEs whose anchor is hinged on improving the growth of SMEs (Arafeh, 2016). This is particularly true in seeking to stimulate the growth of SMEs and this study is important since it can contribute to increased food security in Zimbabwe, as witnessed in other developed countries (Mulet, Royo, Chulvi & Galá, 2017). Recovery of agricultural productivity is based on re-engineering the SMEs, particularly in Zimbabwe, whose poor growth is attributable to poor management/methods (Bilal,Naveed & Anwar, 2017; Meyer & Meyer,2017),inconsistent government policies and lack of agricultural support measures (Eniola & Entebang, 2015; Majoni, Mutunhu, & Chaderopa, 2016).Therefore, re-engineering the agrarian SMEs in the Eastern Highlands will contribute to the creation of employment, improved standard of living, expanded market share, poverty reduction and income distribution in Zimbabwe (Maksimov,Wang & Luo,2017; Sutter, Bruton & Chen, 2019). It has been argued by Anseeuw (Bokor, 2017) that re-engineering closes hunger and poverty gaps the agricultural sector at household and community levels.

1.3. Research Questions

Insights from literature sources which guided the framing of the investigation question showed that appropriate strategies for re-engineering SMEs in the agrarian sector would improve their growth and sustainability and thus enhance food security (ACET, 2015; Anyamga & Nyamita, 2016; FAO, 2017). From the aforesaid discourse, the main questions emerged which are as follows;

1.3.1. Primary Research Question

To what an extent do re-engineering strategies engender (contribute to) the sustainable growth of agrarian SMEs?

1.3.2. Secondary Research Questions

1.3.2.1 To what extent can the major challenges being faced by the agricultural SMEs help inform SME policy review and development as a strategy to re-engineer the growth and sustainability of agrarian SMEs?

1.3.2.2 To what extent do SME related government policies promote the growth of agrarian SMEs?

1.3.2.3 To what extent do government agricultural support mechanisms stimulate the growth and sustainability of agrarian SMEs?

1.3.2.4 To what extent have the existing strategies been used to expedite the sustainable growth of agrarian SMEs?

1.3.2.5 To what extent do gender dynamics influence the growth and sustainability of SMEs in the agricultural sector?

1.3.2.6 To what extent can effective management methods increase the growth and sustainability of SMEs in the agricultural sector?

1.3.2.7 What re-engineering framework can stimulate the growth of agrarian SMEs?

1.4. Aim and Objectives of the Study

The aim of this study is to investigate strategies to re-engineer the agrarian SMEs so that this sector grows to guarantee food security.

1.4.1. Objectives of the Study

1.4.1.1 To identify the major challenges faced by SMEs in the agricultural sector which can be used to inform SME policy development for re-engineering the growth and sustainability of SMEs?

1.4.1.2 To establish the potential impact of SME- related government policies in re-engineering (stimulating) the growth and sustainability agrarian SMEs.

1.4.1.3 To investigate the role of government agricultural support mechanisms in stimulating the sustainable growth of agrarian SMEs.

1.4.1.4 To critically review the existing SME strategies and revise where necessary, so as to expedite the growth and sustainability of the agrarian SMEs?

1.4.1.5 To assess the role of gender dynamics in influencing the growth and sustainability of SMEs in the agricultural sector.

1.4.1.6 To examine the implications of knowledge and understanding of effective management methods on the growth and sustainability of agrarian SMEs?

1.4.1.7 To develop a framework to re-engineer (/stimulate) the growth and sustainability of agrarian SMEs.

1.5. Hypotheses

An investigation assumption is that government policies are the predictor variables while the re-engineering process is the mediator variable, and the growth and sustainability of agrarian SMES are the outcome variables (Kumar, 2014; Brymann, 2015). Therefore, the aim was to test the

relationships among certain variables in the context of the study. In the context of this study, growth will refer to the expansion of SMEs in terms of their productivity, their ability to generate food security, their market capitalisation, economic transformation/wealth creation, employment creation and resource allocation to improve livelihoods and sustain communities. Sustainability will be measured through: effective use of agricultural input resources, standard of living, market growth and output (Mbizi, Hove, Tondlana & Kakava, 2013; Jiang, Liu, Fey & Jiang, 2018). Therefore, it is postulated that the challenges which SMEs are facing will significantly influence the Zimbabwean government to re-design polices to engender their (SME) growth (Cant, Erdis & Sephapo, 2014).

The directional hypothesis is that government policies have interrelationships with strategies aimed at engendering the sustainable growth of agrarian SMEs in Zimbabwe (Kumar, 2014; ACET, 2015; Eniola & Entebang, 2015; Anyamga & Nyamita, 2016). The hypotheses as reflected in Table 1.1 were derived from the research problem and objectives. An investigation assumption is that government policies are the predictor variables while the re-engineering process is the mediator variable, and the growth and sustainability of agrarian SMES are the outcome variables (Brymann, 2015).

Table 1.1: Proposed Research Hypotheses

H1: There are significant relationships between the major SME challenges experienced by agrarian SMEs in the Easter Highlands in Zimbabwe and policies to re-engineer their growth and sustainability.
H2: There are significant relationships between SME-related government policies and their value in re-engineering the growth and sustainability of SMEs in the agrarian sector.
H3: There are significant relationships between agricultural support mechanisms and strategies to re-engineer the growth and sustainability of agrarian SMEs.
H4: There are significant relationships between strategies to re-engineer the growth and sustainability of agrarian SMEs and economic transformation/wealth creation.
H5: There are significant relationships between the existing SME techno-innovative strategies and the growth and sustainability of SMEs in the agrarian sector.
H6: There are significant relationships between gender dynamics and strategies to re-engineer the growth and sustainability of SMEs in the agrarian sector.
H7: There are significant relationships between effective management methods and strategies to re-engineer the growth and sustainability of SMEs in the agrarian sector.

1.6. Contribution to the Field of Study

The study will generally contribute to the growth and sustainability of agricultural activities and economic development in Zimbabwe as discussed below:

1.6.1. Practical Contributions

SME owner-managers in the agrarian sector will better understand how effective management resolves the main challenges hampering sustainable growth of SMEs in the agrarian sector (Şerban, 2015). Additionally, the Zimbabwean authorities will be encouraged to re-look at their SME and other related policies aimed at engendering the growth of agricultural SMEs and improve food security in Zimbabwe (Bindu & Chigusiwa, 2013; WFP, 2014). The study will have vital implications, particularly in re-engineering agricultural SMEs in the SADC region, since most countries perennially face hunger and starvation. This will improve food security, thereby reducing hunger and poverty (Christiaensen & Todo, 2013; Sutter, Bruton & Chen, 2019). Globally, agriculture will be developed through encouraging reengineering and support programs to promote competition and sustainable growth among SMEs. In addition, this research will expand the knowledge base that currently exists in the fields of entrepreneurship (Bubou et al.,2014;Bliemel, McCarthy & Maine,2016; Li, Ur Rehman & Asim, 2019) agriculture and SME management, by highlighting the importance of strategies for re-engineering SMEs in the agrarian sector to improve living standards (ACET, 2015; Bilal, Naveed & Anwar, 2017).The community will embrace effective strategic management to enable the informal agricultural sector to develop, compete globally and sustain the community (Chinamasa, 2016; Mutalemwa, 2015; Bello, 2017;SMEAZ ,2017).The results will be used to revise existing policies so that they engender the growth and sustainability of SMEs in Zimbabwe (Chingwaru & Jarkata, 2015; WFP, 2014).

1.6.2. Hypothetical Contributions

It is anticipated that the findings will be of value to future researchers and have pedagogical implications for educators, as it provides new perspectives to strategies for re-engineering the SMEs in the agricultural sector (Nyanga, Zirima, Mupani, Mashavira & Chifamba, 2013). The literature indicated that there is need to conduct further research on re-engineering SMEs in other industries, particularly in developing economies to establish whether the strategies for re-engineering are effective in growing agrarian SMEs (Chingwaru & Jarkata, 2015; ACET, 2015). The research will have important implications by providing new perspectives, such as understanding and utilising

effective management methods at their disposal and the need to regulate (formalize) their operations which may contribute to better definitions of SMEs in the agricultural sector and how government policies may support agrarian SMEs in developing economies (ASMEC, 2013; Strielkowski, Tcukanova & Zarubina, 2017; Benhassine, McKenzie, Pouliquen & Santini, 2018). One of the exceptional research contributions is the development of a SME re-engineering framework which could assist in the development and growth of the SMEs. The re-engineering framework is unique and has offensive and defensive re-engineering tactics, developed to enable SMEs to re-engineer themselves from within. It will improve internal management and work delivery systems, since the SME's workflow is independent, yet entangled with web-related activities feeding into each other and seeking to achieve growth, sustainability and productivity of SMEs. Its defensive re-engineering methodology insulates SMEs from unfavorable external forces by adapting to government policy regulations and technological demands, thereby, circumventing environmental threats inhibiting their growth and sustainability.

1.7. Delimitations of the Study

Undeniably, according to Etikan and Bala (2017), by definition, delimitations are the characteristics that limit the scope of the inquiry as determined by consciously excluding and including some issues or individuals that are usually made throughout the study. Among these, the choice of objectives and questions, variables of interest, alternative theoretical and conceptual perspectives are considered for the study. Correspondingly, Rahi (2017) stated that while it is not always possible due to resource and time pressures; accurate SMEs research should involve a survey across the region to gain an insight into the agrarian SME characteristics.

1.7.1 Geographical Location

The study was limited to SMEs in the Eastern Highlands of Zimbabwe, because the country is largely an agriculture-driven economy and the agricultural sector is performing poorly. As such, there is need to re-engineer the sector for Zimbabwe to reclaim its ''breadbasket'' status in Africa. The research is conducted within the following parameters: Only agrarian SMEs as well as policy makers and Agritex Field Marshals in the Eastern Highlands will be included in this study. This is because by definition, delimitations of a study are those characteristics that limit the scope (define the boundaries) of the inquiry as determined by the conscious exclusion and inclusion of some issues pertaining to agrarian SMEs. The contribution of SMEs from the Eastern Highlands to the national

agricultural output is vital, as witnessed by the diversity and volume of products that emerge from the region (Zimtrade, 2014). The selection of the region is also based on the amount and value of the output that these districts (when combined), will contribute to the national total agricultural output. Among these geographical and related output factors, are the choice of objectives and questions, variables of interest and alternative theoretical perspectives that could be considered. As such, the study of agrarian SMEs in the Eastern Highlands of Zimbabwe highlights the existence of the 'missing middle' in the Zimbabwean agricultural output situation. The segment of SMEs in the Eastern Highlands experiences severe constraints which are hindering their growth. On the other hand, lack of re-engineering strategies is one issue deterring their sustainable growth. Evidence from Bokor (2017), Muzerengi and Mapuranga (2017) and Mahjoor (2016) suggest that if re-engineered, the agricultural SMEs will increase food security and alleviate hunger, promote Industrialisation and community development.

1.7.2 Focus of the Study: Agrarian SMEs in the Eastern Highlands of Zimbabwe

The choice of SMEs in the Eastern Highlands is largely because the majority of agrarian SMEs are located here (Kamoyo Mavhima, & Muranda, 2014; Finscope Survey, 2012; Dzinotizei, 2019).Thus, this study represented a large sample of different/diverse SMEs which are into farming activities or participate in the agricultural value chain systems. Furthermore, Agritex Field Marshals in this area recognize the classification of clustered agrarian SMEs, since it helps them to distribute agricultural resources from the government to private stakeholders more easily than in to other areas in Zimbabwe. The classification system breaks SMEs into small and medium enterprises. . Therefore, this study focused on a single economy (the exclusion of other sectors,) and focusing on a sample in Eastern Highlands, since the primary objective was on reengineering the growth and sustainability of agrarian SMEs. To summarise, the research focused on a sample of agrarian SMEs in Zimbabwe's Eastern Highlands. The period of study was from July 2017 to July 2020 (Creswell, 2013).

1.8. Outline of the Thesis

The study is alienated into eight chapters.

Chapter 1: presents introduction, background to the study, research problem, aim, questions, objectives, hypotheses, contribution to the study and delimitations. An impression of the investigation highlights the significance of the research.

Chapter 2: deals with an appraisal of the applicable literature on the re-engineering process and conceptualizing SMEs. The objective is to appraise the diverse concepts pertaining to the study.

Lastly, the chapter offers an account of re-engineering process and importance of agrarian SMEs that guides this study.

Chapter 3: presents the appropriate literature on strategies for re-engineering SMEs. The thrust of this section is to weigh the different concepts pertaining to the study and the correlation between government policies and the growth of SMEs. In conclusion, a critique of the reviewed strategies for re-engineering SMEs that guides this study was discussed.

Chapter 4: the focal point is the conceptual framework that led to this investigation. The chapter reviews the re-engineering framework and its relevance to the research. In addition, special models of re-engineering SMEs in the agrarian sector are briefly discussed in relation to re-engineering SMEs to alleviate poverty, increase competitiveness and productivity to ensure food security is attained in Zimbabwe.

Chapter 5: the line of approach was explained as well as the pattern which enlightened the design which presented a structured methodological approach relative to the study's objectives. It provides a comprehensive discussion of the research methodology and the design. The chapter covered in detail the roadmap of how the data was gathered, starting with the pilot study that was carried out to refine the research instruments. It defined the population, sample size as well as the sample elements that constituted the study. The other parameters of the methodology such as validity, reliability and data analysis of the study were also covered. The researcher explained how the confidentiality of the respondents was assured by way of a cover letter, and names of the participants remaining anonymous.

Chapter 6: is committed to the findings using various arithmetical analyses using the most suitable designs such as tables and graphic representations. The fundamental nature of the chapter is to put assembled data into meaningful form.

Chapter 7: is devoted to results and discussion of findings subjecting to various statistical analyses. The section presented results.

.**Chapter 8:** presents conclusions and recommendations. The overall findings deal with objectives of the study. Recommendations section present further study and practical suggestions for use by agrarian SMEs and policy makers.

1.9. Summary

The chapter discussed context, problem, questions, aim and objectives, hypotheses, contribution to the research field and the delimitation. The chapter also cited the conceptual framework relevant to

the study. It is against these that this study is positioned to investigate SMEs in the agrarian sector to engender their growth and attain food security in the Eastern Highlands in Zimbabwe. The next Chapter reviews the literature on the strategies for re-engineering the growth and sustainability of SMEs in Zimbabwe.

CHAPTER TWO:
THE RE-ENGINEERING PROCESS AND AGRARIAN SMALL TO MEDIUM ENTERPRISES

2.1. Introduction

The rationale of this part is to assess literature on agrarian SMEs and the importance of agriculture in Zimbabwe. An overview of re-engineering SMEs to help deal with the research objectives is presented. The literature is complemented by an overview of re-engineering challenges facing SMEs and critically coming up with a re-engineering framework that enables the radical intensification of Zimbabwean agrarian SMEs (Gorevaya, Khayrullina, 2015; Nowin´ski & Haddoud, 2019).The research identified gaps which justified the research whose aim is to explore strategies for re-engineering agrarian SMEs, seeking to guarantee food security and nutriment in Zimbabwe.

2.2. Conceptualizing Agrarian SMEs

This investigation examined the account of agrarian SMEs which are generally intricately woven with the view that this sector is engaged in economic activities whose personnel numbers fall below certain industrial thresholds and vary from family businesses to self-employed persons, cooperatives, partnerships and associations pursuing different lines of agribusiness interest (Bomani, Fields & Derera, 2015; Durendez, Ruiz-Palomo, Garcia-Perez-de-Lema & Dieguez-Soto, 2016; Ameyaw, et al., 2017). According to Wang and Wu (2012) the agrarian SMEs have a huge multiplier effect on employees, suppliers and consumers (Eklof, Podkorytova & Malova, 2018). However, several researchers in the last epoch have been arguing that SMEs in the agricultural sector seem to grow in booming economies and they go on to intimate that Trans National Companies (TNCs) witness growth during economic depression. FAO (2014) further alluded that SMEs in the agrarian sector have higher liability levels than SMEs with lower growth inclination elsewhere (Bass, 2012). Despite these conceptualizations, government policies have a mandate of assisting SMEs in the agrarian sector to grow and generate income. However, Schumpeter 1961 as cited by Nyamutowa, Masunda and Mupaso (2014), pointed out that the growth of SMEs is somewhat slow in nature and more likely influenced by a re-engineering strategy, while entrepreneurship explains that SMEs do innovative activities in an original manner to create taste to consumers (AFDB, 2013; Zhang, van Doorn & Leeflang, 2014; Bliemel, McCarthy & Maine, 2016).Moreso, the Schumpeterian theory further posits that SMEs change from the inside to the outside. Berisha, Justina and Pula (2015) argue that the evolution in the definitions of SMEs is continuous since the geographical, spatial and

economic transformation is revolving making it difficult to depend on a single definition. In this regard, the agrarian sector is crucial to social mobility as it generates opportunities across sectors and topographical areas, creating some equality and boosts income generation (Bjornlunda and Pittock, 2017; Fidrmuc & Gundacker, 2017). These approaches provide the construct to articulate the research problem and respond to the objectives of the study.

According to the United States International Trade Commission (USITC), SMEs are described as organizations with less than 500 employees (Yeboah, 2015). According to ASMEC (2013) and USSBA (2013) SMEs' initial delineation was adopted by the United States of America through the SME Mobilization Act of 1942, the SMEs Act of 1953 and also through the UK's Bolton Committee of 1971. In a quantitative cognitive context, the European Commission (EC) (2015) and Wymenga, Spanikova, Barker, Konings and Canton (2015) define SMEs in terms of number of personnel and annual turnover. Furthermore, the EU block defines SMEs in the agrarian sector by size and feat, and in this context, FAO (2014) and Margaretha and Supartika (2016) allude that SMEs are forces of resourcefulness in creating value and profit out of insufficient resource utilization. Furthermore, Arudchelvan and Wignaraja (2015) posit that SMEs in the EU are defined as reflected in Table 2.1. ASMEC (2013) contends that the categorization of SMEs changes from one country to the other and the major cause of these differences emanates from levels of economic growth within each country.

Table 2.1: SME Classification in EU

SME Category	Staff Head Count	Revenue
Medium	250+	50 Million Pounds
Small	50+	10 Million Pounds
Micro	10+	2 Million Pounds

Source: Fact File- EU, 2014

Table 2.1 provides a summary of SME definitions. In America, the SME Act stated that SMEs are derived from independently owned informal businesses and their definition varies from sector to

sector to affect a homogenous meaning. These definitions are supported by ACET (2015) who identified factors such as government regulations and re-engineering stratagems, capabilities, change management, technologies, innovation and market characteristics as key to promoting the growth and sustainability of SMEs (Bhaskar, 2016; Arunachalam et al.,2018). Therefore, in this case, the definitions of SMEs are different; depending on the socio economic conditions in the community and the pattern of socio-cultural values influence the growth and sustainability of SMEs (Iyiola & Azu, 2014; Yeboah, 2015). Conversely, SMEs in the agrarian sector have a relationship with government policies and re-engineering processes which will help agrarian SMEs meet the demand for food provision and poverty reduction (Christiaensen & Todo, 2013; Muzerengi & Mapuranga, 2017).From this perspective, government policies are crucial in developing the SME sector as a way of improving livelihoods (Chowa & Mukuvare, 2013; IFAD, 2013; Zimtrade, 2014; Mangudya, 2017).

Economies in Africa are becoming more vibrant, and driven by agricultural SME in catalyzing community development (FAO, 2018) and on that basis OECD (2016) suggests there is a superior call to appreciate strategies for re-engineering that trigger the growth of SMEs. Bass (2012) and Barkhatov (2016) explain that SMEs' success is dependent on multidimensional aspects, with some internal and some external re-engineering. However, SMEs have remained in a 'missing middle', particularly SMEs in the agrarian sector, hence, the need to re-engineer them to radically change and improve their functionality and catalyse their sustainable growth.

According to Bomani, Fields and Derera (2015), the delineation of SMEs in the SADC region is being affected by lack of technological uptake (World Bank, 2015). As such, the desire for wealth creation by SMEs in the agrarian sector develops into TNCs and increasingly become drivers of economic growth (World Bank, 2015). The delineation of SMEs in the SADC region is further affected by lack of technological uptake as most of them still stick to obsolete approaches which make their operations uncompetitive thus producing products and or services which have no market. These SMEs are engaged largely in agriculture.

2.2.1. Context of the Zimbabwean Agrarian SMEs

Zimbabweans define an SME as a business segment that is micro, small, medium and large, depending on the number of workers employed their sale volumes and asset base (Chivasa, 2014; Dar, Ahmed & Raziq, 2017). The SME Act (2011) and the policy document states that SMEs are generally micro to small medium enterprises employing in the range of 1-150 personnel with an asset base of between 5000 to 75 000 ZW dollars. The Table 2.2 defines SMEs in the agricultural sector in Zimbabwe.

Table 2.2 SME Characterization in Zimbabwe

SME Category	Staff Head Count	Capital	Assets/Collateral
Micro	<1	<2000	Household only
Small	<5	<5000	Household/ Movable
Medium	<10	<25000	Title Deeds/Movable

Source: Researcher's Development

According to Chinamasa (2016), the SMEs in Zimbabwe are generating over 70 percent of all jobs and contribute to GDP. Most of these SMEs have little achievement for growth owing to lack of support. Zimbabwe has reiterated that agrarian SMEs should be influenced, with support mechanisms, to create more jobs and stand out as a stabilizing catalyst in a socio-economic milieu. According to ZIMRA (2019) and Chivasa (2014), the SMEs contributed $8.58 billion to GDP in 2016 and it classifies SMEs as businesses that employ between 1-40 persons with an annual turnover and assets from as low as $50 000 to $2million.Nyoni (2017) concurs that the role engaged in supporting poor families by Zimbabwean SMEs is significant since the standard of living is improving (Berisha, Justina & Pula, 2015). Therefore, Zimbabwean authorities lack taking necessary steps to transform agrarian SMEs into dynamic large companies operating in the formal economy. Thus, both policy makers and SMEs owners have to know how they influence sustainable growth of SMEs in the agrarian sector since they play a key role in balancing economies (ASMEC, 2013; Bakar & Senin, 2016).

By nature, Zimbabwean SMEs are pathfinders in niche marketing prowess than larger firms (Cant & Wiid, 2016). As such, agrarian SMEs are solving socioeconomic problems bedeviling Zimbabweans. However, Bokor (2017) argued that the agrarian SMEs in Zimbabwe can never grow unless authorities focus on the noble initiative of re-engineering agrarian SMEs since many communities in Zimbabwe practice agriculture and they constitute a fundamental part to employment creation as argued by (Nyamwanza, Paketh, Mhaka, Makaza & Moyo, 2015).ZimVac (2013) assert that the food and unemployment crisis faced by Zimbabweans have forced them into the agricultural SME sector to eke a living. Therefore, Zimbabwe is increasingly acknowledging the influence of SMEs to economic development. This thrust is seconded by Chapter 24:12 the Small Enterprises Development Corporation Act 16/1983, 17/1988, 24/1990, 3/1997, 22/2001 (s. 4), 6/2011 which seeks to stimulate SMEs activities through government support in terms of advice and funding (UNFPA Zimbabwe, 2020).

2.3. Significance of the Agricultural Sector

This section outlines the important role played by re-engineering agrarian SMEs to transform economies around the world. In many instances, agriculture has become the key priority sector for food provision and poverty reduction (Christiaensen & Todo, 2013; Castro, Orjuela & Jaime, 2017). Agricultural SMEs provide basic food and raw materials which stimulate industrialization. In the USA, agricultural development has greatly helped in the process of securing food security and industrialization (WFP, 2017; Cloete, 2013).The focus of every government is to provide food security for its citizens even way before industrial growth is considered as a means to advance nutriment (Muzerengi & Mapuranga, 2017). Even though the agricultural sector faces aggressive competition from various elements of globalization, it remains an influence on hunger and poverty reduction in Central, Eastern and South-Eastern Asia and Latin America through promotion of the growth of SMEs which then improves food security (FAO, 2017). In this case, India increased its food production by nearly 112 per cent in early 2000 from 50 per cent in 1988, and the Cuban Agricultural Revolution has optimized intensive and meticulous agriculture to double food security and their agrarian SMEs have become more efficient (WFP, 2017).

Although agricultural SMEs have remained the most important sector to reduce poverty and they employ 60-80 percent of the economically active population in Africa (AfDB, 2013; Sutter, Bruton

& Chen, 2019) argued that progress in agriculture development in Africa has been relatively poor, compared to other continents. Fundamental to this problem is the lack of strategies to re-engineer SMEs. Most African governments have not prioritized SMEs in the agriculture sector, especially in rural and farm community areas, despite their notable contributions to their countries' GDP (Arunagiri et al., 2015). From this perspective Cant and Wiid (2016) and Rosegrant, Koo, Cenacchi, Ringler, Robertson, Fisher, Cox, Garrett, Perez and Sabbagh (2014) claim the disconnection on the growth of SMEs is partly due to the complexity of poor management in the agricultural landscape. The progress of agrarian SMEs has been slow particularly in Zimbabwe, since the country's disruptive and rhetoric policies have often frustrated efforts to improve the agricultural sector (ZimVac, 2016; Nyamutowa, Masunda & Mupaso, 2014; Majoni, Mutunhu, & Chaderopa, 2016).The motives may be numerous and wide-ranging, but what is understandable is that the African Union (AU) agreed at the Maputo Declaration (2013), to adopt sound policies for the development of agriculture. This is even more important when one considers that agrarian SMEs will end up producing higher crop yields per hectare than larger farms (Anseeuw, Kapuya and Saruchera, 2012).

FAO (2017) agrees that farming has a central responsibility to building a strong Zimbabwean economy and, in the process, reduce socio-economic inequalities by increasing income and employment opportunities for the poor (Anseeuw, Kapuya and Saruchera, 2012; Bindu and Chigusiwa,2013; Doss , Kovarik , Peterman , Quisumbing & Van Den Bold,2015;Bjornlunda & Pittock,2017). Thus, the value of agriculture is unlocked through strategies for re-engineering the growth of SMEs in the agrarian sector to enhance food security. According to Ameyaw et al (2017) government is to come up with agrarian programs to maximize food security and stimulate the agrarian SME activities (Frumina, 2016). Explicitly, this indicates that through re-engineering SMEs in the agrarian sector, it is expected that their activities would become commercial in nature and provide a linchpin for an all-encompassing national economic restructuring. It should be noted that the sector realized growth through the land reform program which saw many previously untrained people taking over farms without the requisite knowhow and experience to practice professional agriculture (Anseeuw, Kapuya and Saruchera, 2012; Jayne, Headey & Chamberlin, 2014), thus making it clear that much more needs to be done in the sector for it to respond appropriately to the new challenges.

This study draws insights from agricultural scientists who are lobbying for re-engineering agrarian SMEs as a prudent way to mitigate food insecurities so that the country is capable of feeding its ever-growing population (Castro, Orjuela & Jaime, 2017). More specifically, effective policy implementation should be the main focus of government intervention and bring out the best from SMEs management in the agrarian sector (Bilal, Naveed & Anwar, 2017). Primarily, in modern conditions and circumstances, agricultural SMEs cannot develop separately without functional management strategies within the concept of agricultural indigenous knowledge systems (Anyamga & Nyamita, 2016; Strielkowski, Tcukanova & Zarubina, 2017).Even though SMEs in the agrarian sector are emerging at different levels and pace, they differ across countries. What is common within them is that unsustainable agricultural practices are persisting, thereby, constraining their growth. To this end, government policies should create conditions that encourage environmentally-friendly practices and create sustainability in the agricultural sector (De Oliveira & Jabbour, 2017). It is against this backdrop that the growth of agricultural SMEs' is achieved through a mixture of re-engineering strategies.

The literature reveals that the strategies to re-engineer SMEs in the agrarian sector have generated considerable growth in agriculture in recent decades. At the same time, they have been increasing the amount of agricultural activities and raising household income, improving competitiveness and driving national economic growth (Irungu & Arasa, 2017; Fidrmuc & Gundacker, 2017). Despite the failure of the agricultural sector in Zimbabwe, the citizenry continues deriving its livelihood from informal agricultural activities (Castro, Orjuela & Jaime, 2017). Re-engineering helps to explain the need to develop the Zimbabwean agricultural SMEs as it is critical in improving food security and overall livelihood, as was elaborated by the World Food Summit (WFS) held in Copenhagen in 2017. Furthermore, agricultural SMEs are the primary source of income for the majority of Zimbabweans and they use this income to stimulate the performance of other economic sectors (Cloete, 2013; Akinboade, 2015; World Food Summit, 2017). The true impact of the agricultural sector is felt as it creates jobs ,affects income distribution, supplies raw materials to the manufacturing sector, contributes to export earnings, contributes to GDP and occupies a central place in the Zimbabwean economy (USAID, 2012; Arunagiri et al., 2015; Wang , Yamauchi & Huang,2016).

To fully exploit the benefits of agriculture, Zimbabwe needs to have policies and strategies which stimulate a radical approach to agriculture production in the agrarian SME sector. This also enhances food security, national economic growth and improves livelihoods (Nyamutowa, Masunda & Mupaso, 2014; Anseeuw, Kapuya & Saruchera, 2012; Hilson, 2016), The poor agrarian activities of SMEs have been viewed by Bakar and Senin (2016) and the FAO (2014) as entities that need to refocus and be revolutionized through a re-engineering process to improve farming processes and outputs(Ndangoh, Thomas & Deedam ,2018).Rigorous research on the best mechanisms which can be applied to re-engineer agrarian SMEs in developing countries is very limited, leaving SMEs with little guidance on which programs to apply in engineering their growth and sustainability (ACET, 2015; (Frumina,2016). Apparently, there are increased chances for SMEs in the agrarian sector to be reorganized and for them to focus on strategies to re-engineer themselves to satisfy food provisions needs (Anseeuw, Kapuya & Saruchera, 2012; (Nyanga, Zirima, Mupani, Mashavira & Chifamba, 2013).SMEs in the agrarian sector lack shared approaches that are in line with global standards (Mutalemwa, 2015; Bello, 2017), as evidenced by the absence of strategic management approaches (Meyer & Meyer, 2017). This is what leads to poverty and increased food insecurity. Unlike in developed countries, SMEs in the agrarian sector in most African nations do not take a business approach to their activities and this has an effect on their outputs (AfDB, 2013; Maksimov, Wang & Luo, 2017). Furthermore, there are limitations embedded in government policies which often become impediments to agrarian SMEs, when they should be the major employer in Zimbabwe.

From the above discussion, it is apparent that the achievement of turning around the Zimbabwean agrarian SMEs depends on re-engineering SMEs, through diverse government policies and strategies.

2.3.1. Sustaining Food Security and Productivity

The UN FAO (2017) defines food security as having safe, adequate and nutritious rations. However, the essence of this study concerns key variables to attain food security through strategies for re-engineering agrarian SMEs since food consumption rate is rising each day (ACET, 2015). In addition, it is evident that the agricultural sector plays a strategic function in the increase of food production and per-capita income rise (Sujová & Čierna, 2018). To this end, the 21[st]century has been increasingly focusing on strategies for re-engineering SMEs in the agrarian sector to improve food

security (De Vries, Terwel, Ellemers & Daamen, 2015). The OECD (2016) describes food security as the state where people have surplus food to sustain themselves, since shortages of food causes famine and malnutrition. The essence of the study is to re-engineer agricultural SMEs in order to promote productivity and to avert the dangers of starvation (World Food Summit, 2017). In line with this general relief, the government introduced support programs to restore macro-economic stability and productivity in all food and agricultural SMEs initiatives (ZimVac, 2016; Frumina, 2016). This approach to food security is a constitutional right for citizens to have access to adequate food. It is in this context that comprehensive agricultural support programs are needed which ensure the development and competitiveness of SMEs and aid in agricultural transformation (Rosegrant et al., 2014WFP, 2014; AGRA, 2016; Anicic, Vukotic & Krstic, 2016). The locus of food security takes stock of progress made towards achieving the internationally established hunger and poverty reduction targets (Christiaensen & Todo, 2013). Hence, the food insecurity eradication and growth of agrarian SMEs should remain a key commitment of decision-makers at all levels.

Historically, agricultural productivity is measured by Total Factor Productivity (TFP) which reflects in the efficiency of combining the SMEs' inputs to produce (outputs) (Jayne & Rashid; 2013; FAO, 2017). It is in line with this that improved agricultural output contributes substantially to the overall economic development (Bouazza, 2015) hence, the justification to place more emphasis on re-engineering agrarian SMEs. According to Food and Nutrition Council (2014), most of Zimbabwe's increased food output is no longer a result of expansion of an area used in agriculture, but comes from strategies for re-engineering agricultural SMEs to intensify growth and productivity of SMEs in the agricultural sector (Anseeuw, Kapuya and Saruchera,2012). As such, the Washington-based International Food Policy Research Institute believes that research in agriculture increases the ability to feed the growing population (WFP, 2017). Although a large proportion of SADC's poor communities are engaged in agriculture, governments spend large amounts of their budget to fulfill the demand for food. The government of Zimbabwe is not fully supporting the agrarian SMEs to eliminate hunger, inequalities and poverty amongst its households sufficiently because the current economic distress being experienced is leading to the poor implementation of SME support programs/ policies (Government of Zimbabwe and AFDB, 2013; Doss et al., 2015). The agrarian SME sector's food productivity is growth- orientated and focuses more on the center of strategic thrusts to improve food security. This is supported by governments across the globe to ensure food security is attained through growing SMEs (Mugozhi & Hlabiso, 2017). The new SME entrance into

farming lack government support on how to increase sustainable growth (Wong, 2015; Grabowski, Kerr, Haggblade & Kabwe, 2016; Saberi & Hamdan,2019).Therefore, the rationale behind re-engineering SMEs in the agrarian sector is to have adequate food as a strategy to eliminate threats (Aliber & Hall,2012) of undernourishment and hunger.

2.3.2. Promoting Income Distribution

The significant income distribution in developed countries by SMEs shows that reengineering agrarian SMEs leads to economic growth in developing countries (Arunagiri, Kalaippiriya, Lenggesh Krishna, MahaVithya & Kalaivani, 2015). Reengineering the growth of SMEs is seen as the paramount way of triumphing over poverty and inequality in developing countries (ILemona, 2013).From this perspective, agrarian SMEs in Zimbabwe are crucial elements in the development of its industries. Governments are creating flexible economic systems in which small and large firms are intertwined, creating good opportunities for the attraction of foreign currency inflows. In that regard, they play a critical role in ensuring income stability and improved standards of living (Chinamasa, 2016; Fidrmuc & Gundacker, 2017). Thus, re-engineering SMEs improves wealth creation. This strategy allows them to grow much faster than large companies to enhance meaningful economic development. They also bring about diversity through bridging the gaps in income disparities (Fidrmuc & Gundacker, 2017) and consumers are able to access goods and services close to their domicile, thereby, transforming lifestyles of the poor and ultimately raising their standards of living (Eklof, Podkorytova & Malova, 2018).

2.3.3 Comparative Analysis: SMEs in Agriculture as Potential Drivers of Food Security and Economic Transformation

SMEs in agriculture present an opportunity to improve food security; however, many of them experience poor yields attributed to poor management. It is, therefore, imperative that agrarian SMEs adopt re-engineering strategies to increase production and, consequently, ensure their growth (Jaramillo, Ortiz, Ramankutty, Sayer & Shindell, 2017). As such, agriculture has provided many benefits, and has given developed countries food security which has enabled them to escape the scourge of dependency (Wang, Huang & Rozelle, 2017) and monopoly by foreign forces. It fosters total sovereignty and economic growth whose leverage is acknowledged by authorities since agricultural development offers the potential for poverty and inequality reduction (Hejazi & Marchant, 2017).

The World Food Summit (2017), postulated that food security, at the individual, household, national, regional and global levels is achieved when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. Thus, food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life. Household food security is the application of this concept to the family level, with individuals within households as the focus of concern. Historically, a vibrant agricultural sector has, in most cases, been the foundation for positive economic growth or transformation in many developed countries (AGRA, 2016). Agricultural growth was the precursor to several food security revolutions in Europe and the United States and more recently to the agriculture revolutions in China (Wang, Huang & Rozelle, 2017), As such, according to Hejazi and Marchant (2017), China is one global country that has experienced massive population growth over the last four decades, with a population that surpasses that of all African countries combined. However, agriculture in China has experienced a roller-coaster development path where the means of farm production was distributed to agrarian SMEs. This has led to China's biggest agricultural achievements, with only 10% of global farmland ,China has successfully fed its huge population of over one fifth of the world total population, getting rid of the worries and doubts on "can China feed itself?". At the same time, enjoying about 13% of global farmland, at least one fourth of the African continent's grain is imported every year and one third of Africa's population is dependent on grain aid (Huang, 2014).According to FAO (2017), 25% of Africans are malnourished, and 44 countries from a total of 53 are struggling to achieve food security. Apart from food security, another great achievement of Chinese agricultural sector has been on improving the nutrition levels of its people. There is a large difference between Chinese and African people's food composition according to their agricultural production (Jaramillo et al., 2017; Sujová & Čierna, 2018 ;).

As discussed above, sustainable grassroots agricultural development is vital to the realisation of sustainable food security and poverty reduction in developing countries (Sutter, Bruton & Chen, 2019). However, to achieve this goal, an effective re-engineering framework that is all- inclusive and embracive of agrarian SMEs must be available for re-engineering the growth of this sector. (Arunachalam et al., 2018).This is exactly why the whole economy of China benefits from agricultural development (Cai, Hu, Huang & Wang, 2017), in a far more sustainable and long-lasting

manner than Africa. Such mechanisms have never taken place in most African countries while they have barely witnessed comparable agricultural growth as China did. Re-engineering agrarian SMEs is essential for African countries to achieve food security.Africa is, thus, competing and lagging behind in agricultural activities seeking to improve food security. According to Africa Country Benchmark Report (2017) and Mitaritonna and Traoré (2017) the African countries with the highest food security provision are; Tunisia, Mauritius, Morocco Algeria, Egypt Gabon, South Africa and Ghana. These countries tend to be politically stable, with good governance and have since managed to put in place effective policy reforms. The reforms had a bearing on agricultural growth of far greater magnitude than for majority of the rest of African countries enjoying stability, such as Zimbabwe. As indicated above, these countries have high   food security   scores because they have placed priority in the development and sound government policy implementation to stimulate the growth and sustainability of their agricultural sector (Jayne & Rashid, 2013; Morrison, 2016).

2.3.3.1 Zimbabwe's Agricultural SME Shortcomings and Prospects for Economic Transformation

Zimbabwe's food security is below 30% owing to policy conflict which has exacerbated the problem of agricultural food production, distribution and access (Eniola & Entebang, 2015; WFP, 2017; Mhembwe, Chiunya. & Dube, 2019).Today, the agricultural sector in Zimbabwe is performing poorly, hence, the need for re-engineering the sector to stimulate economic development and attain food security and reclaim its' Breadbasket of Africa' status. As such, the comparison above reveals that Zimbabwe's food security is the poorest compared to other countries around the world and within Africa. It is clear that Zimbabwe needs to re-engineer its agricultural sector to improve the growth of SMEs as a measure to attain food security to feed the nation (Morrison, 2016; Makate, Makate, Mango & Siziba, 2018). The food security shortcomings in Zimbabwe are self-revealing. As such, Zimbabwe needs various strategies for re-engineering the growth and sustainability of agrarian SME to eliminate hunger and poverty. It is, therefore, prudent to suggest that to ensure food security in Zimbabwe, especially at the household level, we need to re-engineer SMEs and the support of agriculture must be a priority, since several European countries already have policies and incentives that encourage diversification by SMEs. However, strategies for re-engineering SMEs are unique and common to stimulate the development of agriculture and economic transformation in Zimbabwe (AGRA, 2016; Harris, 2019). This, therefore, has inspired the researcher to undertake this stud based on the momentum generated by other better performing countries around the world.

2.4. Re-engineering Process

Thus a re-engineering process is an act of recreating a core business process with the goal of improving product output, quality and cost reduction. Typically, it involves getting rid of inefficiencies. Thus, it needs a team of management of highly skilled competency willing to carry out the process. The most successful businesses are being re-engineered to achieve dramatic performance (Akinboade, 2015; Ndiaye, Abdul Razak, Nagayev & Ng, 2018). This is done through a radical redesign of workflow processes to achieve a quantum leap in SME performance. Re-engineering helps SMEs save hundreds of dollars, raise consumer satisfaction and rapid growth (Bagaber et al., 2014; Huang, Lee, Chiu & Yen, 2015; Eklof, Podkorytova & Malova, 2018).Proper re-engineering process can be a game-changer to any SME business. If properly handled, it can perform miracles on a failing or stagnating SME, increasing its profits and driving growth (Margaretha & Supartika (2016). However, the process of re-engineering is not the easiest concept to grasp. It involves enforcing change in an SME, that is, by tearing down something employees are used to and creating new order (Bokor, 2017). As such, any SME does not embrace re-engineering process seriously will find that its efforts fail.

2.4.1. Re-engineering Barriers and SME Challenges

The field of re-engineering is concerned with, inter-alia, effect of government policies in relation to the different growth aspects and directions of every SME(Eniola & Entebang, 2015).Thus, every SME aim is to re-engineer itself and improve the efficiency of its internal and external operations, in order to get product quality, processing speed, timeous delivery and consumer satisfaction (Zhang, van Doorn & Leeflang, 2014; Wang & Wu,2012; Barkhatov, Pletnev & Campa,2016; Eklof, Podkorytova & Malova,2018).In some instances, underperforming SME efforts are being hampered by re-engineering barriers and SME challenges (Wong, 2015; Mutambara, 2016). Bokor (2017) indicates that re-engineering barriers in the agrarian sector are hindering the sustainable growth of agrarian SMEs, which affect their effective management processes. Mahjoor (2016) and Ameyaw et al (2017) argue that re-engineering barriers are both organic and inorganic (dynamic and static respectively) in nature, hamper the growth of SMEs. Having critically conceptualized SMEs in the agrarian sector, it is important now to employ management concepts seeking to stimulate the growth of SMEs.

2.4.1.1. Organic SME Challenges

The progressions of the re-engineering processes identify the challenges of SMEs and provide insights on critical issues prohibiting the growth of SMEs and creating a competitive advantage over TNCs (Cant, Erdis & Sephapo, 2014; Abeh, 2017). While entrepreneurs generally agree that the fundamental organic barriers are managerial deficiencies (Brooks,2014;Martinsons, Davison & Huang,2017; Kiseľáková, Šofranková, Čabinová & Šoltésová, 2018) which have led to poor planning, organizing, leading and controlling of SMEs operations, there are other vital concerns like gender insensitivity and lack of loan security which affect the SMEs (Broegaard, 2013; Barkhatov, Pletnev & Campa,2016).The women in agricultural economies have dampened agrarian growth in societies because they are ill-capacitated as they own less agricultural machinery than men, inhibiting development of SMEs in the agrarian sector (Cunningham, Ploubidis, Menon, Ruel, Kadiyala, Uauy & Fergusson, 2015). This is in contrast to the fact that women are the majority (Chinomona & Maziriri, 2015; Slavchevska, Kaaria & Taivalmaa, 2016) participants in the agrarian sector and their marginal roles spell doom for agrarian SMEs. Women marginalization has deterred the growth of SMEs in the agrarian sector in Sub-Sahara Africa (Wong, 2015). In the Zimbabwean case though, SMEs are the largest job creators but they face various obstructions limiting their ability to grow and create more jobs, some of which include high initial costs, stiff competition, targeted economic sanctions and poor marketing strategies (Bindu & Chigusiwa,2013; Mangudya, 2017; Arunachalam et al.,2018).

Even though the 2000 , chaotic Land Reform has replaced a colonial agrarian structure that divided land unfairly among commercial and communal farming areas, SMEs remain with insignificant amounts of land making them fork out high rental charges to access land on which economic activities can be carried out. This creates a "missing middle" for SMEs in the agrarian sector because they end up saddled with high inputs costs which lower profits, increased business risks, and they remain under-capitalized thereby, inhibiting their radical transformation (Aybar-Arias, Casino-Martinez & Lopez-Gracia, 2012; Wang, Yamauchi & Huang, 2016). Apart from these barriers, SMEs lack research and development competencies and this has a negative effect on their growth (World Bank, 2015). At a global level, what is more alarming is that SME challenges are exacerbated by poor managerial skills to overcome both technological and political surprises in the agrarian sector, leading to untold poverty, hunger and malnutrition of people who rely heavily on agriculture for a living (Mugozhi & Hlabiso,2017; Kiseľáková et al., 2018). Except for SME owner-

managers who have growth- oriented goals, the sustainability of SMEs in the agrarian sector is likely to be compromised and most of them will not grow into transnational companies. Therefore, the inspiration to address these challenges as elucidated by Maunganidze (2013) and Mugozhi and Hlabiso (2017), emerges from the fact that these barriers are not permanent, hence, the need to re-engineer the growth of SMEs.

2.4.1.2. Inorganic SME Challenges

The external obstacles in re-engineering SMEs as pointed by Bokor (2017), center around the exchange rate fluctuations, physical and market access, infrastructure, financial risk management, political instability, tariff barriers, foreign restrictions, government regulations, speculative tendencies and stiff competition (Evans,2018). The challenges are influential as SMEs mostly lack the influence and means to circumvent them (Cant, Erdis & Sephapo, 2014). Therefore, strategies for reinvigorating government policies hold the most promise to help engender the growth and sustainability of SMEs (ACET, 2015; Tang, Tang & Cowden, 2017). In line with the empirical evidence availed on this, Bagaber et al (2014) indicates that some external barriers (Barkhatov, Pletnev & Campa, 2016) that affect SMEs in the agrarian sector are international regulations and set product quality standards imposed by international associations, thereby, preventing SMEs from realizing their potential growth. In addition to this, poor government support goes hand in glove with politics by taking advantage of the manufactured shocks to consolidate perpetual political power by seemingly adopting popular but non- stimulating aggressive programs which negatively impact on the growth of agrarian SMEs (Frumina, 2016; Ameyaw et al., 2017). In the views of Tang, Tang & Cowden (2017) and Anseeuw, Kapuya and Saruchera (2012), global market barriers have discriminated Zimbabwean SMEs as third-party traders, thus, stifling their growth (Berg,Mrrewijk & Tamminen, 2018). To ground this discussion, one should be cognisant of how the lack of economic reforms has hampered SMEs transition into global companies. This is because SMEs are dependent on the attitudes and characteristics of the environment to become successful (Taneja & Toombs (2014, Nyoni & Bonga, 2018). However, the quality of agrarian products in SADC countries such as Zambia, Malawi and Zimbabwe is perceived to be of poor quality due to lack of biotechnological aspects leading to such poor productivity (Tang, Tang & Cowden, 2017).

In most cases, Tang, Tang and Cowden (2017) stated that there are no government and after-training follow up evaluations to gauge the impact of such growth-oriented innovations (Baporikar,2017;

Heikkilä, Bouwman & Heikkilä, 2018).Although the SMEs sector is dominating in Zimbabwe, its challenges are being worsened by the lack of research and training by Agritex Field Marshals (Bindu and Chigusiwa, 2013; Abeh,.2017). In the view of Eniola (2014) in a study carried out in Nigeria, 72% of the Nigerian entrepreneurs considered lack of government support as a prime constraint inhibiting the growth and sustainability of their SMEs(Saberi & Hamdan,2019). Stokes (2015) stated that the majority of SMEs are financially paralyzed to transform SMEs in the agrarian sector into transnational entities. Although the SME sector reduces economic decline, there are serious disconnections from their operating standards when they try to up take agriculture initiatives, exposing them to penalties and displacement by government (Anicic, Vukotic & Krstic, 2016; Evans, 2018). To this end, re-engineering SMEs in the agrarian sector has the aptitude to turnaround economic growth in view of these SMEs' high potential and small gestation period which are likely to ensure food provision is attained, although in Zimbabwe there is political restiveness.

2.4.2. Re-engineering SMEs in the Agrarian Sector

The literature on the radical development changes of SMEs demand a re-engineering process to redesign their systems in order to grow their market share (Huang et al., 2015; Arunachalam et al., 2018). This is because re-engineering SMEs creates a single management mechanism to achieve the set objectives (ASMEC, 2013; Ndangoh , Thomas & Deedam ,2018).The field of strategies for re-engineering has progressed to a large extent in the past and SMEs have been knowledgeable about their operations in an environment in order to sustain their growth (Mahjoor, 2016). Eniola (2016) and Anseeuw, Kapuya and Saruchera (2012) agree that SMEs which are growing fast prove the need to have taken a lead in using re-engineering process to create and capture value. Many SMEs started as minute/minor/small entities to become TNCs through continuous re-engineering processes. The inspiration to address SMEs' challenges places more emphasis on re-engineering the growth and sustainability of SMEs (ACET, 2015). By distinction, the re-engineering process is aimed at correcting specific challenges hindering SME growth and sustainability (Cant, Erdis & Sephapo, 2014; Bokor, 2017). As a turnaround strategy, the agricultural SME sector improves productivity, efficiency, direction, and sustains aggressive competition, and access to global market shares which helps the entities to become world-class competitors (Mbizi, Hove, Tondlana & Kakava, 2013; Eniola, 2014). The imperative in re-engineering SMEs makes them to rethink and redesign their internal work processes to add value to their output and create high quality products to satisfy consumers (Zhang, van Doorn & Leeflang, 2014; Frank & Schvaneveldt, 2016; Eklof, Podkorytova,

& Malova, 2018).From this discourse, the motive for re-engineering SMEs in the agrarian sector is to effectively manage them into the future (Verboncu, 2013). Re-engineering SMEs is, after all, a well-structured system taking into account their management systems (Verboncu, 2013). In this context, strategies for re-engineering SMEs, radically affect their growth, has been vital in Europe since it is a continuous modern change management tool which influences SMEs' development as illustrated in the diagram below (Wymenga et al., 2015; Aremu et al., 2017).

From another perspective, Huang et al (2015) and Bahramnejad, Sharafi & Nabiollahi(2015) define re-engineering processes as rationally tasks carried out to redesign workflows to accomplish SME objectives(Bahramnejad, Sharafi and Nabiollahi (2015) and through this, re-engineered SMEs increase their value addition activities to achieve a sustainable competitive advantage over competitors in the markets (AFDB, 2013; Irungu & Arasa, 2017). As indicated in Figure 2.1, a study of re-engineering SMEs in the agrarian sector replaces traditional management methodologies by adopting modern management approaches raised by the hierarchical structure of SMEs. The history of SMEs in Europe shows that they have experienced the benefits of re-engineering processes through innovation and technologies ,thereby, resolving problems of SMEs in the agrarian sector and parsimoniously transforming them into TNCs (Ehrenberger, Koudelkova & Strielkowski,2015; Bokor, (2017; Burch,2017).

Figure 2.1: SME Reengineering Process

Continiuos growth

Reengineering

Decline in growth

SMEs growth
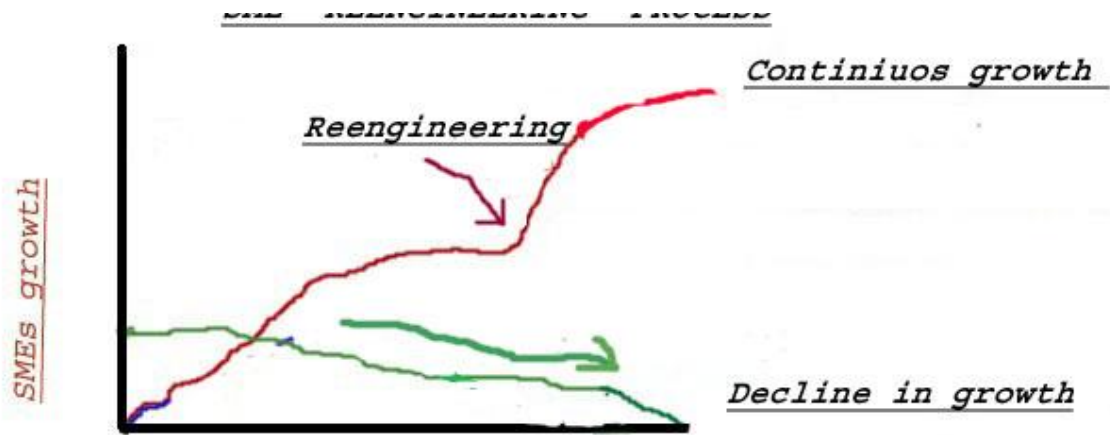
Source: Researcher's Development

Strategies for re-engineering SMEs eliminate odd SME structures, a key SME's strategic area to improve cross-functional teams, data dissemination and decision making processes (Nyanga, Zirima, Mupani, Mashavira & Chifamba, 2013).Re-engineering is a well-structured system taking into account the management systems of SMEs in the agrarian sector, and seeking to address forces impacting on the growth of agrarian SMEs (Wang & Wu, 2012; Frank & Schvaneveldt, 2016). This research suggested a review of re-engineering the fundamentals impacting on SMEs in the agrarian sector, adopting other re-engineering processes being employed elsewhere in various other disciplines. Yet, the false impression about approaches for re-engineering SMEs still exists, and it reverses the tide of rapid growth of SMEs in the agrarian sector. The re-engineering process revitalizes the underperforming SMEs to enhance their growth and make them:

- Compete for technology
- Compete for platform, and
- Compete for relationships

A starting point would be to reform the internal processes of existing SMEs to reshape and reinvigorate their workflows and the working environment, in order to generate high value output (Tadele, 2017). Developing and implementing strategies to re-engineer SMEs is initiated by internal and external re-engineering-engineering methodologies which improve SMEs in the agrarian sector to have high yields and be able to satisfy consumers' needs and wants (Frank & Schvaneveldt,

2016).Frank and Schvaneveldt (2016) further posits that women entrepreneurs in Niger have re-engineered bio-reclamation in Degraded Lands (BDL), through women farming clusters on once disused and degraded land (Fornahl, Hassink & Menzel,2015; Konstantynova & Lehmann, 2017). As such, strategies for re-engineering SMEs in agriculture entail a change in the management practices of SMEs in the agrarian sector which then helps them to resolve problems hampering their growth. The strategies are a consumer-driven process seeking to improve quality yields (output) and high technology uptake (Wang & Wu, 2012; Bubou, Siyanbola, Ekperiware & Gumus, 2014; Anyamga & Nyamita, 2016; Bakar & Senin, 2016).

In Figure 2.2, the goal of re-engineering-engineering the agricultural SMEs required undergoing radical transformation using innovative agrarian technologies to radically increase productivity and competitiveness on a global scale (Wong, 2015). As such, it is crucial to bridge the relationship between internal and external factors to influence the growth of SMEs (Bahramnejad, Sharafi and Nabiollahi, 2015).

Figure 2.2: Reengineering Agricultural SMEs
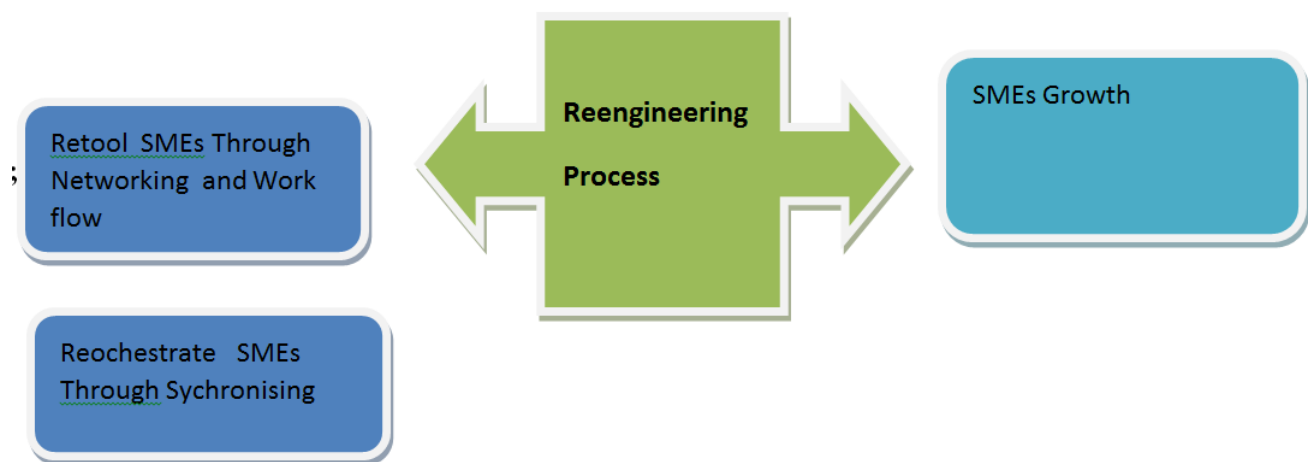
Source: Researcher's Development

It is against this background that an SME re-engineering grid reduces the organizational layers of SMEs and eliminates unproductive tendencies through re-designing, re-tooling and orchestrating using cross functional teams to improve work, dissemination of data, and decision-making processes

(Bhaskar, 2016). In contrast, contradictory results to the aforementioned have concluded that re-engineering is not effective without the support of government and techno-innovative strategies are necessary to the growth of SMEs (Zimtrade, 2014; Anyamga, & Nyamita, 2016; Aremu et al., 2017).

2.4.3. The SME Spider-Web Re-engineering Framework

The SME spider web re-engineering framework is the logic of how SMEs operate to create value for their stakeholders, as well as rapidly transforming themselves into multinational entities (Razalli, Ringim, Hasnan & Hassan, 2015; Nowin´ski & Haddoud, 2019). An SME in the agrarian sector portrays the substance, organization, and control of transactions to stimulate growth and at the same time creating value through exploiting the SME's opportunities and this often generates virtuous sequences and feedback loops that build up agrarian SMEs (Bjornlunda and Pittock, 2017). The aforementioned authors agree that frameworks capture value through monopolizing re-engineering progression (Arafeh, 2016).The framework forms part of a re-engineering strategy for SMEs in this study and are depicted in Figure 2.3.

Figure 2.3: The Spider-Web Re-engineering Framework

Defensive Reengineering (External)

Offensive Reengineering (Internal)

Government Policies

Growth
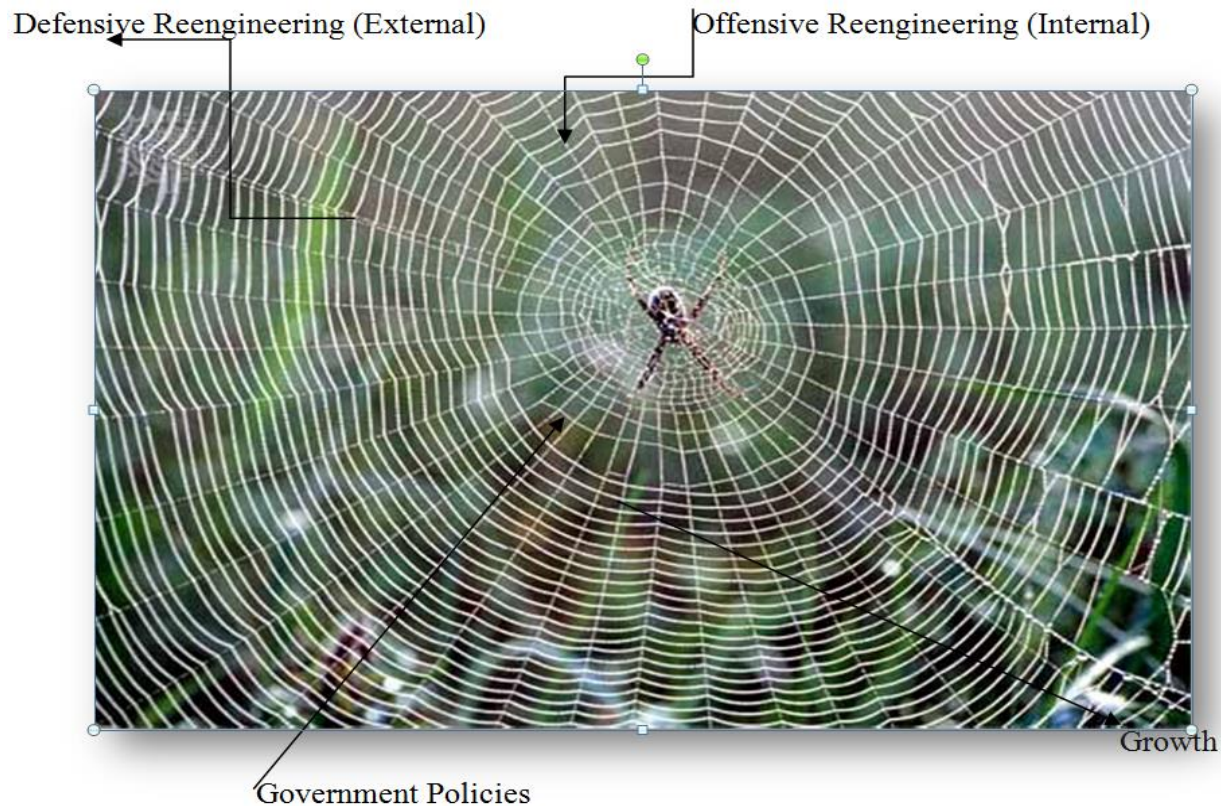
Source: Developed from the Literature Review

Re-engineering requires changes from the outside-in and from the inside-out, since re-engineering is not simply new thinking and new design, but involves radical change. According to Bokor (2017), a re-engineering framework is a strategy which encompasses improving existing operations through disruptive SME innovations. The re-engineering process within the SMEs in the agrarian sector is done through re-tooling and re-designing workflow systems in relationship with the environment (Hossain, Momin, Rowe & Quaddus, 2017). The significance that materialized from literature on re-engineering were innovativeness and creativity benefits of improving products, to attract huge consumers(Eklof, Podkorytova, & Malova, 2018) and at the same time engendering the growth and development of SMEs. The SME spider-web re-engineering framework develops the informal sector and disrupts illegal SME activities (Bakar & Senin, 2016; Moyo & Mandizwidza-Moyo, 2017; Nowin´ski & Haddoud, 2019).This approach improves the management of SMEs in the agrarian sector and takes off from existing conditions, to break even and reach economies of scale. SME must consider both its internal and external environment and using the SME spider-web re-engineering

framework is a unique and twin (double) re-engineering methodology that has offensive and defensive Re-engineering tactics, developed to enable SMEs to re-engineer from within.

The objective of the methodology (offensive re-engineering) is to improve internal management and work delivery systems, since the workflow of SMEs is independent, yet entangled with web interrelated activities feeding into each other, seeking to achieve growth, sustainability and productivity of SMEs (ACET, 2015; Ameyaw et al., 2017**).** The input, processes and output gaps are caused by lack of human capital, structure, information systems and management which need re-engineering to turnaround the growth of SMEs in the agrarian sector and make them competitive through an offensive re-engineering methodology. On the contrary, defensive re-engineering methodology insulates SMEs from unfavorable external forces by adapting to government policy regulations and technological demands, thereby circumventing threats using the re-engineering intelligence approach (Bahramnejad, Sharafi & Nabiollahi, 2015). These building blocks transform SMEs into transnational companies (Razalli et al., 2015; Nyamwanza et al., 2015). According to Mulet et al., (2017), the use of the SME spider-web re-engineering framework is to promote products with consistent quality, to ensure expeditious delivery, dependability and competitive prices to satisfy consumer supply and demand (Zhang, van Doorn and Leeflang, 2014; Arafeh, 2016; Eklof, Podkorytova & Malova, 2018).Henceforth, this framework attenuates the Hammer and Champy, Davenport and the Enterprise ontology re-engineering processes.

This is more so because this framework is a double-edged re-engineering approach intended to solve both the internal and external SME challenges simultaneously, effecting SME growth and sustainability (Bakar & Senin, 2016). Therefore, the SMEs in the agrarian sector growth framework refer to increases in SME sales, invention capacity, employment growth, economies of scale, raw materials and power and these factors catalyze the growth of SMEs. The SMEs in the agrarian sector are gauged by absolute changes in sales, income and turnover margins. However, different researchers use SME growth indicators such as resources, market share and capacity (Fuglie & Rada, 2013; Bagaber et al., 2014).

Generally, the use of multiple growth indicators is noble, because SMEs have dissimilar growth possibilities. The desire to engender the growth of SMEs requires re-engineering strategies as the only medium through which SMEs develop into transnational companies. Re-engineering plays an

important role during structural changes at each stage of the growth and sustainability of SMEs (Teece, 2014). Therefore, it is imperative that this study adopts the spider-web re-engineering framework to align with the purpose of SMEs in the agrarian sector value chain, which is to create new techniques, production, processing, and marketing by linking SMEs to consumers (Cant & Wiid, 2016; Jaramillo et al., 2017; Sujová & Čierna, 2018). The framework is dependent on offering significant value to SME owners and on nurturing agricultural SMEs in the Eastern Highlands in Zimbabwe so that they attain food security (Bakar & Senin, 2016).

2.5. Growth and Sustainability

According to Bakar and Senin (2016), the sustainable growth fundamentals are driven by the power of SMEs. A study by Taneja and Toombs (2014) and Anseeuw, Kapuya and Saruchera (2012) reports that SMEs have greater influence on food autonomy in the agrarian sector). There has been a wide and dominant use of SME growth theory in illuminating the sustainable growth of SMEs. In the same line of argument, Bass (2012) stated that the SME growth and sustainability hinges on their ability to achieve the SMEs' stated objectives .Taneja and Toombs (2014) further argue that growth and sustainability is a product of SME activities and they are in turn determinants of SME success(Barkhatov, 2016). Bokor (2017) and ACET (2015) noted that growth and sustainability of SMEs in agriculture are gauged through evolution series. Furthermore, OCED (2016) provided evidence that most of the research on strategies for re-engineering the growth of SMEs and sustainability have been conducted in developed countries and rarely in developing countries like Zimbabwe. Bagaber et al (2014) posit that when re-engineering SMEs, the first thing is to monitor and analyse opportunities and threats of SMEs in the agrarian sector, while staying true to their mission and vision.

Burch (2017) states that the path to sustainable growth of SMEs in the agrarian sector lies in support measures which facilitate modern technology (Bubou et al., 2014) and in additional inputs (Jayne & Rashid, 2013) which are needed to increase economies of scale and to create SMEs agricultural productiveness. The USAID (2012) stated that robust agriculture by SMEs is essential to create sufficient jobs and reduce poverty (Christiaensen & Todo, 2013; English, 2016). According to Verboncu (2013), a whole system re-design of SMEs' internal and external environments provides development, sustainability and improved worker welfare. Governments assist SMEs to sustain their

development as a measure to support the SME environment to evolve around the SMEs' ecosystem and safeguard the future generation (Bomani, Field & Derera, 2015; Xiaochen, Phiri, Tahseen & Dube, 2018). Although sustainable SMEs in agriculture are a key to inclusive community development, the majority of SMEs have little interest in facilitating accelerated transitions towards environmental sustainability (Anicic, Vukotic & Krstic, 2016; Bakar and Senin, 2016). Sequentially, SMEs are in transition towards more holistically sustainable (environmental, social and economic) growth pathways (Hossain, Momin, Rowe & Quaddus, 2017; De Oliveira & Jabbour, 2017). Even so, some studies suggest that most SMEs are adopting sustainable practices through recycling to increase efficiency and reduce costs while increasing profit creation which is part of the primary strategic intent of SMEs' growth initiatives (Bjornlunda & Pittock, 2017). This call for attention to increased government support (Saberi & Hamdan, 2019) triggers the significant growth of SMEs and changes the way of doing things, especially when it ushers in new and improved management styles.

The literature review shows that government support is a central pillar in re-engineering the growth and sustainability of SMEs (Aremu et al., 2017; Saberi & Hamdan, 2019). In addition, government contributes to effective soil and site management for SMEs, so that they can improve their productivity as they have readily available information on types of soils and levels of nutrients needed in certain areas of concentration. Recently, modernizing SMEs in the agricultural sector has taken center stage to allow agricultural intensification and market integration which would help promote livelihoods through engendering environmental safety measures in SME activities (ILemona, 2013; IFAD, 2013; Hossain, Momin, Rowe & Quaddus, 2017).

The underlying concept of agricultural intensification follows the massive food insecurities which are common in developing countries. A key question largely neglected in this option, and yet to be answered by its proponents, is why SMEs in the agrarian sector need to be re-engineered compared to those in other sectors of the economy? Based on existing farming systems and on the specific agro-ecological principles of farming and diversification, this enables SMEs to better manage risks linked to rainfall variability and market fluctuations (OECD, 2016). Since many of the Sustainable Development Goals (SDGs) are linked to agriculture, with better investments in agrarian SMEs, agro ecological and other forms of sustainable agriculture are realized (ACET, 2015). Below are some of

the SDGs as stated by FAO (2014) and targets for agricultural sustainability which are crucial to SMEs and agriculture development.

> ➢ Bringing an end to poverty.
> ➢ Ending hunger through promoting agriculture development.
> ➢ Achieving gender inclusion to empower all women and girls.
> ➢ Guaranteeing sustainable consumption and production patterns
> ➢ Creating climate awareness to promote the green economy.
> ➢ Stopping the progress of biodiversity loss.
> ➢ Lobbying for more investments to sustain SMEs in agriculture.

As such, the sustainability of SMEs entails the inclusion of environmental and social concerns into SMEs decision- making to create long-term value through the reduction of environmental impacts, and by increasing employees' motivation and consumer satisfaction (Wang &Wu, 2012; OECD, 2016; Eklof, Podkorytova & Malova, 2018).As a result, sustainable SMEs in the agrarian sector endure environmental threats to their livelihoods, yet have to deal with these. Therefore, re-engineering SMEs is said to favour a competitive environment and to prevent collusive practices and derive economic benefits from the environment (Irungu & Arasa, 2017). According to ACET (2015), there is no doubt that environmental conditions affect SMEs. As a result, considerable effort has been invested in re-engineering agrarian SMEs (Bakar & Senin, 2016).

This research has brought about several methodological indicators to sustain the growth of SMEs (Cant, Erdis & Sephapo, 2014). The objective is to introduce methodological definitions and measurements of sustainability. The conclusion is that there is need to reduce large scale damages to ecosystems such as the degraded environment, the loss of wildlife and global warming through a sustainable development path which maximizes the present value of the inter-temporal environment function (ACET, 2015; Burch, 2017).

Furthermore, despite that a number of theories have been propounded to explain growth and sustainability of SMEs and their measurements, each theory provided a fragmented view of SMEs, but at the same time augmenting the evidence of theoretical frameworks which adequately consider re-engineering the growth of SMEs as noble initiatives to ignite their sustainability (OECD, 2016; Arafeh, 2016).The recited background context of SME growth and sustainability concentrated on

strategies for stimulating the growth of Zimbabwean agrarian SMEs. Offering a glimpse of future success, these SME growth measures have inspired motivation to re-engineer SMEs in the agrarian sector. Yet, for SMEs to grow, they are dependent on re-engineering schema without compromising the ability of future generations, since growth and sustainability are perceived as success indicators of an SME (De Vries et al., 2015; Nyoni & Bonga, 2018).

2.5.1. SME Growth

The growth of SMEs is a mufti-faceted phenomenon depending on the measures used to increase growth (Taneja & Toombs, 2014). Bokor (2017) articulates that SME achievements and satisfaction are not always used to measure growth and sustainability. Further, Tang, Tang and Cowden (2017) argue that the use of simply one growth indicator does not capture the different aspects of SMEs growth, sustainability and constructs since growth and sustainability are a multifaceted phenomenon (ACET, 2015). The SME growth has a propensity to lead to very cost-effective reinvestment prospects for its own retained income. Usually SMEs in clusters are in growth drive because they tend to have concentrated focus on investing in innovative technologies, sales growth, expansion and intent to venture into lucrative ventures (Kamoyo, Mavhima & Muranda, 2014; Fornahl, Hassink & Menzel, 2015; Wolfe & Gertler, 2016). Largely, SME growth refers to an increase of the following; sales volume, production capacity, employment, use of raw material and resource utilization (Yeboah, 2015; Sujová & Čierna, 2018). According to Koech (2014), SME growth is measured by the following relative changes;

- ➢ Sales targets
- ➢ Asset base
- ➢ Number of personnel
- ➢ Productivity Scales
- ➢ Profit margins

Given the notion that the sales data is always recorded, SME owners attach high belief to sales growth as an indicator of SME growth. Bass (2012) states that every SME wants to develop and maintain long-term survival through employing strategies for re-engineering.

These indicators are useful in assessing the SME misfits affecting growth to initiate the re-engineering process. A growing SME in the agrarian sector generates significant earnings and shows

significant changes in productivity. The growth model stresses the view that the growth of an SME in the agrarian sector takes place through raising revenue as well as by cutting overhead costs and increasing economies of scale. Thus, the growth of an SME is realized through a re-engineering process to net more profitability (Margaretha & Supartika, 2016). The determinants of the growth of SMEs are classified into growth stages;

- ➢ Existence
- ➢ Survival
- ➢ Success
- ➢ Take-off
- ➢ Resource maturity/ diversification

Taneja and Toombs (2014) conducted a study to determine SME growth and sustainability, and a large number of respondents ascertained that SME outcome variables have greater influence on food autonomy in the agrarian sector in Zimbabwe .Therefore; the determinants of the growth of SMEs have been supported by Verboncu (2013) in line with the internal precursors. These include SME size, evolution history, economies of scale and other antecedents referring to changes in management characteristics such as improvement and staff training are considered as well as those that relate to SME characteristics such as background level covering re-engineering strategies, relationship with government and stakeholders, product adaptation, geographical diversification and cluster intensity involvement, which also have greater impact on the growth of agrarian SMEs (Fornahl, Hassink and Menzel, 2015;Kamoyo, Mavhima & Muranda,2014).The external antecedents, on the other hand, include the legal environment, reputation, and financial environment impacting on SMEs growth as illuminated in Table 3.2 (Taneja & Toombs, 2014).

Table 2.3: Signs of Growth and Sustainability of Agrarian SMEs

CATEGORY	DETERMINANT
SMEs physiognomies	Experience, Age
Competence physiognomies	Productivity and Growth orientation
	Skills, Experience, Training, R & D
Technological physiognomies	Innovation, Creativity, adaptability
SMEs Internal Appearances	Background, Age, History, Reputation
SMEs Growth Strategy	Reengineering
External Environment	Government regulation, environment

Source: Researcher's Development

Government policies are key drivers in determining how to re-engineer the growth of SMEs in the agrarian sector and they have effect on cluster development, incubation and addressing re-engineering barriers (Mugozhi & Hlabiso, 2017; Piperopoulos, 2016). Meanwhile, De Vries et al (2015) opine that sales and employment increases reflect changes in an SME growth. Even between these changes some scholars have established that an increase in sales is most likely to result in the hiring of new employees and vice versa.

2.5.2. Measuring the Growth of SMEs

Srivastava and Kaul (2014) and Mugozhi and Hlabiso (2017), agree that there is no commonly established technique of computing the growth of agrarian SMEs, given the inconsistency in the definition of SMEs. Teece (2014) and Dar, Ahmed and Raziq (2017) define SME growth as relating to changes in sales, resources, service, efficiency, profitability, asset utilization and profit margins(Margaretha & Supartika,2016;Jiang et al.,2018). Alternatively, in the context of this study, growth is an important phenomenon to indicate the survival power of SMEs, depending on their market competitive advantage and their growth decreases the possibility of extinction (Mugozhi & Hlabiso, 2017). The growth of agrarian SMEs requires further investigation, since numerous studies have been carried out in the growth of SMEs in other segments of the economy (FAO, 2017).

Most analysts focus on measuring the growth of SMEs using return on equity (ROE) as the primary growth -o- meter of determining growth success, whilst others use growth valuation techniques as depicted in Figure 2.4.

Figure 2.4: SME Growth Curve
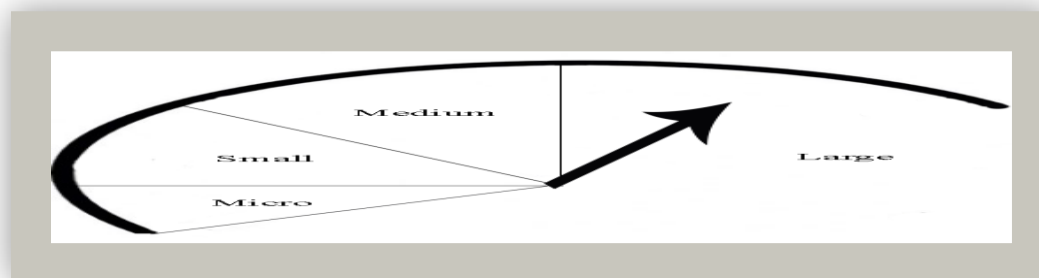
Source: Researcher's Development

Figure 2.4 illustrates the SMEs check tempo to determine whether they are growing or performing negatively. Usually, the most common factors of SME growth are turnover, number of employees and the amount of capital employed. The measure of SME's return on assets avoids distorting SME growth measurements (Yeboah, 2015). The accounting- based growth measurements in Figure 2.5 on the growth of SMEs explicitly take into account the assets used to support SME activities (Al-Matari, Abdullah & Bt Fadzil, 2014).

Figure 2.5: Accounting-Based SME Growth Measurements
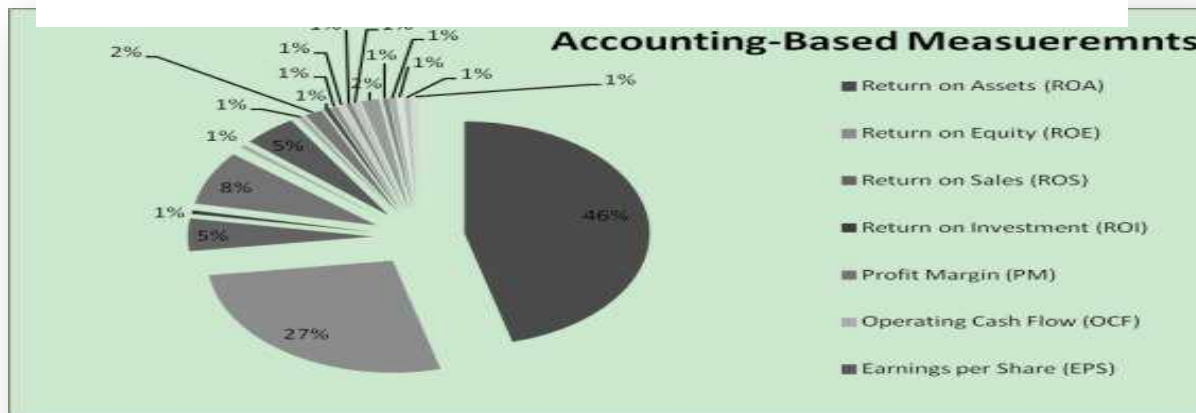
Source: Al-Matari, Abdullah & Bt Fadzil, 2014

2.5.2.1. Revenue Growth

The SMEs' revenue growth increases over time and measures how fast an SME in the agrarian sector is expanding. This exposure allows investors to identify the SMEs' growth trends over time by gauging the revenue growth (Abdulsaleh & Worthington, 2013; Wadesango, 2015). Furthermore strategic planning maximizes sales, thereby, enhancing their chances of survival. However, to calculate total revenue growth, one subtracts the current period's revenue from the revenue from the same period in the previous year (Brooks, 2014). The Formula is: Revenue Growth = (Revenue this year / Revenue last year) – 1 (Karadag, 2015).

This formula is a critical component of the SME stock analysis to determine whether an SME is growing or not. De Vries et al (2015) and Wadesango (2015) remark that boosts in sales are frequently used in quantifying the growth of SMEs. However, use of solitary growth indicator is biased in showing the precise growth trends of an SME.

2.5.2.2. The Market Share Growth

The SME market share is merely its dollar sales in a specified period, articulated as a percentage of the overall market sales volume (De Vries et al., 2015). The strategies for re-engineering SMEs promote greater flexibility and diversity in the growth of SMEs; through a vibrant marketing system that increases the SME market share (Charisa, Dumba & Makura, 2012; Arunachalam et al., 2018). It promotes efficient arbitrage between markets and the efficient allocation of productive resources to benefit both consumers and producers (Fuglie & Rada, 2013). Cant & Wiid (2016) posited that the market share of SMEs is defined in terms of income accounted for by a specific SME sector. Abdulsaleh and Worthington (2013) went on to assert that the SME market share is closely monitored to determine SMEs' growth changes in the aggressive landscape, and regularly drives SMEs' strategic action. From this perspective, Sukume, Mavedzenge, Murimbarima and Scoones (2015)alluded that the use of market share is the best of them all because it is less dependent upon the economy and is not affected by tax regulation changes(Dolgih, Zhdanova & Bannova,2015; Dlamini, 2017). Then again, the market share of SMEs is decomposed into three components: penetration share, share of consumer, and usage index. As such, re-engineering SMEs attempt to make SMEs reach their target markets by revamping their marketing attitudes and product promotion through advertising, packaging, sales discounts and distribution (Cant & Wiid, 2016). This is to strengthen their market share and minimize the impact of competition and at the same time promoting SMEs' growth. These three underlying metrics can then be used to help identify market share and the growth opportunities of SMEs (Nyamutowa, Masunda & Mupaso, 2014; Arunachalam et al., 2018).

In Zimbabwe, the ease of access to international markets by SMEs in the agrarian sector is through the 'Buy Zimbabwe' Campaign which seeks to increase the SMEs' market share (Mangudya, 2016).Market share is widely recognized as one of the main determinants of SME profitability. Marketing is the spine of any SME who seeks to grow his or her market share and increase the sale of a product to customers (Bahadur, Aziz & Zulfiqar, 2018). Therefore, it is cheap to grow market share of SMEs through a re-engineering process to get maximum growth results from minimal resources available to SMEs (Jiang et al., 2018). In this way, the ever-changing consumer needs require re-engineering strategies for SMEs to be able to attract, retain consumers and safeguard consumer loyalty (Wang and Wu (2012). Moreso, the formalization of SMEs increases their

market shares as they earn more economic benefits through getting stakes in public procurement processes (Khankaew, Ussahawanitichakit & Raksong, 2015; Benhassine et al., 2018). Thus the re-engineering strategic fit satisfy consumers and at the same time increasing revenues by building blocks to grow the SME in a coherent manner (Zhang, van Doorn & Leeflang, 2014; Chingwaru & Jarkata, 2015). Specifically, as the market share increases, SMEs in the agrarian sector tend to have higher profit margins.

2.5.2.3. Profitability

In the context of this research, SMEs' returns lead to high profits which help to stimulate the growth of SMEs (De Vries et al., 2015).Therefore, re-engineering SMEs in the agrarian sector has an effect on profitability. The strategies for re-engineering have a role in SMEs growth based on a development framework that re-engineers the SMEs' product quality to satisfy the consumer needs (Charisa, Dumba & Makura, 2012; Gorevaya & Khayrullina, 2015). Therefore, SMEs with strong traditions in quality management have better chances for profitability in a dynamic environment. Manipulation of product quality compensates for the shortcomings of SME products and services in the agrarian sector (Şerban, 2015). The profit margin on sales increases sharply when they increase competitiveness and market growth (Abdulsaleh & Worthington, 2013; Irungu & Arasa, 2017). Profitability is an important and necessary tool for an SME to survive, grow and remain attractive to consumers (Nyamutowa, Masunda & Mupaso, 2014; Margaretha & Supartika, 2016). Therefore, profitability is critical to long-term survival of SMEs in the agrarian sector, whose primary goal is to increase capital to sustain agricultural operations and increase productivity (Dossou-Yovo, 2015). The bottom line is that no SME survives and grows without making a significant amount of profit (ASMEC, 2013). The measurement of the profitability of SMEs is critical in the evaluation of SMEs in the agrarian sector. This is essential for managers to expand and make SMEs turn into TNCs and ultimately make the SMEs in the agrarian sector profitable. The profits acquired by SMEs help to acquire assets such as new machinery, vehicles and computers.

2.5.2.4. Globalization

Globalization according to Mutalemwa (2015) greatly enhances the development of agriculture since it is an engine of economic growth in low-income countries (English, 2016). With such potential benefits, globalization has allowed agricultural production to develop more rapidly and the SMEs' growth initially comes from basic staples. Marketing is the life-blood of any SME to grow its market

share and increase the sales of products from minimal SME resources (Fuglie & Rada, 2013; Cant & Wiid, 2016).

The guerrilla campaign is typically more inventive and places customers at the center (Fatoki, 2014). It is cheap but easily grows the market share against competitors. The explosive SME's growth occurs through niche marketing and horticulture exports. However, globalization is a force where SME markets stand to benefit as much as large enterprises (Zimtrade, 2014; Srivastava & Kaul, 2014). From a global level, estimates differ on how SMEs in the agrarian sector grow, though the agricultural sector seems to be growing strongly. Arudchelvan and Wignaraja (2015) would view such responses as globalization benefits of SMEs emanating from deeper partnerships and economies of scale. Globalization enhances the competitiveness of agrarian SMEs and helps third countries to achieve faster economic growth to reduce poverty (Mutalemwa, 2015; Maksimov, Wang & Luo, 2017). This is sometimes abated by the fact that SMEs have freer movement between boarders so they can gain new ideas, skills and technologies (African Development Bank, 2013). Therefore, internalization opens capital markets and increases awareness among SMEs in the agrarian sector. According to UNCTAD (2012), China adopted a market strategy that insulates SMEs from global competition, allowing them to remain in economic dominance and to increase their market share through internationalization in the form of exporting, creating partnerships across national borders, and establishing operations in other countries. SMEs contribute between 15% and 50% of a country's export and SMEs in the agrarian sector play an important part in sustaining the exports to gain the much needed foreign currency (Şerban, 2015).

The phenomenon of globalization has played a major part in the success of SME businesses. It is believed that globalization enhanced by re-engineering is the flow of value from old, obsolete business designs to new and more economically effective ones(Bokor,2017). With the new SME business designs that are more suited to current market trends, globalization helps SMEs to achieve more than they ever could in the past. However, globalisation improves bilateral agreements with SMEs and make them grow stronger and competitive (UNCTAD, 2012; Irungu & Arasa, 2017).Thus, the benefits of globalisation can include an increase in employment rate, increase in the standard of living of the local people, increase in the trade of raw materials, expansion of the

existing domestic market and benefits of knowledge transfer among SMEs (Arudchelvan & Wignaraja, 2015; Berg, Mrrewijk & Tamminen, 2018).

2.5.2.5. Increase in Assets

The growth measurement of SMEs in the agrarian sector can be undertaken through a multi-factor growth indicator (MFG) (Chinamasa, 2016). It is the change in the SMEs' income, assets and employees over time, and usually measured over a specified period (Yeboah, 2015). However, if an SME wishes to grow, it needs to grow its asset base, whether through inventories and or technology. The ROE of SMEs is calculated by dividing net income by end of a standard period (Fidrmuc & Gundacker, 2017). Likewise, the higher the earnings retention rate, the higher the sustainable growth rate. The increase in the assets is a sign that an SME in the agrarian sector is effectively utilizing its assets to generate profits (Karadag, 2015; Margaretha & Supartika, 2016).At any rate, a low asset increase ratio is an indication that the SME's assets are not being utilized and therefore are making fewer returns. When trying to raise assets, SME owners examine all holdings to determine the assets increase ratio. The agrarian SME's inventory has a significant effect on total assets increases, therefore, maintaining production levels that are in line with sales is necessary to ensure that unneeded inventory does not inflate total assets unnecessarily (Abdulsaleh & Worthington, 2013; Sujová & Čierna,2018). These initiatives, coupled with modern technologies, result in SMEs in the agrarian sector growing from one age band to another. However, the authors went further to argue that failure to re-engineer SMEs inhibits asset growth. However, SME asset increase is vital since banks require movable and immovable assets to lend their money. The asset increase of SMEs is a welcome alternative that allows them to borrow against them (Dossou-Yovo, 2015). It is the fastest route for SMEs to get soft loans through sweating these assets which is an indication that the growth of SMEs is relative to the rise of SME assets.

2.5.2.6. Agrarian SMEs and Economic Growth

The primary postulation of stimulating economic growth is that SMEs must aim at maximising output. Therefore, supporting SME re-engineering generates employment and food security. In this case, rational SMEs search for growth- oriented strategies are necessary to maximise their productivity. In light of these developments by SMEs, economic growth in developed countries is being fronted by SMEs' activities. The contribution of SMEs in China is 57 percent, in Germany its 55.3 percent and both Japan and Korea's is 50 percent. In this case, re-engineering SMEs and

economic growth have a significant relationship. In recent times, agrarian SMEs are stimulants to economic development and this has been an important deliberation by government, policy- makers, academics and economic researchers in seeking to increase the aggregate of the SMEs' agricultural productivity (Anicic, Vukotic & Krstic, 2016). Government support generates benefits for SMEs and enhances their competitiveness; promotes efficiency, innovation and productivity (Ehrenberger, Koudelkova & Strielkowski, 2015).

2.5.2.7. Industrialization

According to World Bank (2013) Taiwan is a newly- industrialized economy, within which the prevalence of SMEs has contributed immensely to economic development (Bouazza, 2015). The evidence that suggest Taiwan's elite SME sector is the jewel in the crown of its economy. Therefore, industrialization is attributed to the agricultural revolution, SME activities and population growth (World Food Summit, 2017). This scenario calls for the production of more food to meet consumer demands. At the same time, techno innovativeness by SMEs has been pivotal in industrial revolution. The shift to the improvement of productivity by re-engineering the SMEs makes it more efficient and increases their output (Wong, 2015). In every region, SMEs are evident because they make a huge contribution to gross domestic product (GDP), employment generation and dominate at the world business stage (Arunagiri et al., 2015).Industrialization remarkably benefits from the growth of SMEs.

To a large extent, industrialization decreases the inequality gap between the urban and rural geographical settings. Therefore, re-engineering SMEs across the board decreases unemployment and poverty (Christiaensen & Todo, 2013; Sutter, Bruton & Chen, 2019). The degree of economic openness in the growth of SMEs influences industrialization and national economic growth. Whereas industrialization strives to make a country become a leader in technology and trade (Bubou et al., 2014; Berg, Mrrewijk & Tamminen, 2018).This is driven by SMEs which lead the development path of Industrialisation through a re-engineering process (Bokor, 2017). In general, agrarian SMEs have the potential to spur industrial development since most factories are dependent on agriculture to manufacture finished products (Faloye & Akinkoye, 2013). Thus, agrarian SMEs have strong growth linkages and multiplier effects on the non-agricultural sectors. Agriculture plays a pivotal function in industrialization through providing raw materials. The current understanding of industrialization is influenced by agrarian SMEs. As SMEs grow, the demand for quality agrarian

raw materials increases. In spite of these efforts, the success of turning around the industrial performance depends on the determination to re-engineer SMEs in the agrarian sector as a measure to increase the supply of affordable raw materials to the industrial sector (Mangudya, 2017).

2.5.2.8. Employment Creation

Benefits accruing from re-engineering the growth of SMEs are food provision, income distribution, poverty alleviation and employment creation (Sukume et al., 2015; Wang, Yamauchi &, 2016), There is pragmatic evidence confirming that SMEs in the agrarian sector are major job creation engines which seek to reduce unemployment and improve livelihoods (ILemona, 2013; IFAD, 2013; Hilson, 2016), especially where there is a lack of sufficient wage employment. Instead, the objective should be to support SMEs in the agrarian sector since they provide two-thirds of all jobs worldwide.

As such, SMEs in Zimbabwe indicate high rates of employment according to prior government surveys, thereby improving the income brackets of its poor people (Mangudya, 2017).The aforementioned author posits that economic growth lies firmly in the growth of small and medium-sized enterprises (SMEs) since they create around 80 percent of the country's employment, establishing a new middle class economy (Chinamasa, 2016). Furthermore authors posit that the empirical studies show that agricultural SMEs reduce unemployment and ZimVac (2013) posits that the sector provides most of its industrial output. Furthermore, there are limitations embedded in government policies which often become obstacles to SMEs in the agrarian sector which are supposed to be the major employer (Eniola, 2013; Zimtrade, 2014). Although many authors have failed to give an account of the benefits that accrue on re-engineering the growth of SMEs in the agrarian sector, Bokor (2017) makes it clear that such re-engineering increases employment generation, innovation and skills development (Ehrenberger, Koudelkova & Strielkowski,2015; Baporikar, 2017).In line with this, Chinamasa (2016) and the Food and Nutrition Council (2014), highlight that these attributes enable agricultural innovation to increase food security to avert poverty and hunger.

2.5.2.9. Gross Domestic Product

The approach to national income and its distribution have always been a central concern of government policy. The concept has many success stories in the world where strategies for re-engineering agrarian SMEs have given impressive results in stimulating the growth of the GDP

(Mbizi, Hove, Tondlana & Kakava, 2013: ACET, 2015). According to Mangudya (2017), in pursuit of economic growth, the SME sector is the main driving force in employment generation and provision of income for the poor. SME income generation increases GDP. In essence, SMEs influence GDP growth through increases in labor wages, unemployment decrease, and increased exports (Arunagiri et al., 2015). Agrarian SMEs have a role to play in economic development through absolute agricultural systems. At the end, economic growth is linked to SMEs' contribution to national production, which is then responsible for increasing the disposable income, food security and which also further improves the social standards. It is initially assumed that the equation of the state income is $(Y = C + I + G + X\text{-}M)$ (Dossou-Yovo, 2015). Therefore, the resultant of this equation makes SMEs in the agrarian sector to expand, as they immensely contribute to the diminution of imports and increase the exports and domestic production (Abdulsaleh & Worthington, 2013; Zimtrade, 2014). The engendered SMEs also lead to increased investment, employment growth and improved standard of living (AFDB, 2013).Therefore, agrarian SMEs cannot be underestimated since they rapidly transform the economy.

2.6. Sustainability

The concept of the green economy is proposed to reconcile economic, social, and ecological dynamics (Hamann, Smith, Tashman & Marshall, 2017). Today, managing climate change has become a global issue and this concept is the source of strongly diverging interpretations in the field of economic analysis. As such, agricultural SMEs need to understand the scale of environmental degradation to improve the green economy (Anicic, Vukotic & Krstic, 2016). According to Hamann, Smith, Tashman and Marshall(2017) ,the green economy improves the sustainability of SMEs, while significantly reducing environmental risks, ecological scarcities and the primary focus on the intersection between environment and economy improves sustainable development and prevents the loss of biodiversity, ecosystem services and it also contributes to poverty reduction (ACET, 2015; FAO,2017; Sutter, Bruton & Chen,2019).

Hamann, Smith, Tashman and Marshall (2017) argue that the relatively high costs of environmental and natural resource protection are inhibiting the growth of agrarian SMEs in lower income countries and technological supply-side measures are complementing incentives for environmentally sustainable infrastructure and other investments (De Oliveira & Jabbour, 2017;SME Magazine,2017).

Figure 2.6 clearly reflects that the sustainability of surroundings and livelihoods requires the growth of SMEs and economic growth and the conservation of the environment (Mbizi, Hove, Tondlana and Kakava, 2013). Therefore, the evolution of sustainable SME environments as presented below reveals that the environment starts off as unbalanced and not conducive for growth of SMEs, hence, it is supported by conservation, citizens and its surroundings (Hossain, Momin, Rowe & Quaddus, 2017).

Figure 2.6 Sustainable Agrarian SME Environments

Source: The Researcher's Development

SMEs in the agrarian sector have been lauded by Cant, Erdis and Sephapo (2013) as engines of economic development (Bouazza, 2015) ready to create most of the green jobs for many countries. The understanding of a review of the real green issues is the turning point in exploring new SME opportunities and achieving sustainable growth. Government support and policies promote the green economy through targeted agrarian SMEs support which then has a multiplier effect on environmental wellness (Sims & Kienzle, 2017). The green economy reverses environmental degradation through a variety of ways, especially through how SMEs recreate the environment to enhance the green economy and agricultural sustainability (De Vries et al., 2015). There is need for government to increase allocation proportions of its budget to the SMEs in agricultural sector development in return for environmental social responsibility in line with environment management agency (EMA) statutes (Hamann, Smith, Tashman and Marshall, 2017). While this poses a huge challenge to consumers worldwide, it entails opportunities for SMEs in developing countries who

49

paradoxically are most affected by hunger and undernourishment today (Zhang, van Doorn & Leeflang, 2014). The challenge for government and SMEs in the agrarian sector is to ensure the longevity of the green economy since sustainable SMEs fulfill stakeholders' expectation (OECD, 2016). Therefore, the growth of green business among the SMEs must protect the environment from deteriorating lest the effects become a threat to human survival.

2.6.1. Social Responsibility

Barkhatov (2016) and Hossain, Momin, Rowe and Quaddus (2017) agree that social responsibility has evolved over the decades with notable contribution in environment wellness. The literature reveals how social responsibility by SMEs provides a balanced but non-exhaustive role in community development approaches. The plethora of social responsibility issues impact heavily on SMEs development. Generally, over the past years, SMEs faced mounting obstacles in sustaining Mother Nature. However, according to Aguinis (2012), SMEs management requires social responsibility nebulous concepts (Barkhatov, 2016) which exhibit "missionary" rather than "mercenary" attitudes towards communities. In this assumption, social responsibility in SMEs has gained great attention in the field of management. Therefore, the involvement in social responsibility activities contributes to SMEs growth in Zimbabwe. Thus, studies on social responsibility and SMEs' growth show significant sustainability. The terminology of social responsibility is difficult to define but it has come to mean a balanced approach through which SMEs address surrounding issues in a way that benefit communities (USAID, 2012; Hossain, Momin, Rowe & Quaddus, 2017).

SMEs in the agrarian sector see social responsibility as expressing similar objectives to sustainable development and environmental sustainability (ACET, 2015; Barkhatov, 2016; De Oliveira. & Jabbour, 2017). According to Aguinis (2012), social responsibility is a useful or desirable component to create wealth and employment, and to reduce hunger and poverty (Christiaensen & Todo, 2013). To a great degree, the social responsibility agendas of SMEs as noted in the figure below is the result of historical and community cultural social responsibility factors.

Figure 2.7: SME Social Responsibility
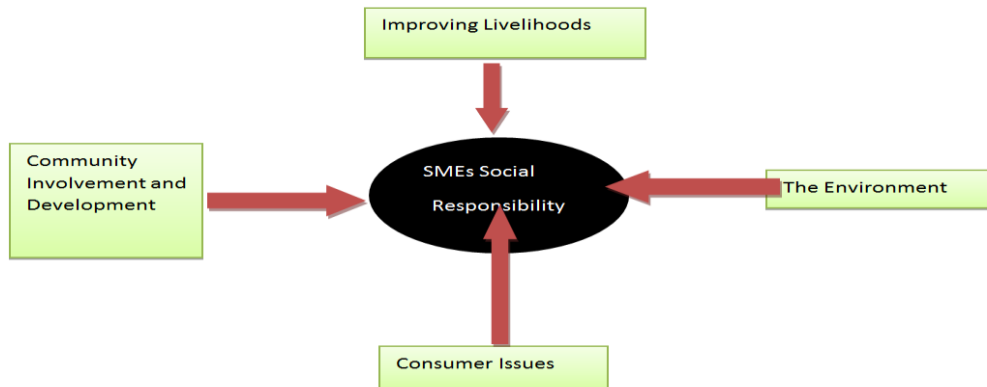
Source: Researcher's Development

In this aspect, social responsibility is an SME's voluntary commitment that addresses environmental challenges and improves community wellness and also influences the growth of SMEs (Aguinis, 2012; Barkhatov, 2016; Hossain, Momin, Rowe & Quaddus, 2017; Koranteng et al., 2017).It can be summed up that management is fundamental to the growth of SMEs, as they tend to do well if they adopt effective management. It can be noted that high output and teamwork exhibited by SMEs have strong management propensities towards community development.

2.6.1.1. Poverty Reduction

Although economic growth does not entirely address poverty problems, the traditional economic literature considers re-engineering the SMEs in the agrarian sector as a panacea to reduce poverty, promotes economic stability and ultimately undergirds political stability (ILemona, 2013; Christiaensen &Todo, 2013; Sutter, Bruton & Chen, 2019). As such the informal economy provides employment to a disproportionate number of women (Chinomona & Maziriri, 2015; Maksimov, Wang & Luo, 2017), young people and disadvantaged groups (Agarwal, 2015; Chinamasa, 2016). The study further shows that an increase in the percentage shares of SMEs' employment impact on reducing poverty. Furthermore, in agriculture-based economies, SMEs provide livelihood opportunities and nurture entrepreneurship (Bliemel, McCarthy & Maine, 2016; Li, Ur Rehman & Asim, 2019).The World Bank (2013) concluded that SMEs respond differently to re-engineering since many lack shared approaches, particularly in the agrarian sector as evidenced by the absence of

strategic management prowess leading to poverty and increased food insecurity. However, growth flexibility requires SMEs in the agrarian sector to optimize food security as a measure to reduce poverty and hunger in societies (Christiaensen & Todo, 2013; WFP, 2014; OCED, 2016). According to Cloete (2013), the rapid and balanced growth of SMEs is thus essential to bring about equity in distribution of income and wealth to quickly reduce poverty among the people (Fidrmuc & Gundacker, 2017). Meanwhile, according to the World Bank (2013) and Sutter, Bruton & Chen (2019) poverty reduction is one of the SMEs' social responsibilities as outlined in the government poverty reduction program. The contribution of SMEs to economic fundamentals, nonetheless, varies substantially and it can be concluded that inequality remains excessive in poorly performing SME-oriented countries (ILemona, 2013).

2.6.1.2. Standards of Living

The perception about SMEs in the agrarian sector is that they have made significant improvements in enhancing the quality of life. The life expectancy improves despite the re-engineering challenges inhibiting the growth of SMEs (Cant, Erdis & Sephapo, 2014). As such, the long-standing and vigorous debate on the informal sector (Benhassine , McKenzie, Pouliquen & Santini,2018) is whether they adjust the standards of living for the better since the major role of SMEs in the agrarian sector is to improve the living conditions of people so that they earn and live healthy lives at household levels (ILemona, 2013; Harris,2019). As such ,agrarian SMEs play a critical role of providing people with social development in the form of high standards of living, quality of life, and freedom from hunger and malnutrition (FAO, 2017).SMEs improve the standards of living of people who are struggling with poverty. Development of communities is closely connected to small and medium-sized enterprises. It is obvious, that SMEs play a crucial role in social, cultural and economic development, and many authors are focused on the issue of standards of living and SMEs. The main purpose is to re-engineer SMEs to influence improved standards of living. However, today the standard of living which is the quality of life is intertwined with happiness. The concepts of standards of living and quality of life overlap in many areas and their definitions are clearly reserved (OECD, 2016). From this background, the well-being and welfare of communities is influenced by the growth of SMEs .Therefore, the most commonly used indicator of the standards of living is the gross domestic product per capita. GDP per capita is not a direct reflection of the standards of living but it is one of the many determinants that are involved in it since the increase of national wealth in developed countries has been followed by the growth of subjective well-being, being influenced by

the growth of SMEs (FAO, 2017). Hence, there is an interconnection between the standard of living factors and re-engineering the growth of agrarian SMEs in the Eastern Highlands. Therefore, the growth of SMEs covers the gap of the cost-of-living differences created by large companies to remarkably improve the happiness levels of families in the Zimbabwean communities (Chinamasa, 2016). This change in the scale and size of SMEs in the agrarian sector seeks to improve livelihoods irrespective of the family unit, their inventiveness or way of owning land for improved SME agrarian activities (Durendez et al., 2016).

2.8. Summary

The section has extensively covered the literature on the importance of SMEs in the agricultural sector in improving food security. This was done to clarify and review the rationale for re-engineering SMEs and their related concepts. The reviewed literature has pointed to the challenges being experienced by SMEs and there was clarion call for re-engineering their growth which is pivotal in the provision of food security and reducing poverty in Zimbabwe. The overview brought perspective into the importance of agricultural SMEs. The perspectives help to determine how strategies for re-engineering can influence the growth of Zimbabwean SMEs (Mbizi, Hove, Tondlana & Kakava, 2013). After having reviewed the literature on re-engineering SMEs, the strategies for re-engineering will be discussed in the next chapter.

CHAPTER THREE:
STRATEGIES FOR RE-ENGINEERINGRE- THE GROWTH AND SUSTAINABILITY OF AGRARIAN SMEs

3.1. Introduction

The rationale in this section is to discuss the associated literature on strategies for reengineering SMEs. An overview of existing and other techno innovative strategies used to engender the growth of SMEs is presented. The research identified gaps which justified the research whose aim is to critically identify strategies to reengineer SMEs, seeking to develop the agricultural sector and in general the economy growth of Zimbabwe.

3.2. Government Policies

The literature shows that governments around the world have recognized the SMEs' existence and their significance in preserving vibrant economies (Aremu et al., 2017).This has resulted in many states creating plans for reengineering agrarian SMEs and stimulates economies to grow from within. This perception is borne from the comparison given where government policies are seen to radical affect the growth and development of SMEs. Maunganidze (2013), Majoni, Mutunhu & Chaderopa (2016) and Eniola & Entebang (2015) reiterate that government policies are a major determinant for competitiveness and growth of SMEs (Irungu & Arasa, 2017). The insights and contributions of various authors state that the exigency of SMEs has seen many governments such as Cuba, Brazil and America lobbying for effective SME policies to engender their growth to sustain livelihoods. In this regard, the key SME policies leverage rapid growth with chances of transforming the distressed economy into a vibrant economy. SMEs tend to capitalize on government policies to stimulate their growth (Maunganidze, 2013).

In the developed world (ASMEC, 2013), countries have provided security of tenure, investment and consolidation of SME policies to improve mechanisms necessary for their long-term growth. This study recognizes that previous studies on the good governance exhibited by developed governments reflect mutual interaction between policy makers and SMEs to develop desirable policies which engender the growth of SMEs and result in economic development (Nyoni, 2017; Ameyaw et al., 2017). Such a discourse between the policy makers and the role-players in the agricultural sector, especially SMEs, is and should be taken as the recipe for sustainable agriculture. African governments should focus on creating greater dialogue between themselves and the SMEs in the

quest to establish the best approaches to commercialization of farming for better results (Grabowski et al., 2016). In Zimbabwe, the Ministry of Industry and Enterprise Development facilitates supports and encourages SMEs in the agrarian sector to adhere to corporate ethics, principles and guidelines to enable them to grow.

According to Zimtrade (2014) and Nyamwanza et al (2015), the Zimbabwean government's policies traditionally tend to benefit large enterprises but now, these insights promote the existence of the informal sector. It now has to offer related policies to the SMEs, while pursuing all the necessary legal, regulatory and institutional reforms to improve their operating environment. Apparently, according to Bomani, Fields and Derera (2015), the government's position is overwhelmed by the SMEs problems, and in response, the government has to adopt a variety of anti-SME crises programs to reengineer their growth (AFDB, 2013). It is envisaged that implementing stimulus support measures will be critical for the SMEs' growth prospects. Policy simulations are seen as having the potential to improve the SMEs' operating environment. From another perspective, since SME policy simulation does not take place in a vacuum, it is critical that government delivers policies which are implemented in an atmosphere exuding an optimistic image and confidence which can stimulate economic growth and contribute greatly towards the achievement of agrarian SMEs. This brings to the fore the various calls from the marketplace by experts, for government to establish an SME Bank in the same spirit that has seen the 2018 establishment of the Women's Empowerment Bank.

3.2.1. SME Policy

In Zimbabwe, the core ethos of the SME Policy vision is to provide guidance and facilitate training and development. The key principle of an SME's policy is to intervene and guide the growth of SMEs which are drivers of the economic growth trajectory. Zimbabwe's SME policy in post-independence provides support for agricultural development with a view to support an enabling business environment that attracts the growth of the agricultural sector. However Nyamwanza et al (2015) and Bomani, Fields and Derera (2013), noted that the growth of SMEs have become significant after the development of the SME Policy in 2002. The policy spearheaded the exigency and development of SMEs and policy' interventions were successful in development of the informal sector to address the unemployment levels, poverty reduction and grow the economy(Christiaensen & Todo, 2013;Barkhatov,2016; Sutter, Bruton & Chen,2019).Gender mainstreaming was also

considered to be a critical variable in SME growth, especially in the equitable land distribution and ownership process which was traditionally skewed in favour of males (Broegaard, 2013; Quisumbing, Meinzen-Dick, Raney, Croppenstedt, Behrman & Peterman, 2014). Historically, the SME policy is the bedrock which engenders the growth of SMEs (Mazanai & Fatoki, 2012; Bjornlunda and Pittock, 2017). Over time, this must help to radically transform SMEs into more sophisticated transnational companies. While fostering linkages and formalizing the SME sector, the critical component of the policy encourages value addition of Zimbabwe's SMEs and facilitates access to technologies to raise productivity and competitiveness of agricultural SMEs (AFDB, 2013; Benhassine et al., 2018).

3.2.1. SME Policies

Zimbabwe's SME policy model is traced to the pre-colonial era. However post-independence provide support for agricultural development with a view to support an enabling business environment that attracts the growth of the agricultural sector. Additionally, the SME policies cut across sectors and aimed at supporting indigenous businesses with the sole reason of growing the Zimbabwean economy from the grassroots levels. There are various SME policies that have been instituted to target agrarian sector, inclusive of related policies in Zimbabwe. The table 3.1 below shows that there is an overlap between the various policies supporting SME development in the agrarian sector and the SME policy in general, with a strategic thrust to enhance inclusive performance of SMEs towards an equitable poverty-free society (Al-Matari, Abdullah & BtFadzil, 2014; Ndiaye et al., 2018).

Table 3.1: A Summary of Zimbabwe's SME Developmental Policies

Policy	Relevance to Agrarian SMEs
Zimbabwe National Policy for Information and Communication Technology (ICT) 2015	This policy improves the agrarian technological innovation (Zimtrade, 2014; Burch, 2017). It strides to introduce various e-services to stimulate the growth of SMEs.The ICT policy has enabled farmers to get critical data that assists them to plan their agricultural activities such as weather forecasts, prices of inputs and location of commodity brokers. Applications such as VAYA has assisted farmers in conveniently accessing tractors for land preparation and transport to ferry produce to the market(Jayne Headey & Chamberlin ,2014),
Gender policy	The gender commission has been advancing the rights of disadvantaged members of the community, mainly women through various gender policy initiatives where women rights are placed on the spot-light. One such aim is to ensure women rights to access of land is observed. Since lack of tenure

	on land security is affecting those (Chinomona & Maziriri, 2015).
Transitional Stabilisation Program (2018– 2020)	This provides sustainable economic empowerment and social transformation for entrepreneurs. The policy framework creates opportunities for micro, small and medium enterprises growth (Bjornlunda & Pittock, 2017; Ameyaw et al., 2017). The objective of this policy was to create an environment for revival and revitalization of the productive sector in the country while also creating the necessary economic fundamentals that would lead to stabilization in the financial sector and initiate currency stability. The SME sector has been the greatest beneficiary of the TSP since it has been able to sustain local productivity and meet requirement of the manufacturing industry as the country continues to witness massive import substitution within the food and beverages sector which are largely driven by the agrarian SMEs sector.
Education policy	Training and capacity building are the key success tenets of the agrarian SME sector. Currently there are more than 5 agriculture training colleges, 11 polytechnics that train in horticulture and nearly 17 universities that offer diplomas and degrees in agro-based courses respectively. This massive investment is important for imparting skills and competencies necessary for re-engineering and growth of agrarian SMEs.
Economic and Poverty Alleviation Strategy Plan (EPASP) (2012)	This policy framework supports SMEs in agriculture through provision of material, equipment and technical support to the agrarian SMEs in order to promote productivity of smallholder farmers in the A1 and A2 farms.
Presidential Agriculture Input Scheme (PAIS)	The presidential inputs support program become synonymous with the rain season in Zimbabwe. The objective is to ensure that Zimbabwe achieves national food security. Direct provision of Presidential Agriculture Input Scheme (PAIS), Education for All (2008), training by Agritex Field Marshals and other subsidiaries in support of the agrarian SMEs has been an opportunity to see the continuous re-engineering and growth of SMEs (Bomani, Fields & Derera, 2015). The inputs program ensures that the SMEs provide the excess production towards the development of the agrarian food value chain from the field, through manufacturing up to export and consumption (Jayne & Rashid, 2013).
The Economic Recovery Program (ERP)	This program was created to bridge the funding gap for emerging SMEs in government's bid to mitigate the effects of hunger, food insecurity and poverty in communities (Gebrehiwot, Mesfin & Nyseen, 2015).
The Indigenization and Economic Empowerment Act (IEEA) (2008)	The IEEA sought to create an opportunity for economic empowerment for the majority of people who were economically disadvantaged so that they could participate in major economic activities that were once a preserve for the white minority communities created during the pre-independence era. This Act therefore, was meant to also support SMEs as it also reserved certain sectors of the economy for indigenous Zimbabwean communities.

Agricultural Policy Framework (2012 – 2032	The framework's vision for sustained agriculture was created to ensure viable standards of living, food security and the comprehensive Agricultural Policy Framework (2012 – 2032) This policy addresses issues concerning crop and livestock production, marketing and trade (Berg, Mrrewijk &Tamminen, 2018).In addressing these issues, the policy framework describes the current situation and constraints, gives the broad policy goals and objectives and detailed policy statements. From these objectives, SMEs are not left out but to compete with large farms though the government avails support largely to large farmers other than the SMEs.
Zimbabwe Agenda for Sustainable Socio-Economic Transformation – ZIMASSET (2013– 2018).	The policy seeks to promote equitable development and prosperity for SMEs (Matutu, 2014). ZIMASSET identified SMEs in the agrarian sector, transport, tourism, information communication technology, enhanced support for small and medium scale enterprises as well as infrastructural sectors primarily focusing on power generation as key drivers for the projected growth targets. The main clusters of the plan were Food Security and Nutrition; Social Services and Poverty Eradication, Infrastructure and Utilities; Value Addition and Beneficiation. These clusters were made to function through two clusters namely the Fiscal Reform Measures and the Public Administration, Governance and Performance- Based Management clusters (GoZ, 2013).
Land Policy	The land reform policy created space for indigenous agrarian SMEs to compete with large scale farmers. The land policy empowered the indigenous Zimbabweans by creating opportunities for them to have total ownership of the means of production(Jayne, Yeboah, Chamberlin, Traub, Muyanga, Sitko, Chapoto, Nkonde, Anseeuw & Kachule (2015), There are, however, concerns particularly relating to the inadequate security of tenure provided by the 99 year leases issued by the Government of Zimbabwe, inadequate development of support institutions such as training and finance, inconsistent procedures of land administration littered with corruption in terms of multiple farm ownerships, and unclear compensation models for current and future displaced SME farmers. Years of deteriorating infrastructure and declining government essential services support have contributed to diminished domestic food production, which is currently insufficient to meet consumption for 14.6 million Zimbabweans.

Although most policies have noble intentions, some are being poorly implemented and do not seem to radically stimulate the growth of SMEs (Chivasa, 2014). The policy implementation lacks communication and cordial relationships to enable SMEs to take advantage of these laws. The government seems to neglect SMEs in agriculture, rather it prefers to amplify and place more emphasis on cross border, mining and home industry SMEs. Policies and institutions such as the National Lands Commission on the Status of SMEs which support their growth are not integrated into various chambers of SMEs. The current subsidized inputs support programs for agricultural

SMEs through government platforms do not have the requisite outreach to even fifty percent of the SMEs. Therefore, there is limited evidence of agrarian SME support in the policy implementation. Thus, the major reason for these policy frameworks was to create opportunities for empowering micro, small and medium enterprises growth (Bjornlunda & Pittock, 2017; Ameyaw et al., 2017).

3.2.2. Government Regulations and SME Business Compliance

According to Koranteng et al (2017), governments establish regulations that indirectly guide SMEs. Ameyaw et al (2017) states that regulation is achieved through government policies, consumer groups, associations, courts and media among other groups which work to control and influence SME operations. However, the role of government in regulating the unequal relationship between TNCS and SMEs is not even and it is in favour of big large businesses (Nyamwanza et al., 2015; Ndiaye et al., 2018). Moreso, the transparency and accountability of government policy delivery increases, as compliance by SMEs increases. The regulation processes make the business environment stable and they stimulate the growth of SMEs. As such, regulating SMEs ensures that they become efficient and function properly and profitably.

Agrarian SMEs in particular, need to be flexible and respond to changing government and municipality rules and policies. The overall government regulations establish basic conditions which allow all SMEs in the agrarian sector to operate and make investment decisions in a stable environment. Regulating SMEs enables direct SME technology transfer, thereby contributing more to technological innovations (Bubou et al., 2014; Ehrenberger, Koudelkova & Strielkowski, 2015). When scrutinized carefully, regulations impact SMEs to grow into large companies and are of particular relevance in creating a stable SME business environment (ILemona, 2013; Aremu et al., 2017). From this perspective; regulations appear to stimulate the growth and competitiveness of SMEs. Therefore, re-engineering SMEs is particularly difficult since the informal sector is bedeviled with poor management skills (Meyer & Meyer, 2017; Benhassine et al., 2018). Since they mostly survive on 'illegal' activities, several scholars even suggest that SMEs in Zimbabwe are disproportionately affected by regulatory requirements, red tape and other burdens (Bindu & Chigusiwa, 2013; Moyo & Mandizwidza-Moyo, 2017; UNFPA Zimbabwe, 2020). These imbalances exert serious burdens on their daily operational activities. Koranteng et al., 2017) argues that these complexities affect the development of SMEs, hence, the need for strategies to re-engineer SMEs to become sustainable. The enabling government regulatory framework provides the fundamentals for

the SMEs in the agrarian sector to create favourable conditions to form the foundation for their growth, survival and competitiveness (Irungu & Arasa, 2017). The Zimbabwean SMEs Act (Chapter 24:12) of 2011 strengthens the already existing SME development momentum towards economic prosperity. This ensures a socio-economic and friendly environment is achieved in Zimbabwe. This SMEs Act (2011) plays a facilitative and coordinating role to develop SMEs in Zimbabwe, who on their part, must comply and work together with all Ministries and Agencies including the private sector, Non-Governmental Organizations and International Development Partners (Bomani, Fields & Derera, 2015).

Licensing and registration of SMEs in the agrarian sector is cumbersome due to the high costs involved. These issues are often cited in Dzinotizei (2019) survey as constraints inhibiting SME growth. However, the strength of SMEs stems from their flexibility to get around registration requirements which are designed to prevent their entry into the market. The SME formalization is usually done through the Registrar of Companies, under Chapter 24:03. Once registered, they trigger competitiveness on the market to stimulate their growth since regulating converts informally-held assets into real assets.

In principle, SMEs usually turn a blind eye to registration and licensing, leading them to suffer punitive evictions, embarrassments, and stiff penalties as a measure to force them to comply with statutory instruments in terms of the Councils Act and government instruments (Nyamwanza et al, 2015). On the other hand, the delay in registering is because some SMEs are located far away from the company Deeds Office which is mostly centralized in the capital city, Harare. In recent years, business concerns have led to a significant rise in the activities and scope of SMEs. Being closely related, compliance activities are increasingly being aligned with SMEs growth goals and being integrated to some extent to avoid non-performance of SMEs and possible conflicts with the government (Akinboade, 2015; WFP, 2017; UNFPA Zimbabwe, 2020). It is against this background that the only way to go for SMEs in the agrarian sector is to comply with Environmental Management Authority (EMA) guidelines to reduce littering, land degradation and deforestation since the lack of regulation has previously overlooked the whole notion of environmental sustainability (DeVries, Terwel, Ellemers & Daamen, 2015). Therefore, the focus on government regulations improves both the business side of SMEs in the agrarian sector and the environment sustainability concerns, as well.

Scholars like Eniola (2016) and Ameyaw et al (2017) have advocated that the cornerstone of the growth of SMEs is a stable environment. The environmental stabilizing mechanisms are considered as a force that engenders the growth of SMEs by protecting them so that they develop (Dossou-Yovo, 2015; Ndiaye et al., 2018). One thing entrepreneurs hate is environmental instability, since SMEs operate according to their forecasting the future, comprising surprises as well as certainties (De Oliveira & Jabbour, 2017).SME owners always try to avoid uncertainties associated with environment instability such as political gridlock, extremism and economic dysfunction. Furthermore, SMEs tend to suffer and their growth is hampered- in an environment that is marred by frequent strikes, social unrest and chaos (Burch, 2017). This is because SMEs which are family owned depend on stability to grow (Durendez et al., 2016). Apart from this, AGRA (2016) conclusively posits that instability negatively impacts on their profitability.

According to a study by Ameyaw et al (2017), SMEs in the agrarian sector are subject to taxation and non-uniformity of taxation and high taxation rates overburden formal SMEs, prohibiting their growth (Akinboade, 2015; Dlamini, 2017).Trade liberalization policies in Zimbabwe have exposed many SMEs to external competition, especially through cheap goods imports from China and COMESA countries (Bindu and Chigusiwa, 2013). The Monterrey Consensus (2002) also recognized taxation's key role in SME resource mobilization. Taxation plays a key role in African governments' aim to promote good governance and accountability by strengthening their relationship with SMEs in the agrarian sector (Dolgih, Zhdanova & Bannova, 2015; Koranteng et al., 2017; Dlamini, 2017). Nyamwanza et al (2015) and SMEAZ (2017) posit that developing countries continue to face challenges of tax evasion and non-compliance by the informal sector. Business and trade liberalization has brought about limited market space for locally produced goods as foreign players export their products to Zimbabwe. In the agrarian sector, countries like Kenya have gone ahead of Zimbabwe in areas like horticulture farming due to their techno-savvy approaches.

The weak tax administration and lack of tax holidays for SMEs has resulted in tax evasion by the informal sector (Dlamini, 2017). For instance Finscope Survey (2012) posits that there are 2.8 million SMEs employing over 2.9 million people, implying that 5.7 million are dependent on this sector. However, this good intention is being tainted by their illegal operations as revealed by Kazunga (2019), who reported that only 18500 SMEs are registered with ZIMRA, up from about

13000 in 2017.Although it is a well- known- fact that taxes in Zimbabwe are enacted by the Income Tax Act and administered by Zimbabwe Revenue Authority (ZIMRA, 2019). The interest payable can be compounded indefinitely. As such in developing countries, getting SMEs in the agrarian sector registered for tax should not be a cost benefit calculation involving a trade-off between enforcement costs and tax revenue, as the system improves SMEs attitude towards the state and more importantly, it stimulates economic growth (Dolgih, Zhdanova & Bannova, 2015; Dlamini, 2017; Berg, Mrrewijk & Tamminen, 2018). However, SMEs in the agrarian sector are often not up to date because tax registration requirements are burdensome, particularly in relation to understanding which requirements apply in their context (Ameyaw et al., 2017). Finding guidance and advice is therefore which explain what they must do to comply with ZIMRA regulation processes is difficult, since TAX registration is mostly centralized in the capital cities.

The SMEs in the agrarian sector need a good reputation of being ethical, treating consumers well, good financial behavior, good innovative qualities, high quality management, social responsibility, consumer focus, quality products, reliability, emotional appeal, trust, responsiveness, technological savvy and good communication skills (Lin,Zeng,Wang,Zou & Ma, 2016; Evans,2018). The literature shows that reputation is pivotal for SME survival. Harmonized trust and confidence of the consumer can have a direct and profound effect on a SME's bottom line, hence the importance of reputation to stand out. SMEs in the agrarian sector rely on consumers to establish, build and maintain their reputations (Taneja & Toombs, 2014). The benefit of reputation is consumer goodwill, preference and support in times of crisis or controversy. If an SME maintains a good reputation, consumers have a preference on products or services being offered (Zhang, van Doorn & Leeflang, 2014). This is what leads to the growth of an SME (Frank & Schvaneveldt, 2016; Burch, 2017). Therefore, the SMEs in the agrarian sector culture seeks a good reputation as it is an important aspect to foster the development of agriculture and the growth of SMEs (Chivasa, 2014; Taneja & Toombs, 2014: Akinboade, 2015; English, 2016).

3.3. Agricultural Support Mechanisms and SMEs Narratives

Since 1980, the developed world has progressively increased agricultural support to SMEs. FAO (2014) asserts that agricultural support boosts SMEs' low agricultural productivity. The proponents in the construction of the agricultural support measures seek to leverage the SMEs agricultural

productivity as the majority of them are unable to purchase expensive inputs such as fertilizer and other complementary inputs due to high cost and insufficient quantities on the market. The critical review of agricultural subsidies such as fertilizer and seeds contribute to increase in SMEs yields (output) and improve soil fertility (ZimVac, 2013; Yang, Huang, Zhang & Reardon, 2013). Therefore, government support builds up household food security systems (Saberi & Hamdan,2019).The constructs that emerged from a review of the government's agricultural relief are quite generous, together with other support measures which are widely availed to support agriculture development as tabulated in Table 3.2.

Table 3.2: Agricultural Support Measures

Agricultural Mechanization: Agricultural SMEs in the developed world have purposefully embraced agricultural mechanization to increase productivity and opportunities for successful SMEs innovation and growth using machinery such as tractors and pumps (Burch, 2017; Baporikar, 2017; Arunachalam et al., 2018). The literature reviews also covered findings on government support on SMEs with new farming mechanisms which focus on embracing mechanization strategies (This helps SMEs in the agrarian sector to use creative techniques so that they sustain their operations. SME mechanization grows and creates wealth through provision of new machinery to increase goods and services (Mulet et al., 2017). In this regard, Agricultural Innovation Systems (AIS) are increasingly driven by mechanization to help ensure good use of SME resources in response to the need to increase food security (Şerban, 2015; Heikkilä, Bouwman & Heikkilä, 2018).
Agricultural Extension System: This system improves the technical activities of SME farmers (Government of Zimbabwe, 2014; Masuka, 2019). In Zimbabwe, Agritex Department identifies trial farmers and monitor progress. Agricultural extension services have been the key information disseminator for the Zimbabwean agricultural economy and particularly for SME prosperity in the agrarian sector (Mutambara, 2016). The desire for the growth of agriculture is only possible if agrarian SMEs are supported by extension services to enhance the pace of agricultural productivity. Meanwhile, the coverage of extension services across SMEs in agricultural businesses engenders their growth (Akinboade, 2015). Further development of SME farming techniques increases tillage, water harvesting and improve soil fertility (Tadele, 2017). However, the widespread adoption of these techniques depends on an effort by Agritex Field Marshals.
Agricultural Research: Agricultural research prioritizes the problems facing SMEs in agriculture and research expenditures doubled in the late 2010 in Zimbabwe (USAID, 2012). A much greater emphasis on agricultural research enhances livelihoods of the majority who rely on agriculture for a living (IFAD, 2013 ;Hilson,2016),The research should cover the whole agriculture value chain from soil texture, rainfall patterns, seeds and chemical requirements, among many other issues (ZimVac, 2013). This research is very critical for growth in the business. According to Bomani, Fields & Derera (2015), the support from Ministries of Agriculture and SME development sought to strengthen the capacity to carry out agrarian sector research and development to develop appropriate policies, programs and schemes that engender the development of the SMEs. The survival tool for

SMEs in the agrarian sector is research which aims to sustain, ease and improve their operations. Literature shows that there has not been too much R and D practiced by agricultural SMEs (Şerban, 2015). The agricultural research and technological dissemination improve food security (Chinamasa, 2016). Furthermore, it has been identified that R & D considerations by owner managers improve human competencies and product development to grow market share. As a result, collaboration by agricultural SMEs in research and development with other research institutions facilitates access to techno- innovativeness, markets and information to enhance product quality and competitive advantage over TNCs. The success of the SMEs in the agrarian sector is derived from the complex interplay of a wide variety of highly-specified research systems for SME development (Barkhatov, 2016; Burch, 2017). In terms of success and growth of SMEs in the agrarian sector, it is dependent on the effectiveness of research and development to prevent possible risks. Thus, research develops SMEs in the agrarian sector to become competitive.

Agriculture Loans and Credit Facilities: The Government established micro- finance banks to address the SMEs capital requirements (AlBuraiki & Khan, 2018).Yet there has been relatively little progress available to agrarian SMEs. Credit facilities for SMEs through the Agricultural Finance Corporation (AFC) and Agribank (Government of Zimbabwe, 2014; Masuka. 2019).Agricultural Finance Corporation (AGRIBANK) was conceived through (Chinamasa, 2016). In addition, the microfinance institutions (MFIs) support SMEs through financing and training workshops.

Agricultural Inputs Schemes: SMEs rely on free agricultural inputs to improve crop production and food security, particularly during periods of natural disasters, (Jayne & Rashid, 2013; Hossain, Momin, Rowe & Quaddus, 2017). Zimbabwe's Ministry of Agriculture controls the inputs such as fertilizers, machinery, pesticides and seeds, production and trade testing using multiple mechanisms. It is a well-targeted input support program (ISP) targeted at SMEs. These efforts are a key factor in the rapid uptake of agricultural activities (Government of Zimbabwe, 2014; Masuka, 2019).

SMEs Infrastructure and Investment Development: The deplorable state of roads and market centers in low-income areas calls for massive investments which will boost their growth (ACET, 2015). However, lack of investment has little multiplier effect on the SMEs in the agricultural sector (African Development Bank, 2013). Therefore improving infrastructure has higher longer-term returns for SMEs. This is so because infrastructure is essential for increasing economic progress and in efforts at poverty reduction. Critical analysis by Mutambara (2016) and Nyoni (2017) posits that infrastructure expansion has come at the expense of the local informal sector, and it also affects the long-term compliance of global business approaches to stimulate SME growth.

3.3.1. Sustainable Agricultural Measures

3.3.3.1. SME Produce Preservation

FAO (2014) states that produce preservation keeps agrarian produce in good condition for a long time to prevent it from spoilage and making it possible to store in an environment which is conducive for future use and increases shelf life for a larger part of the year. Primary processing has been seen by government institutions as an important method to improve nutritional status and food

security, and also to improve incomes to individual smallholders and/or the wider village community (WFP, 2014). These benefits may include improved short-term storage of fresh produce without excessive losses. Many farming households have the knowledge and skills to preserve their crops, often handed down through the generations Grabowski et al., 2016). However, the recent surge in SME productivity has increased food wasting and deterioration and this makes products lose their appearance and decrease in nutritional value (WFP, 2014; FAO, 2017). Thus, food preservation methods such as heating, pickling, edible coating, and drying, freezing and high-pressure processing solve this problem by extending shelf life of the SME produce. This strategy stabilizes product quality, appearance and taste.

However, modern technology and conventional preservation methods use natural food preservatives. In this light, replacing these synthetic preservatives is safe for human consumption and the environment. From this perspective, ZimVac (2013) posits that the introduction of primary processing can build on and enhance local knowledge and skills by integrating new ways of processing or new types of simple technologies that provide for better preservation techniques, greater processing efficiencies and yields, and less wastage. Important reasons for processing are to reduce losses and to preserve foods so that they are available when out of season. This must be carried out in such a way that the crop does not spoil before it is adequately dried, which can be a challenge to farmers if the harvest period does not correspond with dry weather. The dried crop must also be stored correctly to prevent losses arising from damage or consumption by insects, birds and rodents or spoilage by micro-organisms especially molds (FAO, 2014).

3.3.3.2. SMEDCO Revolving Fund

It is believed that the SMEDCO revolving fund promotes the SMEs capital needs to boost their productivity. With an option of SMEs borrowing from the government arm, an SME can do away with risk reducing through employing diversification strategies (Chinamasa, 2016). In the case SMEs in Zimbabwe, credit constraint has been singled out as a major factor militating against re-engineering the SMEs to grow into transnational companies. Nyoni (2017) pointed that government is financing SMEs through SMEDCO, to enhance their productivity and at the same time reducing, poverty and seeking to attain food security in developing countries such as Zimbabwe. The first half of 2016 witnessed the creation of the Small and Medium Enterprises Revolving Fund, which is administered by the Ministry of Small and Medium Enterprises through the Small

and Medium Enterprises Development Corporation. On the same goal, Zimbabwe has mobilized nearly $40 million towards supporting the growth of the small to medium enterprises (SMEs), which have become a strong sector of the economy (Chinamasa, 2016).This initiative was complemented by various banking SMEs windows as well as value chain programs linking SMEs to large companies seeking to influence their growth (Akinboade, 2015; Frumina, 2016). This means that access to credit lines by SMEs can significantly increase their growth Furthermore, the ease and access to credit facilities enables SMEs to diversify by undertaking new investment initiatives seeking to grow (Mausch, Orr & Miller ,2017; Dzinotizei,2019).

3.3.3.3. Cooperatives Credit Facility

The role of cooperative credit facilities in SMEs development in Zimbabwe has worked wonders in addressing the SMEs financial challenges to strengthening their growth prospects. SME cooperative credit savings operate on the basis of ownership shares where each member of a cooperative receives return profits proportionate to the profits. Cooperatives operate in every industry including agriculture and other sectors (UNFPA Zimbabwe, 2020).However, cooperative credit facilities are sustaining SME activities in Zimbabwe and they have a role in lending loans for their takeoff (Nyoni, 2017). The money that the cooperatives lend to their members and the public is then paid back with interest. As such cooperative savings credit empowers SMEs to improve their productivity and enhance their economic opportunities through funding. Savings cooperatives are owned by the people who give financial support to SMEs (Evans, 2018). Cooperative credit facilities have enough capital base raised through pooling resources together in a scheme, focused on giving soft loans to SMEs aimed at seeking capital to increase their productivity (Fuglie & Rada, 2013). The scheme was introduced as Zimbabwe grappled with economic problems compounded by SMEs challenges. The program ensures that SMEs are fully funded to grow their operations, seeking to reduce poverty (Christiaensen & Todo, 2013).

3.3.3.4. SME Land Tenure and Ownership

SME tenure security is right to land ownership and this is critical for the growth of SMEs (Nyoni, 2017). This legacy renders SMEs to continue moving from one place to the other. A fundamental goal of SME tenure is to enhance their growth. The strength of land ownership increase SME returns on their investments and opens borrowing powers from banks (Government of Zimbabwe, 2014;

Jayne et al., 2015), Zimbabwean agrarian SMEs have been advocating for security of tenure and it is generally argued that lack of SME tenure security constrains their growth. Following the widespread land dispossession that took place in the colonial times, the land question for agrarian SMEs had for a long time been a major concern in the country. It dominated the Lancaster House Conference Agreement, especially its acquisition, allocation and distribution amongst the races. There were four types of land tenure that the country inherited at independence, namely, Large Scale Commercial Farmers (LSCF) and urban areas; Freehold Tenure of Small Scale Commercial Farms (SSCF); Communal Areas and State Land. It is reported that 4 000 large-scale white commercial farmers occupied 11, 2 million hectares; yet more than 1 million rural families occupied 16, 3 million hectares of dry, less fertile and less productive lands; 10 000 small-scale farmers occupied 1, 2 million hectares; 70 000 families were resettled on 2 million hectares, and only 0, 5 million hectares were left for state farming (ZimVac, 2013). The Lands Commission Report noted that there is, however, still a major concern as regards security of tenure in the resettlement areas. The SMEs expressed the view that the process from listing to final acquisition take too long to the extent that some individuals were already on the farms before they were fully acquired. According to some agrarian SMEs, this led to a sense of insecurity.

Thus, the issue of security of tenure remains one of great concern to agrarian SME owners. Absence of leases was negatively affecting investment on the allocated land and hence productivity.Dealing with the land tenure and land ownership demand side is a key challenge of District Administrators responsible for land allocation for people interested in farming including agrarian SMEs. The land available is for the natives and those who benefited from land reform program hence, they find it difficult to allocate land to SMEs (Jayne et al., 2015).The debate on appropriate land tenure security has long been identified as one of the key elements necessary to stimulate the growth of SMEs and intensify agricultural production. Land tenure security for SMEs has a marked effect on investment and it is a pre-condition for increasing land-based economic development. However, a number of studies have shown that SMEs are more likely to make medium to long-term land improvements for them to benefit from their investments (Mausch, Orr & Miller, 2017).

3.3.3.5. Resource Utilization by SMEs

Resource utilization refers to the process of making the most of the resources available to achieve growth objectives (Simalenga, 2013). There is evidence that resource levels influence management

practices that subsequently have a bearing on the productivity of SMEs. Nyoni (2017) and Jiang et al (2018) disclose that SME resources such as labour, cash, machines, and buildings that the organization owns. There are also the non-physical resources which are; the reputation of SMEs and knowledge of human resources. The availability of these resources is affected by the failure of re-engineering by the SMEs. The perceptions from the additional definitions of resources include raw materials used effectively to increase quality output. However, maximizing the effectiveness and efficiency of resource utilization by agrarian SMEs has been always a challenge. Having said this, SMEs respectfully increase productivity to lower costs (Brooks, 2014; Bjornlunda & Pittock, 2017). Therefore, the re-engineering of SMEs in the agrarian sector increases the solution to resource allocation and this critically helps to improve resource utilization by mainly removing waste from the scheduling process, and by standardizing the functional roles and information from both tactical and operational levels. Therefore, maximizing the effectiveness and efficiency of resource utilization by agrarian SMEs has been always a challenge for SMEs (Wong, 2015).

The SMEs management through scheduling maintains the growth of SMEs (Bjornlunda & Pittock, 2017). Therefore, re-engineering strategies increases the resource utilization efficiency to ensure food security is attained in the agrarian sector. Nyamutowa, Masunda and Mupaso (2014) opine that SMEs resource utilization is a key determinant of whether the set objectives are achieved or not. The SMEs assets which need close monitoring and evaluations for the organizations to grow are individual skill, ability, and management of finances (Bjornlunda and Pittock, 2017; Al Buraiki & Khan, 2018). However, the SME owners need to apply effective management efforts to acknowledge and utilize their assets efficiently and effectively for them to be the source of their competitive edge (Irungu & Arasa, 2017). The SMEs' efficient and effective use of resources improves the service delivery system through effective management by coordinators or managers. Mugozhi and Hlabiso (2017) and Sims and Kienzle (2017) agree that SMEs generally consider how they take maximum advantage of their business assets while utilizing government support to increase income distribution, superior growth and food security (Fornahl, Hassink & Menzel, 2015). For SMEs to strengthen their resource base, they need to speed up their innovation and knowledge transfer processes to achieve a competitive advantage. Therefore, re-engineering the growth of SMEs improves their planning for and scheduling of their limited resources to increase productivity and to be able to lower overhead costs and maintain effectiveness of asset utilization (Brooks, 2014; Baporikar, 2017). This is what makes it possible for SMEs to cope with uncertainty (Mahjoor,

2016). The sustainable SMEs resource utilization ensures resources are used within their capacity for renewal, maintenance and this enhances the ecological integrity of natural systems by minimizing and avoiding risks leading to irreversible damage (OECD, 2016; Bakar & Senin, 2016).

3.3.3.6. Consumer Satisfaction

Customer satisfaction implies the taste condition either pleasant or depressing of an SME product (Khajeh Nobar & Rostamzadeh, 2018).This results in customer satisfaction of the actual product perceived benefits (Bahadur, Aziz & Zulfiqar, 2018).This was supported by various researchers such as Zhang, van Doorn and Leeflang (2014) who found an existing correlation between customer satisfaction and product branding. However, Frank and Schvaneveldt (2016) state that customer satisfaction stimulates the growth of SMEs. The cost of living in Zimbabwe has skyrocketed, due to limited supply of agricultural commodities that are commonly supplied by agrarian SMEs in peri-urban communal plots. The commodity pricing has remained distorted due to varying economic fundamentals such as those caused by fuel prices, lack of inputs, transport, drought, currency malfunctions and poor marketing support systems that affect the productivity of agrarian SMEs. Thus, Zimbabwe's consumer price index on food currently sits at 33.5% of total weight. This means that produce on the market is generally very expensive, leading to consumer dissatisfaction with service provision Hence there is need for eevolving consumer taste to improve SME sales volumes and according to Khankaew, Ussahawanitichakit and Raksong (2015) and Eklof, Podkorytova & Malova, (2018), consumer involvement in SMEs influences decision making and their development. According to Frank and Schvaneveldt (2016), the concept of consumer involvement is linked to advertising. It is associated with numerous marketing concepts to explain various facets of consumer behaviour for further research on the product (Khankaew, Ussahawanitichakit & Raksong, 2015). Consequently, consumer behaviour defines involvement as the degree of psychological connection between consumers and SME stimulus product (Zhang, van Doorn & Leeflang, 2014). These perceived partnerships between SMEs and consumers as noted by the Consumer Council of Zimbabwe (2018) leads to loyalty and the success of SMEs. Thus, individuals form a psychological attachment with a product reflecting the extent to which a product is perceived as relevant to their cognitive elements as the global competition increases. SMEs are seeking new ways to develop better products, hence, the need to involve their consumers on product development which varies substantially .The thrust of this argument is to increase consumer taste and switching to consumer

demands and this swings SMEs' sales upwards to influence growth. The more the SMEs in the agrarian sector are actively involving their consumers in the product development process, the more they know their consumers' wants and needs. It is one of the biggest factors in good consumer service. The increasing collaboration with consumers in new product and service development processes increases the competitive advantage of SMEs and incites innovation and increases market share (Zhang, van Doorn & Leeflang, 2014; Irungu & Arasa, 2017). The value of interacting closely with consumers during the innovation process was acknowledged years ago as perhaps the most basic feature of quality service (Ehrenberger, Koudelkova & Strielkowski, 2015; Burch, 2017). It is argued that understanding consumer participation in the production of a service is instrumental in assessing consumer potential in service innovation (Baporikar, 2017; Pierre & Fernandez, 2018; Cai et al., 2017). Going the extra mile results in an indebted and happy consumer, and it can go a long way in terms of keeping consumers on the radar including both existing consumers and potential consumers. When added to fast consumer support and service delivery, this delivers excellent and appreciated consumer service (Khankaew, Ussahawanitichakit & Raksong, 2015).

3.4. Overview of Existing Techno- Innovative Strategies

It is difficult for SMEs in the agrarian sector to survive without strategic management approaches, implying that the significance of strategies for re-engineering SMEs in the agrarian sector lie in radical change and stimulated growth (Mahjoor, 2016). The re-engineering process uses these existing techno innovative strategies to stimulate SME growth and sustainability in a systematic process, and without these strategies re-engineering SMEs will not be possible. The strategies have evolved substantially in the past and SMEs have learned to understand threats and turn them into opportunities. Arafeh (2016) emphasized that an SME in the agrarian sector is innovative when it creates a new combination of production factors in the form of introducing new goods or producing existing goods with better quality. The introduction of re-engineering SMEs opens up new markets and new supply sources leading to the re-organization of SMEs to develop. From this perspective, the Schumpeterian theory triggers competition in the markets to force SMEs to adjust in the market (Burch, 2017). Thus, disruptive innovation power gives the SMEs a competitive edge in the market as no large organizations would be using such innovations, giving SMEs a unique competitive edge which is critical for their growth (Burch, 2017; Cai et al., 2017). SMEs seize technological opportunities to expand production frontiers. Therefore, the principal function was to probe and

explore otherwise ignored opportunities that stimulate economic growth (ASMEC, 2013; Bjornlunda & Pittock, 2017). Hence, the SMEs owner-managers seek to go beyond re-engineering SMEs to solve the immediate challenges using strategies discussed in this section to develop SMEs into TNCs.

According to Mbizi, Hove, Tondlana and, Kakava (2013) and Bokor (2017) strategies for re-engineering the growth and sustainability of SMEs have a significant influence on the agrarian SMEs' development and their ability to sustain livelihoods (Hilson, 2016). In the view of Bokor (2017), Re-engineering SMEs in the agrarian sector exhibit characteristics which craft a shared vision on how SMEs move towards and deliver superior products in the foreseeable future. Therefore, according to Verboncu (2013), re-engineering strategies are associated with the following key pointers:

- Re-focusing on SME development and consumer prerequisites
- Re-designing core processes using information technology
- Re-organizing cross-functional teams with end-to-end responsibility
- Re-thinking basic issues to improve work flows

The volatile economic conditions have forced the majority of SMEs to review and adopt the following existing SME re-engineering innovations to stimulate their growth.

Furthermore Hussain (2018) emphasizes that an SME in the agrarian sector is innovative when it creates new combination of production factors in the form of introducing new goods or existing goods with better quality. From this perspective the Schumpeterian theory triggers competition in the markets to force SMEs to adjust in the market (Burch, 2017). Therefore, governments maintain a variety of re-engineering initiatives such as techno- innovation diffusion initiatives to aid SMEs in identifying, absorbing and implementing techno- innovation (Baporikar, 2017; Makhdoom,Li & Asim,2019). In addition to the above, part of the rationale for technological diffusion lies in maximizing returns to stimulate the growth of SMEs (FAO, 2014). Technological innovations are traced back to the enlightenment and scientific revolution that motivated entrepreneurs to seek solutions to their challenges in order to enhance output. The power of disruptive innovation gives the SMEs a competitive edge in the market, since no other existing organizations; even large ones would be using such innovations (Abeh.2017; Burch, 2017; Heikkilä, Bouwman & Heikkilä, 2018;

Arunachalam et al., 2018). It gives SMEs a unique competitive edge which is critical for their growth.

The significance of this theory is to translate SMEs into economic benefits. It is important to understand factors of innovation and why governments generally increase their priority on SME policies and place greater emphasis on the promotion of SME technological innovativeness to create employment and income generation (FAO, 2014; Fidrmuc & Gundacker, 2017). However, the government pioneers the development of SMEs in fragmented markets, characterized by risk and reward ratios which promote them to grow into TNCs (Zimtrade, 2014). The following section discusses a wide range of SMEs re-engineering and innovative approaches.

3.4.1. Agrarian Indigenous Knowledge and Information Systems

Agrarian Indigenous Knowledge and Information Systems (AIKIS) concepts are used to improve SME growth (FAO, 2017). The revolutionary advances of the AIKIS concept protect agrarian SMEs cultural and landscape components. It reflects the practices of farming linked to traditional methodologies which are dependent on cultural, spiritual values, and customary laws shaped within SME communities (Castro, Orjuela & Jaime, 2017; Burch, 2017). Within the extension science literature, the agricultural indigenous knowledge and information system (AIKIS) concept dates back to early agriculture (USAID, 2O12).

As reflected in Figure 3.1 , there is need to support this concept, to add new SME dimensions using cultural and spiritual values, elderly advice, inheritance resources, customary law and native sciences.

Figure 3.1: Agricultural Indigenous Knowledge Systems
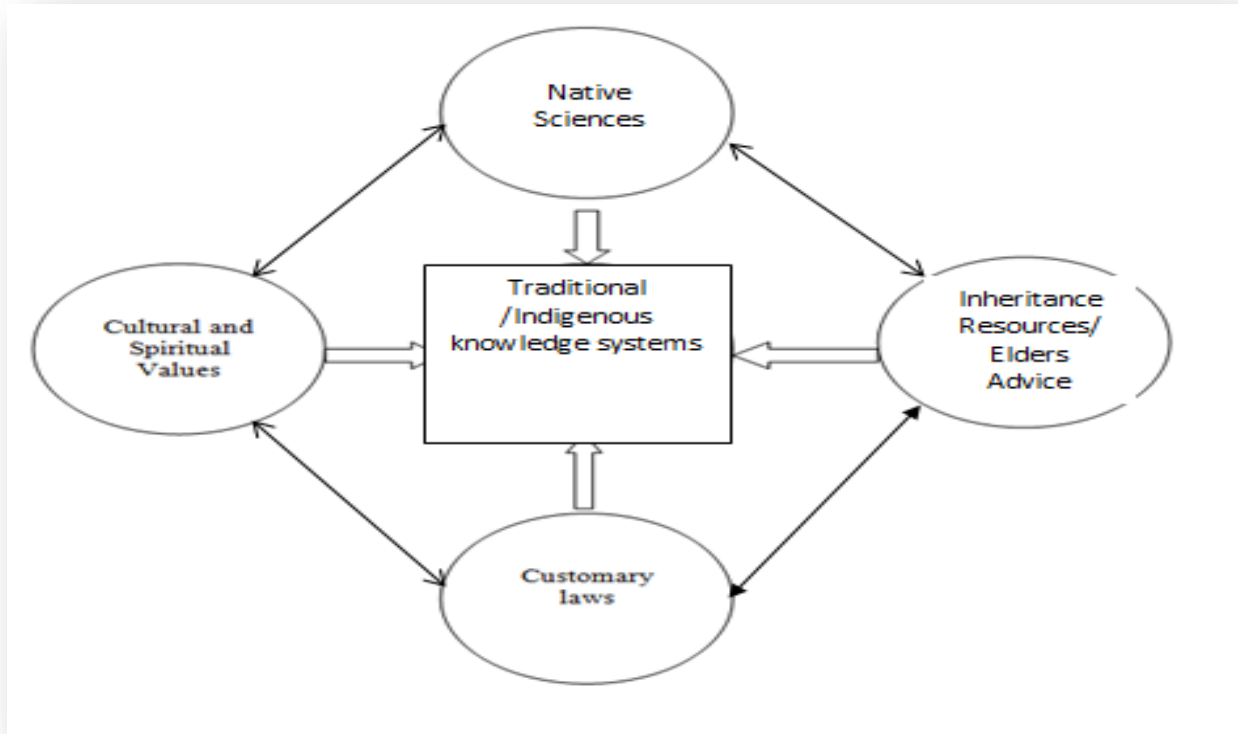
Source: Researchers Development

The adoption of agricultural indigenous knowledge and information system (AIKIS) is undoubtedly proven to be the center of interest for re-engineering agrarian SMEs (Burch, 2017; Nyamutowa, Masunda & Mupaso, 2014). The aim of AIKIS is to grow SMEs and improve agricultural productivity. Regrettably, this approach has great potential that has not been exhausted by SMEs in developing countries. AIKIS principles of analysis and action integrate more traditional and indigenous interventions to complement modern interventions needed for SME innovations to take place to ensure food autonomy is attained (Chikere & Nwoka, 2015; Sims & Kienzle, 2017).However, according to FAO (2014), Bebber, Holmes and Gurr (2014) and Zimvac (2013) the following are SME agricultural indigenous knowledge systems being applied to re-engineer their growth;

73

- Agro- forestry involves maintenance and planting of trees to develop a micro-climate that protects crops against extremes. Blending of SMEs with forestry techniques to control temperature, sunlight exposure, and susceptibility to wind, hail, and rain.

- Crop rotation is the practice of growing different crops on the same land so that no bed or plot sees the same crop in successive seasons to preserve the productive capacity of the soil, minimizing pests and diseases and managing nutrient requirements seeking to maximize SME yields.

- Mixed-/Inter-cropping is a system of cropping two crops at the same time. By planting multiple crops, SMEs maximizes land use while reducing the risks associated with single crop failure.

- Poly-culture is growing many plants of different species in the same area, often in a way that imitates nature. By increasing plant biodiversity and promoting diet diversity in local communities. Poly-culture provides many advantages such as better soil quality, less soil erosion, and more stable yields compared to monoculture systems.

- Water harvesting, collecting water from rooftops, from swollen streams and rivers during monsoon season, or from artificially constructed catchments to ensure that SMEs have substantial amount of water stored up in case of drought.

Thus, indigenous knowledge plays a key role in sustaining agrarian SMEs. It is fashionable to solving agrarian SME problems. In terms of output, this system has its roots in experimentation by SMEs that produced a maize variety with a very short growing season and sorghum with a very long growing season (ZimVac, 2013). The SMEs in the agrarian sector growth cannot function and succeed without indigenous knowledge. This depends to a great extent on how successfully re-engineering is applied by SMEs in the agriculture sector (OECD, 2016; Nyoni &Bonga; 2018). The heterogeneity of the agricultural technological systems is needed, although they have been ruefully ignored by SMEs in the agrarian sector. In practical terms, this approach leads to informed decisions on the part of SMEs owner managers when integrating high technology workflow systems in their structures to reduce poor yields being experienced and effect expansionary growth (Bubou, et al., 2014).

3.4.2. Biotechnology

Bio- technology is the 'Mother of Invention' and agricultural development is dependent on it to produce quality yields and increase food autonomy (Tadele, 2017). As such, the idea of biotechnology is associated with SMEs in the agrarian sector with new things where the old systems are discarded. In that respect, agricultural technology is irreplaceable in society and is needed to constantly grow the industry. Further, this helps to uncover genetic solutions and build experiences within SMEs in the agricultural sector with the mandate to supply value added nutriment food (Nyamutowa, Masunda & Mupaso, 2014). Henceforth, the spotlight on re-engineering SME products through manipulating the DNA to change the hereditary traits is pivotal to produce high quality SMEs products (Tadele, 2017). According to Witlox (2015) biotechnology is a powerful tool when seeking to increase yields of modified conventional crops and micro- propagated plants which establish quickly, grow more vigorously and taller, and have shorter and more uniformed productivity cycles. All this contributes to poverty reduction and addresses food security concerns (World Food Summit, 2017). The facilitation of bio- technological capabilities maximizes the growth of SMEs in the agrarian sector through a combination of functional interactions to improve productivity, SMEs growth and to allow SMEs to reap huge profits (Margaretha & Supartika, 2016). Biotechnology helps to increase crop productivity by introducing such qualities as disease-resistance and increased drought tolerance to the crops (Tadele, 2017). Despite these mitigating circumstances, modern bio-technology represents unique applications of science that can be used for the betterment of SMEs through development of crops with improved nutritional quality and reduced cost of production.

3.4.3. Generic Competitive Strategy

According to Kinyuira (2014), Michael Porter's Generic Competitive strategies are useful for SMEs to identify marketing areas in which they can gain a competitive advantage over large companies. Thus, SMEs survive with the use of different marketing strategies (Cant & Wiid, 2016).These strategies are referred to as generic as they can be applied to products and services across all industries. Further, Kinyuira (2014) agrees that a competitive strategy underpins the majority of SME businesses and competitive decisions made by them. Therefore, it is crucial that SMEs use it correctly and effectively to grow their market share. However, as proposed by Kiseľáková, Šofranková, Čabinová & Šoltésová (2018), the aforementioned author believes that generic competitive advantage has a mix of cost leadership, differentiation and focus survival strategies

which promote SMEs to be competitive. In cost leadership it is often achieved through mass production by SMEs to lower cost of products (Chingwaru & Jarkata, 2015).By developing unique products SMEs seek to differentiate their products so that they attract customers and increase prices than promoting undifferentiated products. The focus strategy makes the product look more different and attractive than other competitors within the industry seeking to achieve a competitive advantage. These strategies are being used by SMEs which are concentrating on a particular market segment(s) of the economy to increase their income/profit .These are popular and widely used by agrarian SMEs in Zimbabwe

3.4.4. Mergers and Acquisitions of SMEs

Mergers and acquisitions have been developed almost exclusively from the study of large deals by large firms. However, the behaviour and success of small and medium sized enterprises (SMEs) may be significantly different since they are more likely to be financed with equity rather than debt, indicating that the influential financial pecking order theory is of less relevance to SMEs (Barkhatov, 2016; Evans, 2018).Thus, mergers and acquisitions are used to increase the size of an SME in the agrarian sector, together with its profit. The approach is critical in combining shares and debts to transform SMEs into competitive units. The significance is in incremental aspects to sustain the growth of SMEs (Srivastava & Kaul, 2014). The rationale of mergers and acquisitions focuses on combining similar SMEs under common ownership where the larger SMEs acquire a lesser performing SME to create a new, larger organization with robust market share. This strategy protects a weaker entity from closing down operations through such alliances where a pool of resources is put together for the purpose of growing from one age band to another (Fuglie & Rada, 2013).The acquisitions and mergers create opportunities for SMEs in the same line of business and are often consummated to increase the market share and to facilitate growth. According to Arunagiri et al (2015), as illustrated in Figure 3.2, the driving force for a merger to occur is the need for SMEs to grow, and a merger is normally referred to as a marriage between two SMEs (De Vries et al., 2015). Mergers are defined and instituted according to the similarities and differences between the two SMEs. A successful merger or acquisition increases the SMEs profitability in the long term.

Figure 3.2: SME Acquisition and Mergers
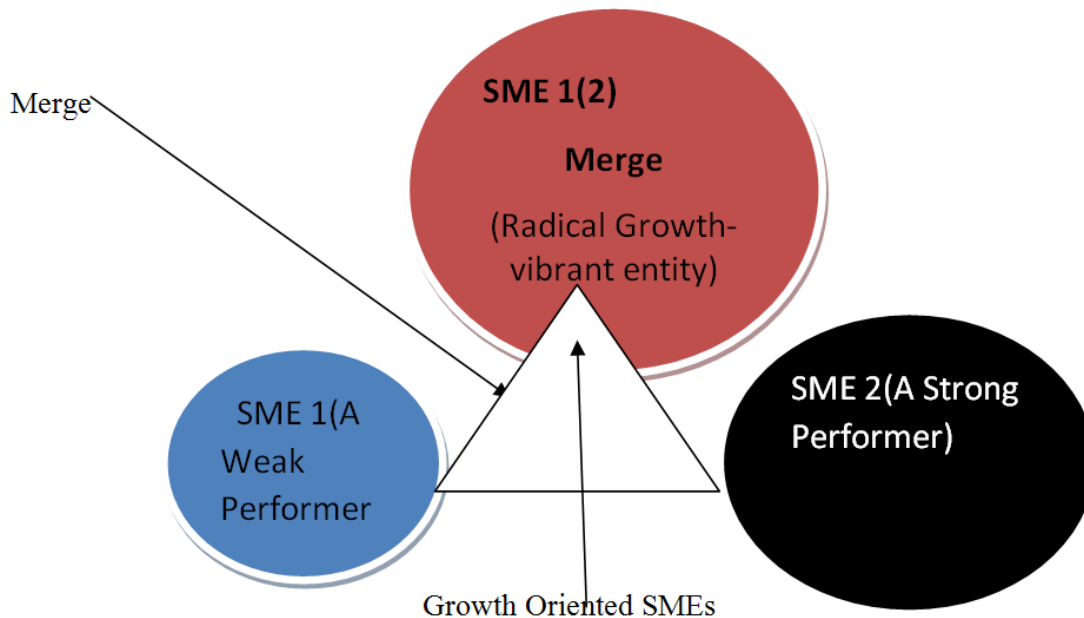
Source: Researcher's Development

The valid motive for getting SMEs involved in mergers and acquisition is to reinvigorate and retool operations to expand and be able to cut down overhead costs (Bhatnagar, 2014). Research has shown that SME owner managers engage in mergers to increase competencies and drive SMEs into the foreseeable future. The approach demonstrates that strategies for re-engineering SMEs radically transform them into competitive TNCs (De Vries et al., 2015) and their ability to enter into mergers removes the solo business approach which is detrimental to SMEs growth.

3.4.5. Value Addition Involvement

The advance of value chain covers interrelated production activities performed by SMEs to bring out an end product or a service from the time of conception, product development and its delivery to the consumers (Zhang, van Doorn & Leeflang, 2014; UNCTAD, 2012; Kneafsey, Venn, Schmutz, Balázs, Trenchard, Eyden-Wood, Bos, Sutton & Blackett, 2013). Therefore, SMEs in the agrarian sector participating in agricultural value chain encompass the full range of activities to improve products from the fields to their end use and beyond. This perception is borne from early thinking that suggests that value addition increases product quality and scale in order to consolidate the

SMEs' market share (Arudchelvan & Wignaraja, 2015). This implies that re-engineering SMEs produces better quality and standardized products. In this context, value addition in agricultural SMEs increases their competitiveness and productivity to realize return on investment (Kneafsey et al., 2013).This is especially when the focus of value addition efforts has been seen to be a fast method to ensure that SMEs grow rapidly (Srivastava & Kaul, 2014). The AfDB (2013) suggests that the SMEs' value addition concept has been associated with developing products further which then increases consumer taste (AFDB, 2013). The collaboration between value addition and the SMEs' productivity produces high quality products which impact on the standard of living.

In some cases, recent research suggests that this strategy enhances superior SME growth (Weston, 2015). The SMEs' benefits and costs trade off in the value chain include both financial and non-financial considerations. This indicates that the SMEs' competitiveness and growth is based on value addition (Ameyaw et al., 2017). Apparently, the level of product transformation of SME's beyond primary processing, is low in Zimbabwe. In the same vein, advanced level of product value addition by SMEs can be further factored into end products to increase income and radically expand SMEs into large entities (Kneafsey et al., 2013). In this argument, any SME in the agrarian sector participating in the value addition gains financial stability, increased productivity and expanded market share (Castro, Orjuela & Jaime (2017; Evans, 2018). Perspectives on involvement in the value chain by SMEs in the agrarian sector demand greater managerial ability ranging from inputs, production, processing, output, marketing, delivery and workflow(Martinsons, Davison & Huang,2017; Kiseľáková et al., 2018).

As reflected in Figure 3.3, the value addition activities of SMEs are usually contained within a single setup and within a single geographical location and or at cluster level (Arudchelvan & Wignaraja, 2015; Fornahl, Hassink & Menzel, 2015). The key motive in this setup of re-engineering SMEs within a network of upstream and downstream product development is simply to enhance value chain involvement to meet the SMEs growth objectives (Srivastava & Kaul, 2014).

Figure 3.3: Value Addition Process
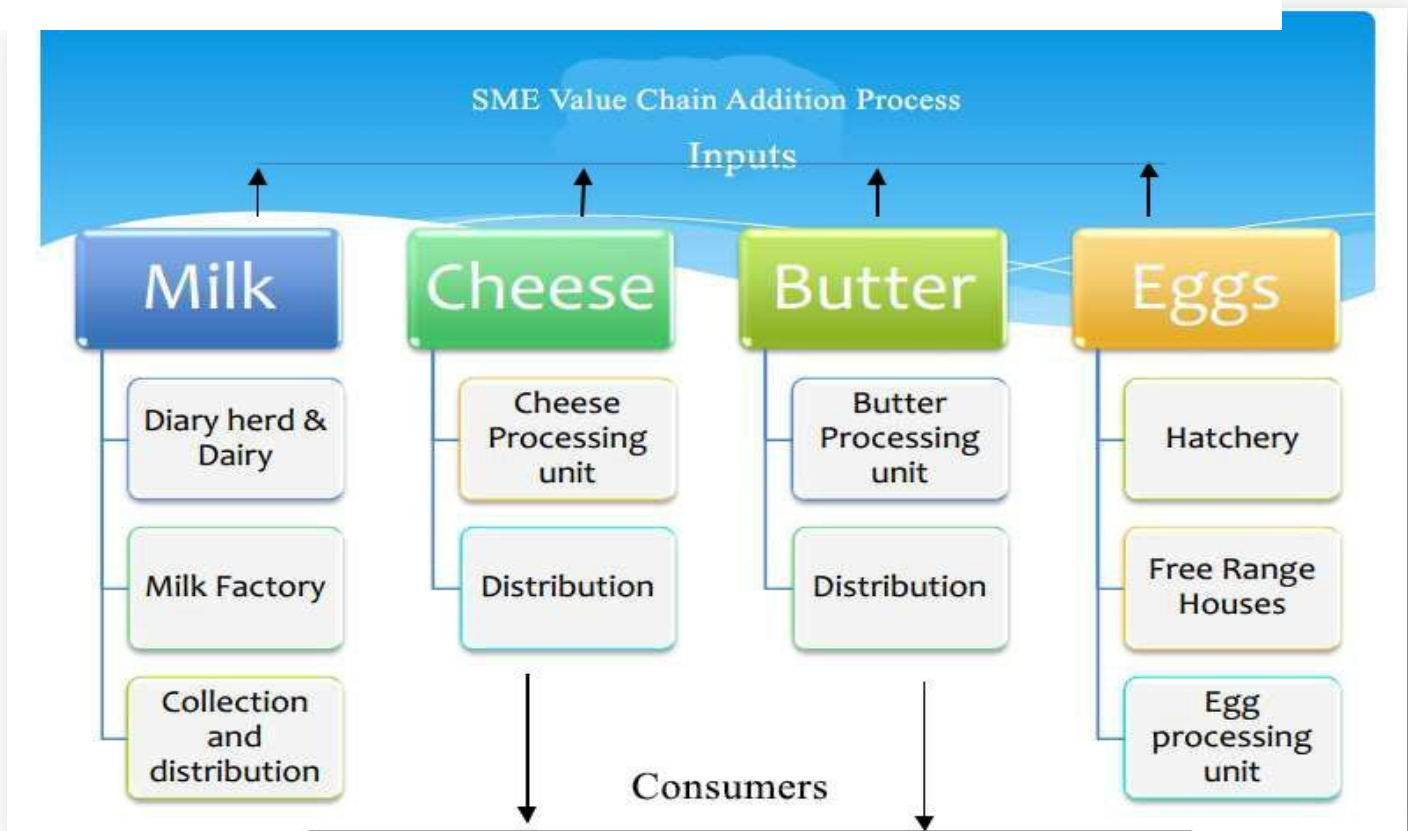
Source: Researcher's Development

Re-engineering considers value addition as a factor to improve SME product taste. Implicitly, most of theories believe that if SMEs in the agrarian sector participate in supply chains increase their output and market share as compared to larger companies, they can grow ASMEC, 2013).

3.4.6. E- Commerce

According to Chen & Zhang, (2015), going global has become revolutionary and inevitable. Thus, the adoption and use of E-commerce by SMEs in their activities of buying, selling products, services provision and acquisition over the internet and/or online is, therefore, unavoidable (Olayinka, Wynn & Bechkoum; 2016; Rahayu & Day, 2016). The SME electronic commerce draws on technologies such as electronic funds transfer, advertising and marketing to stimulate SMEs development and make it easy when conducting business as reflected in Figure 3.4.

Figure 3.4: E Commerce Workflow Diagram
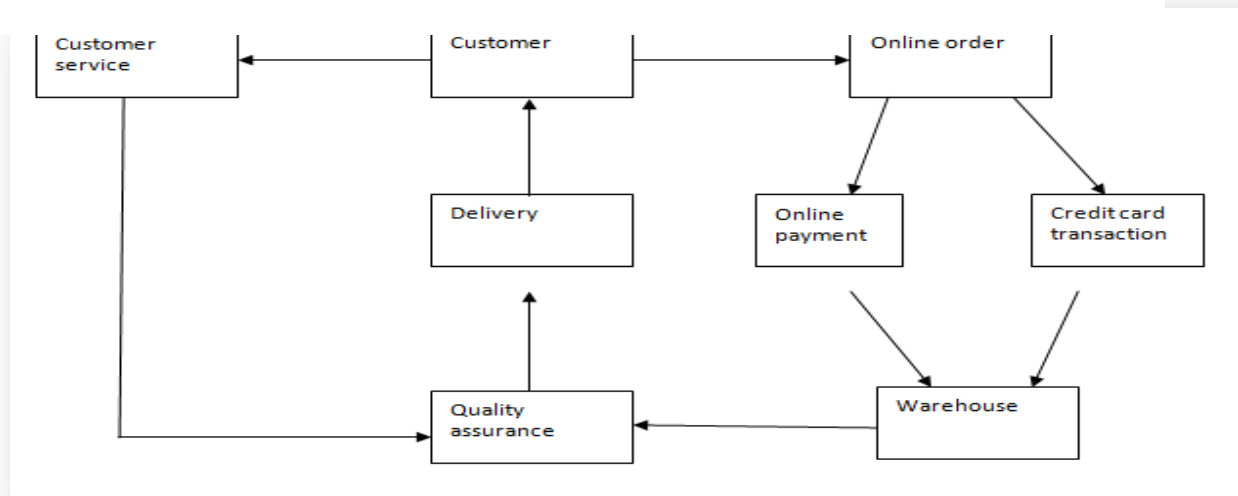
Source: Researcher's Development

Hence, e-commerce is not just the infusion of technology, but a process of re-engineering the whole SME internal and external systems (Chen & Zhang, 2015). Successful diffusion of e-commerce is premised on re- engineering SMEs in the agrarian sector to make it easier for consumers to easily purchase items online using online catalogues (Faloye & Akinkoye, 2013; Makhdoom, Li & Asim, 2019). However, according to Batani, Denhere and Mawere (2015), uptake of e-Commerce (online businesses) usage stands at 9.5% and SMEs are facing persistent power cuts. Apparently the country has an estimated deficit of 60% and is generating only 845 MWs whereas the national demand is 2200 MWs. This projection does not meet the demand of the agricultural sector which needs about 687MWs (Runganga & Mishi, 2020). Thus, consistent power outage in view of depressed electricity

generation has resulted in many farmers installing solar at their premises. Thus, 80% of farmers in Zimbabwe have limited sources of power and network coverage to meet their e-commerce service requirements. It is, however, notable that due to the fragile economic environment in which agrarian SMEs operate, e-commerce tends to increase the cost of goods and services for raw materials which are used by SMEs(Batani , Denhere .& Mawere,2015;Mavimbela & Dube,2016).

There is need to lobby for widespread interest in the e-commerce approach since it increases market share and network intensity. From this standpoint, the benefits of e-commerce include working 24/7, speed, and easy accessibility of quality goods and services by consumers (Zhang, van Doorn & Leeflang, 2014). It is perceived that business grows faster if marketing is conducted using mobile devices and social media such as WhatsApp, Facebook, Pinterest and Twitter .However, government should continue regulating e-commerce and monitoring fraudulent activities to ensure that business security is achieved by SMEs through the introduction of web fraud detection systems**.**

3.4.7. Contract Farming Involvement by Agrarian SMEs

The advantage of contract farming increases the income of participating agrarian SMEs. Thus, participating in contract farming reduces/mitigates against hunger and poor yields (Grabowski et al., 2016; Bellemare & Novak Lindsey, 2017). For SMEs in the agrarian sector, contract farming is an alternative re-engineering strategy that is used to lock in procurement deals with larger buyers. The contractual arrangements increase SME profitability and growth. Activities that appear to work well for SME contracts include crops, chicken breeding and horticulture. It can be noted that with the right and adequate support for contract farming, SME farmers can improve their livelihoods. For instance, in the 2012/13 season, SME farmers who were provided with pre-season input packages and some technical advice increased their productive capacity (Nyamutowa, Masunda & Mupaso, 2014). All the same, there is sometimes limited participation as some SMEs fear losing their assets to the financiers in the event that they do not do well and subsequently fail to repay the loans (Bjornlunda & Pittock, 2017). Beneficiaries of contract farming are able to buy some assets such as household items, vehicles and scotch-carts, farming inputs and implements. They can even afford living decent lives, yet they often suffer from side selling and contractual breaches on both sides of the agreement.

3.4.8. Agricultural Credit Guarantees Schemes

According to Chinamasa (2016) and Abdulsaleh and Worthington (2013), Credit guarantees leverage the development of SMEs in emerging economies. In the event of default, banks submit claims to the guarantee fund. However, CGSs unlock the liquidity to SMEs; they have been widely used in many countries around the world with optimistic outcomes (Abdulsaleh & Worthington, 2013).

According to FAO (2014), governments in most countries seek to encourage SME growth. Although the impact credit facility has been widely analysed, credit guarantee rationing has received the least attention (African Development Bank, 2013). It is clear that the majority of SMEs lack sufficient funds to operate and expand their businesses. They lack mechanized agriculture as most do not have modern equipment, other labour- saving devices and capital to acquire the same, SMEs need credit guarantee support. Therefore, as part of efforts to guarantee food security, the government has put in place an agricultural credit guarantees scheme fund to support the development of agriculture. The Agricultural Credit Guarantee Funds Scheme (ACGFS) seeks to address the credit needs of SMEs in agriculture to improve food security in Zimbabwe and it was established by the Reserve Bank of Zimbabwe (RBZ) (Chinamasa, 2016; Muzerengi & Mapuranga, 2017). This is because most often, financial institutions require huge collateral from SMEs before loans are granted to them and this is detrimental to efforts by SMEs to improve productivity.

There is no strong theoretical justification for the use of credit guarantees, especially when banks fail to provide SMEs in the agrarian sector with finance and when their position is more to do with an unwillingness to lend than risk aversion (Al Buraiki & Khan, 2018), This is further shown by the fact that when a guarantee is priced correctly to incorporate the risk of non-repayment by SMEs, it has a negligible impact on lending. The AfDB (2013) is of the view that credit guarantee encourages SMEs in the agrarian sector by providing collateral as compensation in case the loan is not repaid since SMEs in the agrarian sector have a very important role to play to stimulate economic growth in each country(Arunagiri et al., 2015). If this ratio is high, it means the contribution and the role of a credit guarantee institution is important in the national economy and in SMEs development.

3.4.9. Incubator and Cluster Involvement by Agrarian SMEs

It is increasingly evident, given the relevance of support mechanisms, that many governments avail to SMEs through incubation and cluster centers. The agricultural sector is divided into 5 clusters which are the inputs, production and processing. Thus, incubation centers are limited in Zimbabwe with only one located in Harare. It may be noted that there are more than six agriculture training colleges in Zimbabwe. These are operated and run through the Ministry of Lands, Agriculture, Water and Resettlement. These colleges, most of them were inherited from the pre-independence era, and exclusively trained a unique clientele of whites who owned most of the farmland in Zimbabwe. It is thus imperative to note that these colleges provided training and act as incubation hubs in Zimbabwe. To date, incubation hubs have taken the form of farmer schools which constitute a grouping of farmers who go through a cycle of training which incorporates hands- on and onsite training through Agritex Field Marshals. It is unfortunate that the majority of farmer- field schools are run through NGOs with funding from other countries. The farmer- field schools have not replaced the traditional Master farmer Schools which were popular during the pre and post-independence era in the first two decades. These platforms are a key to the provision of incubations for agrarian SMEs and are wide spread across Zimbabwe. It is notable that these facilities have had little uptake by agrarian SMEs. As such, Piperopoulos (2016) states that the cluster theory combines the incubation programs with the aim to develop SMEs. In part, incubators are key stimulus factors that encourage SMEs growth and contribute to the GDP (Kamoyo, Mavhima & Muranda, 2014; Arunagiri et al., 2015; Sanyal & Hisam, 2018), Though Incubators provide work space, and they are confronted with many challenges that affect their development, such as lack of capital. Abeh (2017)) concur that equipment and skilled labour effectively incubate SMEs.

Gancarczyk (2015) is of the view that SMEs in the agrarian sector lack incubation support to increase employment reduce poverty and enhance economic growth. Yet incubators (Sanyal & Hisam, 2018) are an economic concept which stimulates SMEs in the agrarian sector as shown in Figure 3.5.

Figure 3.5: Incubation
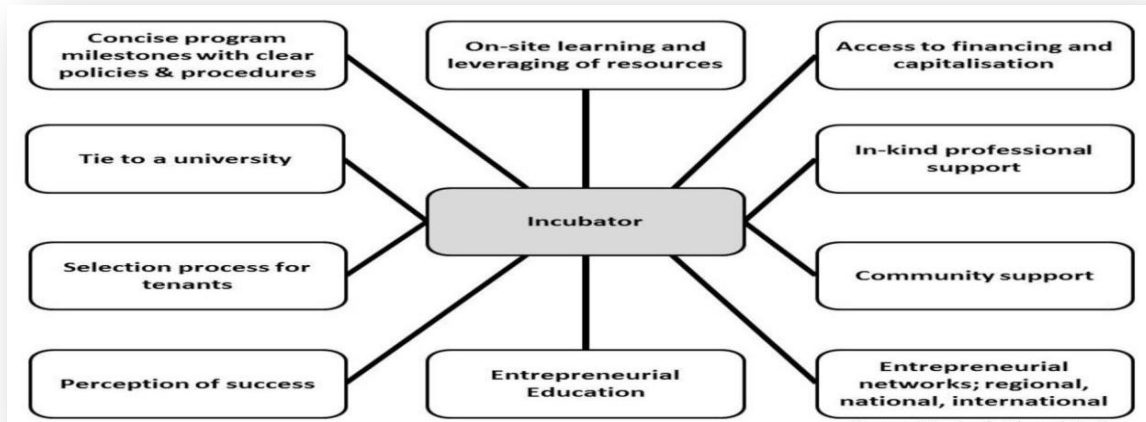
Source: Delgado, Porter & Stern, 2014

The government has joined forces with the corporate world to learn, understand and share experiences of SMEs in the agrarian sector through incubation centers. This allows governments to meet today's SMEs growth prospects (Zreen, Farrukh, Nazar & Khalid, 2019). Model agribusiness incubators nurture early-stage agro-based SMEs (Gorevaya & Khayrullina, 2015). The incubation process is a highly pro-active and holistic strategy (Srivastava & Kaul, 2014; UNFPA Zimbabwe, 2020). In this regard, Bokor (2017) argued that, although these strategies seem to be appropriate for SMEs to make their products more appealing on international market, they are ineffective against global companies using the same strategies. This then compels SMEs in the agrarian sector to remain in a difficult position, and at the same time it deters their growth thrust. The premised belief on incubation, however, remains and is that it is a re-engineering strategy that assists in the growth of SMEs (Fornahl, Hassink & Menzel, 2015).

Gancarczyk (2015) and Dar, Ahmed and Raziq (2017) posited that clusters are defined as SME hubs which share resources and require diverse expertise (Bjornlunda & Pittock, 2017; Jiang et al., 2018). To Delgado, Porter and Stern (2014), a cluster is related to the use of integrating mechanisms that require expertise from different sections and on different functions. Clusters are regarded as good as incubation centers where start-ups are nurtured and weaned into big companies (Zreen, Farrukh, Nazar & Khalid, 2019). Building on earlier studies, a rich literature has emerged examining strategies for re-engineering SMEs in the agrarian sector and sustainable growth. For example,

Gancarczyk (2015) attributes the success of Silicon Valley to the culture of clusters as a strategy to stimulate the growth of SMEs. Ultimately, Kamoyo, Mavhima & Muranda (2014) and Fornahl, Hassink and Menzel (2015) posit that a cluster initiative is a tool for SME competitiveness organized to increase growth and competitiveness of SMEs within a similar geographical setting. To add to this, FAO (2017) states that the government influences SMEs growth programs through availing clusters and global partnerships. In a cluster setup, SMEs enjoy economies of scale at industry level and have improved operational efficiency. ZinVac (2013) argues that SMEs in the agrarian sector are clustered to enable them to re-engineering process take place on a larger scale while at the same time they will be satisfying food provision demands (output).

SMEs depend on the relationships between clusters and the re-engineering of SMEs in the agrarian sector (Gancarczyk, 2015; Wolfe & Gertler, 2016; Tadele, 2017) argues that the aim of developing SME cluster involvement improves relationships among SMEs. Fornahl, Hassink and Menzel (2015) highlighted that clustering improves SMEs in the growth of the agrarian sector as group members share ideas to generate cohesion and increase optimistic outcomes. A desirable aspect of clustering is integrating SMEs with related lines of business to operate at one center, where they co-operate and share specialized labour. This is a key stimulus for re-engineering SMEs in the agrarian sector to grow and be sustained. By using cluster analysis (CA), SMEs are grouped into homogeneous groups to reverse poor growth (AFDB, 2013). This increases the supply of foreign currency to the nation, through the surplus exportation of SMEs goods and services in the agrarian sector. This is important as the future of sustainable growth of SMEs in the agrarian sector calls for continuous re-engineering to ensure food security is achieved in Zimbabwe.

3.5. Gender Dynamics

According to Agarwal (2015), removing barriers to equality between women and men remains a challenge to governments around the world, including SMEs in agro-based businesses. However, given structural challenges such as the digital transformation, increasing population, ageing and a shrinking labour force, it is more important than ever that governments mobilize all of their available talents, both male and female, to become vibrant entrepreneurs (Cant, Erdis & Sephapo, 2014; Slavchevska, Kaaria & Taivalmaa, 2016; Hussain,2018). Gender gaps can arise from a broad range of policy failures in areas of economic empowerment (Broegaard, 2013; OECD, 2016). These gaps

such as unequal access to education and lack of professional experience have a negative knock-on effect on women's entrepreneurship (Chinomona & Maziriri, 2015; Bliemel, McCarthy & Maine, 2016). At the same time, gender equality ensures women have equal access to economic opportunity, education, employment and entrepreneurship. This is critical to forge stronger, more sustainable and inclusive agricultural SMEs' growth. Women's full participation in innovation plays a fundamental role in building more cohesive SMEs (Burch, 2017).

Gender equality for SMEs means equal responsibility as men and women share similar tasks (Broegaard,2013).Gender inequality is a major policy concern worldwide, thus, the call for SMEs to consider equal opportunities in SME and work-related matters, to improve livelihoods (Hilson, 2016;Bjornlunda & Pittock, 2017). Usually gender mainstreaming is trying to address limitations of previous gender approaches, together with the activities of Women in Entrepreneurship (WIE) and Women employed in SMEs which seeks to improve the status of women in societies (Chinomona & Maziriri, 2015; Agarwal, 2015). Therefore, gender mainstreaming reduces gender gaps in SMEs related businesses.

According to Cunningham et al (2015) the inclusion of women, the youth, the disabled and all races in agricultural SME structures has the potential to create wealth, as well as innovation and promotion of plural agricultural practices. Recent statistics indicate that approximately 8 million businesses in USA are managed by the 'invisible' sexes, who in this case are innovative women (USSBA, 2013). This calls for a closer look at the contributions and needs of gender to commensurate with government structural reforms to facilitate the deployment of women in SMEs, as a strategy to reduce household poverty and the dependency syndrome (World Bank, 2013). In Africa, estimates of women's effort in agricultural SME activities are around 30 percent in Gambia (AFDB, 2013). Gender sensitivity promotes equal access to SME business entrees that go on to help to improve livelihoods (Broegaard, 2013; Quisumbing, Meinzen-Dick, Raney, Croppenstedt, Behrman & Peterman, 2014).Both men and women have empowerment and leadership qualities which must not be selective but inclusive to improve agriculture and grow SMEs in the agrarian sector. Figure 3.6 below depicts the notion that gender equity leads to gender parity in SMEs activities and to aiding SMEs to grow into TNCs.

Figure 3.6: SME Gender Equality
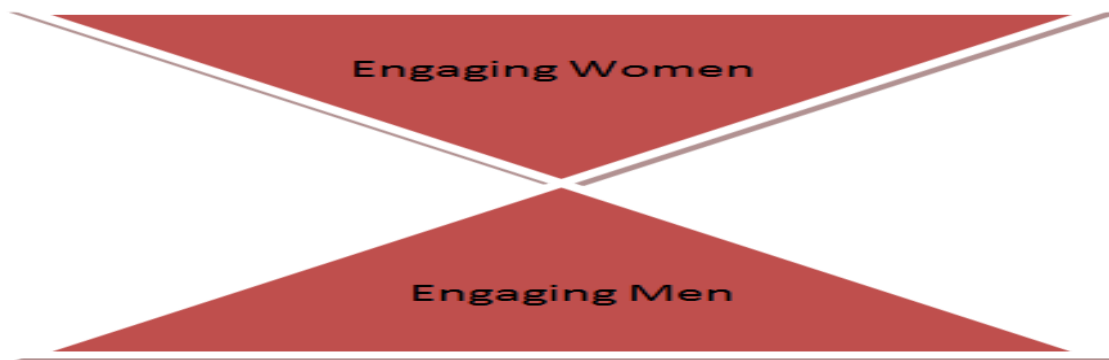
Source: Researcher's Development

According to FAO (2014), Gender Policy has resulted in gender equality by involving women in planning and running SME businesses (Brooks, 2014; Cunningham et al., 2015). Agro-SME activities should be part of a comprehensive program that supports gender parity .Promoting gender in farmer groups and cooperatives has resulted in more production in the informal sector (ZimVac, 2013).

Inequality among SMEs in the agrarian sector is at its highest and to achieve gender equality, the pathway is via reforms that give equal rights and access to economic, financial and natural resources (Fuglie & Rada, 2013; Evans, 2018).Thus, re-engineering SMEs in the agrarian sector is a smart strategy, with focus on sustainable returns that multiply across gender, societies, regions, and countries. Changing entrenched patriarchal cultural norms may improve gender equality, where women have the right to asset ownership, inheritance and competition with men to improve the standing in community (Broegaard, 2013; Jayne et al., 2015). As such, according to Nyoni(2018) chiefs, community leaders , NGOs and Gender Commission in conjunction with Ministry of Women Affairs, Community, Small and Medium Enterprises (MWACSME) are working together to dispel the gender biased myths to improve equality in communities Chinomona & Maziriri, 2015; Cunningham et al., 2015), as this encourages women to take up agriculture related businesses seriously. This has been witnessed in India, where it is widely cited as a success story of the potential for agricultural transformation through gender promotion. It may be noted that Zimbabwe is predominantly a Christian state and have tended to be more liberal and regard women as equal in terms of standing before God. On the other hand, an insignificant population believes in the African

tradition based patriarchal system that give ownership of wives, children and assets to men, changing these perceptions increases reduces inequalities among men and women. According to Chinomona & Maziriri (2015), Zimbabwe made a commitment to ensuring that gender equality is a generic principle that embeds all sectors and is a key approach to implementing the country' economic and development agenda, the ZIM Asset (2013-2018). This is possible through national gender strengthening, particularly through developing women human resources, training and budgetary allocations (Katua, 2014). The focus on Zimbabwean women is based on the recognition of women participation in agriculture to earn a living and improve their own standards of living (USAID, 2012). While women's share in SMEs continues to increase, the gap between the percentages of women to men in business is wide. Research by Chinomona and Maziriri (2015) indicates that women in SMEs are smaller than the average in developed countries. The youth' and the disabled' development strategies prepare youth for self-employment through SMEs programs (Frumina, 2016). As such, the ever-increasing demand for agricultural products both regionally and internationally creates yet another opportunity for governments to seriously exercise gender parity to ensure women are actively earning income from agricultural activities (Cunningham et al., 2015; Fidrmuc & Gundacker, 2017). This approach matches the right skills with strategies to re-engineer the growth and sustainability of SMEs to realize food security in Zimbabwe.

3.6. SMEs and Management

ILemona (2013) reported that the entrepreneurial competencies of SMEs are strong predictors of SME success (Cho & Lee, 2018). From this point of view, the re-engineering process in the management of SMEs aims to address inefficient results through restructuring. In this case, effective management of SMEs invigorates their growth. American SMEs have implemented interesting management strategies to enhance their skills and this has improved SMEs networks (ASMEC, 2013). From this perspective, management is a function of putting into practice SME initiatives to evolve and outsmart rival competitors through planning, leading controlling and to strengthens SME ventures and reduce the SMEs' failure. Zimbabwean SMEs operate ''illegally' since the majority are not registered; hence, the need for them to be re-engineered so that they practice quality management methods to increase their technical, interpersonal administrative and conceptual skills to operate effectively and above board and become more accountable (Moyo & Mandizwidza-Moyo, 2017).

Re-engineering SMEs help SME owners appreciate management methods since it assist them to understand planning, organizing, leading and controlling of SMEs is necessary to develop those (Brooks, 2014; Huang et al., 2015).However, the scientific theory discards the traditional SMEs approach of the agrarian sector management methods which looks to cut down the cost of unskilled labour. Therefore, re-engineering of SMEs allows them to increase effective managerial concepts to stimulate the growth of SMEs (Sukume et al., 2015; Kiseľáková et al., 2018). African management styles differ from those of western origin in the sense that African SMEs are more driven by family and spiritual values than by real business acumen (Durendez et al., 2016). Developing a sound management training program for SMEs in the agrarian sector could demystify traditional beliefs surrounding business management systems especially within the rural and farm community areas. Figure 3.7 explains that managerial authority provides the analytical and problem-solving for SMEs. However, the use of the SMEs' managerial grid helps to empower their workers and at the same time to help SMEs in the agrarian sector to grow as indicated in Figure 3.7.

Figure 3.7: SME Managerial Grid
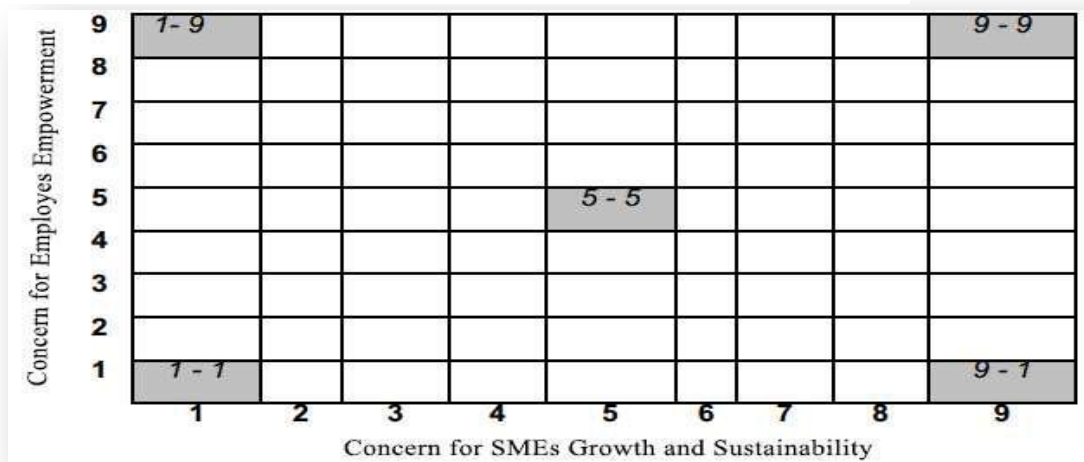
 Source: Researcher's Development

As depicted in Figure 3.7, the effective management of SMEs is measured by the achievement of intended results, and the growth of SMEs through concern for employee empowerment and product diversity and competitiveness (Irungu & Arasa, 2017). As reflected in Figure 3.7 (1-1), SME managers show low interest in their subordinates and growing the entity. They make minimum efforts to achieve their intended objectives .On the other hand, the task-oriented SME manager (9-1)

makes it a priority to solve all SME growth difficulties, pays minimum attention and even neglects subordinates .The (9-9) reveals a manager with increased interest for employees and SME growth. On the contrary, the (1-9) manager focuses more on human resources by creating an ergonomic, psycho-social environment. The (5-5) manager maintains a workflow balance. Thus, solving technical problems requires the following managerial tactics which stimulate the growth of SMEs (Kiseľáková et al., 2018)

3.6.1. Delegating Functions

The call for modernity in the management of SMEs (Chikere & Nwoka, 2015) in the agrarian sector is not a new concept but it has become even more significant recently. The delegation of duties and responsibilities improves SME operations (Srivastava & Kaul, 2014: ACET, 2015), which in a practical context entails re-engineering the SMEs which helps to expand the SMEs' management initiatives. The concept of SME management provides insights of re-engineering processes where SME owner managers delegate their work load through a set of functions and hierarchical levels in seeking to improve their services as mirrored in Figure 3.8.

Figure 3.8: Process of SME Delegating Functions
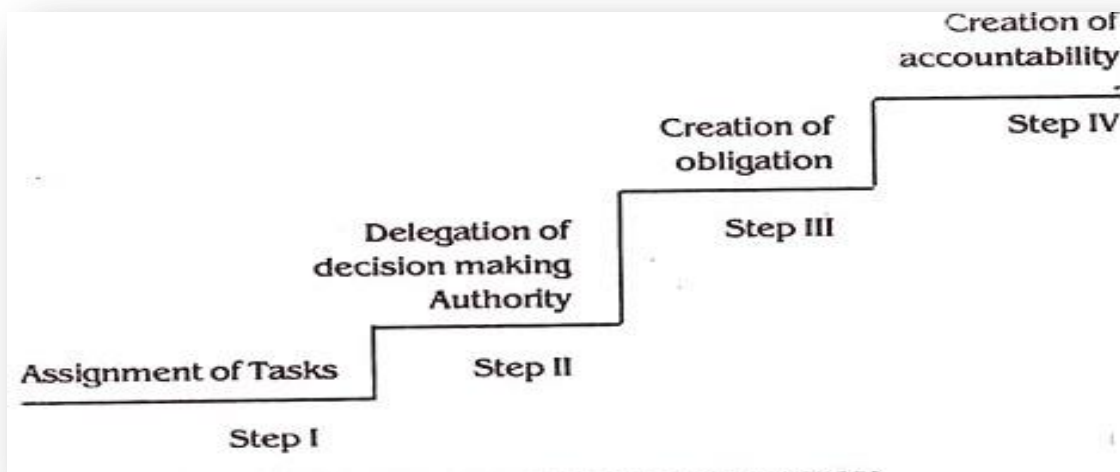
Source: Fatoki 2014

90

Brooks (2014) went further to state that delegating work gives the leader enough time to execute other duties whilst junior staff is working on the other assignments in the business. It makes the organization more efficient and effective. If SME owners in the agrarian sector learn to delegate to their junior workmates, the overall performance and growth of the SMEs will be enhanced.

3.6.2. Agrarian SME Structures

According to Ighiebembe (2016), SMEs in the agrarian sector must consider their organogram in a vibrant environment. An SME structure shows the organizational structure that identifies roles and expectations of the workflow .The owner-manager who understands an SME's structure and relationships expedites decision- making and has a greater understanding of the SME environment. The structure clearly defines the objectives of SMEs in the agrarian sector and determines the functions performed. A coordinated structural design helps to achieve assigned responsibilities which are accomplished through departmentalization. Therefore, it is important to recognize that structures of SMEs play an integral role to grow them.

The structure assigns roles and relationships and it entails the usual logic of division of labour into functions and departments (vertical) to managing emerging supply needs and responsiveness to market changes. In addition, there are several scholars who focus on empowerment as another aspect of structure and on capability as a form of modification to structure to help SMEs adapt to market changes (Ighiebembe, 2016).Managing across boundaries becomes challenging due to lack of knowledge about skills of the external firms, hence, the need for managing integral functions across functional teams as depicted in Figure 3.9 to ensure that consumer value is created and delivered (Nwodo , Okolo, Nebo, Eze Egodi , Enyi, Obikeze & Ohanagorom,2017).

Figure 3.9: SME's Organogram
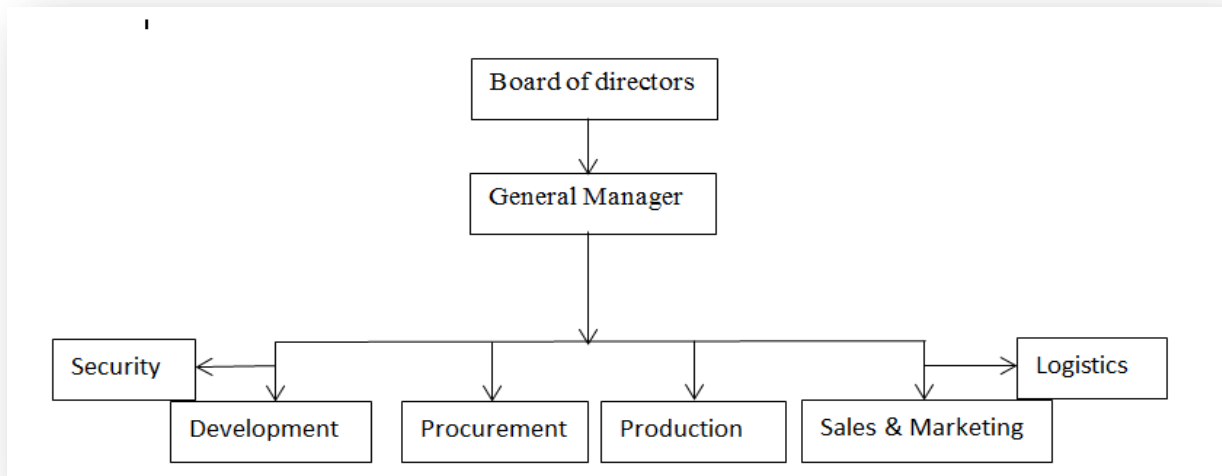
Source: **Aybar-Arias, Casino-Martinez & Lopez-Gracia, 2012**

Figure 3.9 above presents the structure reflecting the division of labour which is necessary for the informal sector to become more organized and become competitive. Researchers tend to focus on systems that are likely to improve outputs, since an SME structure is deeply entrenched in team work. In this instance, An SME structure channels the productive capacity of employees into SME growth and profits. While organizations use different structures, it is essential that they be clearly defined. As the SME grows, Serban (2015) states that other workers are signed up to do different tasks. In particular, the organogram includes production and marketing personnel, and many others since in re-engineering, the work flow moves from one worker to another, and from one division or department to another to enable the SMEs to grow (Cant & Wiid, 2016).In its simplest form, there is, thus, a paramount need for the SME to create new jobs and assign new personnel to work towards the accomplishment of the objectives. However, this makes it difficult to claim that structures enhance the SME's growth in the face of competition and changing technologies (Hawkins, 2013). Generally, structures clarify working relationships to reduce confusion, and improved decision-making.

3.6.3. Skills Competency

According to Karadag (2015) SME owner-managers make serious mistakes by failing to develop competencies in terms of critical skills to bring about superior growth and productivity of SMEs.

Chikere & Nwoka (2015) found out that skills competencies are deliberated by level of education and experience to impact on their growth.The incremental theory explains the need to improve management styles through nurturing talent which comes in handy in developing SMEs. The incremental approach assists in the development of hard and soft skills. As such, governments have sought to train and provide access to advisory and consultancy services to SMEs (Aremu et al., 2017). This was supported by Verboncu (2013) who found out that the SMEs competencies are linked to proper handling of finances and high technical competencies are linked to the growth of SMEs(Al Buraiki & Khan, 2018). Fatoki (2014) further asserted that most of the SME failures are due to the SME owner-manager' inadequacy and inexperience in managing work- related activities. Therefore, core competencies allow SMEs to deliver value to their consumers (Frank & Schvaneveldt, 2016). According to ILemona, (2013), the litmus test for a core competency is that it is hard for competitors to copy innovativeness, quality, and flexibility. However, Fatoki (2014) associates competencies with micro-level job performance. Competences apply knowledge, understanding and skills in performing work to the required standards (Karadag, 2015). Chikere & Nwoka (2015) define competencies as a set of skills, which allow SME employees to increase productivity. However, a number of studies propose that SME management is a critical process that creates a sustained competitive advantage.

3.6.4. Change Management by Agrarian SMEs

Nordgvist, Wennberg, Bau and Hellerstedt (2013) note that poor succession practices and lack of effective change management results in poor growth and reduced services. Ighiebembe (2016) clearly points out that without a strategic succession and change management, drawbacks and loss of expertise damage client relationships .Essentially, FAO (2014) and Brooks (2014) posits that in the agrarian sector, succession planning by SMEs is associated with a conscious decision to foster the continual development of SME employees and focus on improving executive-level positions. Therefore, managers create succession value by identifying the future staffing needs of an SME. This works to ensure a continuous growth of SMEs.

Bakar and Senin (2016) confirmed that interrelationships exist between sustainable growth of SMEs and succession planning which gives continuity to the business in the event of death or incapacitation of a member. This is because the existing team is prepared to manage the situation

well as earlier own planned on the succession matrix. In most cases where replacement was not well prepared for, there is poor performance and even closure of an SME.

According to Brooks (2014), succession planning is frequently interchangeably used with replacement in the literature. In other words, it is a replacement planning concept that features in leadership succession. Essentially, succession planning fosters and promotes SME growth. It is principally analyzing future strategic goals, together with retirement forecasts of SME workers seeking to grow informal businesses.

Brooks (2014) further claims that the process is tangled with the personnel planning process to re-engineer an SME in the agrarian sector by reviewing worker performance to ascertain critical training needs (Nordgvist et al., 2013; Ndiaye, et al., 2018; Xiaochen et al.,2018). Succession planning influences business continuity. Therefore, the importance of replacement acts as a strategy which is a key driver to SMEs growth. Normally, succession planning is focused on senior management positions, although authors have disputed that it should be extended to all workers, including those at lower levels to retain the value of offering development opportunities as well as increasing SME profitability associated with a competent and motivated workforce.

3.6.5. Training and Development

The "mind-set" focuses on training and development based on the basic premise that the SMEs depend on improving workers' skills over time to cope with the changing technology, customer tastes and productivity (Bubou, et al., 2014; Bahadur, Aziz & Zulfiqar, 2018). Training and development upgrade existing SMEs (Nyamutowa, Masunda & Mupaso, 2014). Access to training and the effective utilization of skills in SMEs has long been ignored and this tends to lower growth (ILemona, 2013). As part of Zimbabwe's agricultural recovery, there is need for policy shifts to assist in training and developing SME owner managers, employees and entrepreneurs (Johansson, 2017). The recognition of the need for training of entrepreneurs in the farming sector which will potentially increase the possibility of stimulating radical transformation of the agricultural sector (Fuglie & Rada, 2013). However the lack of farming knowledge by SMEs is a clear disadvantage for Zimbabwe to compete at a global scale, since almost the majority of SMEs have limited access to agricultural training and development programs. It is against this back drop that skills development

among SMEs is necessary to re-engineer their growth and improve economic performance. In this case, vocational training centers provide technical skills training for SMEs (Aremu et al., 2017). Barkhatov, Pletnev and Campa (2016) and Aremu et al., (2017) conclude that barriers to investing in training and development are more substantial for SMEs as compared to larger organizations. In this perspective, trained employees increase performance to produce quality products which enhances SME global competitive advantage. Hence, shifts in job functions require skills filling to enhance SMEs competence (ILemona, 2013). The importance of training for SMEs is a critical factor in improving their development (Ighiebembe, 2016), thus the government is mentoring emerging SMEs through training and development (Aremu et al., 2017).

3.6.6. Entrepreneurial Growth

The literatures on SMEs reveals that nurturing entrepreneurship- related skills have stimulated the growth of SMEs over the years, in line with re-engineering processes (Bliemel, McCarthy & Maine, 2016; Cho & Lee, 2018). According to Arafeh (2016) and Benhassine et al., (2018), entrepreneurship growth opens new destinations for technology and innovation. The logical approach to entrepreneurship growth leads to the formalization of the informal sector. This revolves around harnessing strategies for re-engineering SMEs since it improves economic growth. According to Arafeh (2016), entrepreneurs are pragmatic and flexible to the changing environment. On the other hand, they see uncertainty as a chance for them to succeed**.** The contribution of the entrepreneurs has resulted in innovative efforts which catalyse economic growth

An academic discussion on entrepreneurial growth by Cho and Lee (2018) and Yeboah (2013) argues that there is no accord among researchers, as to what constitutes entrepreneurial growth with some versions insisting that entrepreneurs are born talented. Yet, entrepreneurship development is a good re-engineering technique which uses research efforts for chance to create a new product to grow an SME (Dossou-Yovo, 2015; Karadag, 2016). Hussain (2018) put the entrepreneur as a moving force that creates wealth in a competitive, innovative and dynamic economy. Therefore, the development of entrepreneurship improves the competitive growth of SMEs (Bliemel, McCarthy & Maine, 2016).

Entrepreneurship provokes the development of a country (Teece, 2014). Entrepreneurship culture is cultivated at national level to foster economic development (Bouazza, 2015) Entrepreneurship development targets those with little knowledge on how to develop their SMEs (Eijdenberg & Masurel, 2013; Karadag, 2015).

3.6.7. Networking and Information Dissemination by Agrarian SMEs

According to Srivastava and Kaul (2014), SME owner-managers require effective communication which plays an integral role in developing SMEs. With open communication, building SME business contacts is an invaluable source which develops and supports SMEs .There are many ways of social networking (Bliemel,McCarthy & Maine,2016; Johannisson, 2017) such as through association, events and conferences which open opportunities that increase innovativeness, partnerships and knowledge (Bjornlunda & Pittock, 2017). A more complex approach of networking is to create relationships by focusing on agrarian activities to ensure food autonomy is attained in Zimbabwe (Wong, 2015). Therefore, a social networking and communication skill in SMEs is supported by lead Ministries such as the Ministry of SME which act as resource centers for SMEs market networks. The concentration of networking by SMEs portrays the complexity in information dissemination to increase market share (Srivastava & Kaul, 2014). This portrays that networking is a composite factor to improve their growth. However, for this reason, banks provide guidelines that help SMEs access information on areas of expertise to ensure they receive best networking services. The role of social networking and communication has changed the way SMEs interact for it is invaluable to stay in contact with consumers which then assists SMEs to grow and to increase their market share. The social networking role is necessary to expand and make SMEs in the agrarian sector have access to information elsewhere in the world (Arudchelvan & Wignaraja, 2015; Johannisson, 2017). In many respects, governments provide information and consumer requirements through regular surveys which are quickly and efficiently conducted across sectors to get the information which is a key to SMEs' competitive advantage**.**

3.6.8. Employee Motivation

Xiaochen et al., (2018) point out that motivation shows the needs, desires, wants and drives within employees as compounded by Abraham Harold Maslow's hierarchy of needs. It is the most representative theory of motivation, which mainly discusses those existing factors that can motivate workers and make them satisfied with their rank and file (Nyanga, 2018).To support this, Eijdenberg

and Masurel (2013) went further to concur with Maslow's theory that an employee's behaviour is consistent with the biggest interests of SMEs in the agrarian sector. However, according to the Maslow's hierarchy of needs, each employee is at a different phase in his or her life, thus, they require varied financial and non-financial motivation techniques. SMEs nowadays motivate employees to deliver work and engineer their growth. As such, motivation is important to all SMEs in the agrarian sector as employees create the success of an SME. If managers motivate their employees, they would be happy to do their work (Eijdenberg & Masurel, 2013, Nyanga, 2018). This approach makes an SME to grow and employees excel in their jobs as intrinsic motivation comes from the enjoyment of a task, the satisfaction of a job- well done, and the desire to achieve the growth of SMEs.

Employee motivation in SME management is concerned with worker retention and wellness to increase productivity. Eijdenberg and Masurel (2013) and Bahadur and Zulfiqar (2018) present that source of worker intrinsic motivation comes from pay rise; bonus and rewards so that they perform better at the place of work and it leads to SMEs achieve their goals. If taken seriously, SMEs can change their culture and create one where employees are valued and ensure their job security (Eijdenberg & Masurel, 2013; Chivasa, 2014; Nyanga, 2018).The reason for motivating SME employees can be illustrated in Figure 3.10. This simplistic definition is relevant in the current SME environment where managing SMEs has become very complex and sophisticated in a poorly performing environment.

Figure 3.10: Employee Motivation for SME Growth

Source: Researcher's Development

3.7. Summary

The chapter has extensively reviewed literature on strategies for re-engineering agrarian SMEs. This was done to clarify the rationale for re-engineering SMEs. This reviewed literature has pointed to the need to re-engineer SMEs to contribute to food security. This extensive brought into perspective the importance of agriculture and strategies for re-engineering SMEs in the agrarian sector. These perspectives form the focus of the research. After having reviewed the literature on how re-engineering provokes the growth of SMEs, the theoretical and conceptual frameworks underpinning the study will be discussed in the next chapter.

CHAPTER FOUR:
THEORETICAL AND CONCEPTUAL FRAMEWORK

4.1. Introduction

The extensive literature was inspired by the support of several researchers who acknowledged that strategies for re-engineering agrarian SMEs cannot be exclusively enlightened by a single hypothesis. Therefore, this part investigates the theoretical and conceptual framework supporting the research and making recommendations in the Zimbabwean context (Khankaew, Ussahawanitichakit & Raksong, 2015; Nowin´ski & Haddoud, 2019). The researcher seeks to locate and signal the origin of the research, interpret and reconcile the variables under study. Therefore, the theories adopted for the study seem to move towards supporting strategies for re-engineering SMEs so as to stimulate economic development and reduce poverty (Sutter, Bruton & Chen, 2019). The indispensable strategies for re-engineering agrarian SMEs call for the need to examine relevant theories to understand the discourse on Zimbabwean agrarian SMEs. This study is anchored on the SME growth model, cluster and incremental theories (Fornahl, Hassink & Menzel, 2015; Gorevaya & Khayrullina, 2015). However, it is important to recognize that these theories explain the growth behaviour of SMEs from diverse viewpoints, although they are not in divergence, since they can be submissive from end to end using strategies for re-engineering agrarian SMEs.

4.2. Underpinning Theories of the Study
4.2.1. SME Growth Model

Understanding the SME growth models is important in understanding SME growth behaviour, as it helps to elucidate what motivates SME growth. This research makes use of constructs of accessible researches on the SME growth model from academics such as Ameyaw et al (2017) who discovered that this model can persuade the development of SMEs. The growth model has evolved over centuries from a micro or informal cognitive perspective to an SME perspective. This theory can be used to explain whether the SMEs are growing or not. Notably SMEs (Small and Medium Sized Enterprises) achieve various growth stages as there are different SME growth levels. It is, therefore, the intention of this research to further develop the understanding of the growth stages of SMEs. The SME life cycle phenomenon has been found meaningful by SME owner managers for use in re-engineering the growth of SMEs. There has been a wide use of the SME growth model in advancing theories that explain the growth of agrarian SMEs (Gorevaya & Khayrullina, 2015). The SME

growth theory, as Yeboah (2015) explains, relates to the growth physiognomies of SMEs, describing how SMEs evolve from one growth series to another, and increasing competitiveness and economies of scale (Srivastava & Kaul,2014). The SME growth model elucidates that the growth of agricultural SMEs is distinguished by structures and it is a basis for evaluating whether strategies for re-engineering SMEs influences their growth and food security (ACET, 2015). Furthermore, the SMEs in the agrarian sector use the growth model as a contingency to analyse the growth of SMEs by grouping them into different growth stages which are existence, survival, success, maturity and diversification. In this context, the growth stages of SMEs as depicted in Figure 4.1 are unique in their nature and have gained wide acceptance in literature as stimulants to growth (Yeboah, 2015; World Bank, 2015).

Figure 4.1: SME Growth Stages
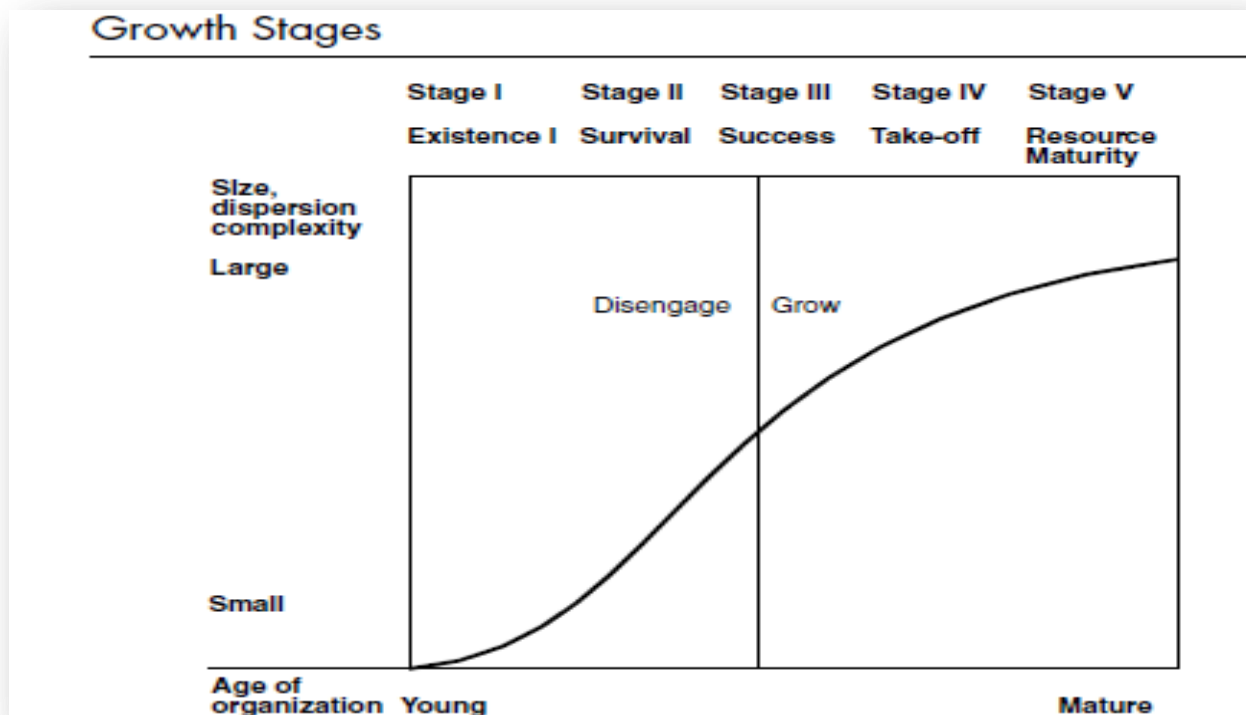
 Source: Sulaiman, Sheihnaz & Samuel, 2016

The theory as proposed by Yeboah (2015) and Sulaiman, Sheihnaz and Samuel (2016) relate to the SME growth trends which increase competitiveness and economies of scale (Wong, 2015). The

SME growth model is an instrument that is used to determine and categorize SMEs as characterized by structures and management styles (De Vries et al., 2015; Meyer & Meyer, 2017). From another angle of appreciation, it provides a basis for evaluating government support and proposing how government policies fit into and influence the growth of SMEs (Nyamwanza et al., 2013; Eniola & Entebang, 2015).As revealed in the literature, researchers have noted that there is no single theory that sufficiently explain the growth of SMEs, since their growth in the agrarian sector is highly related to current activities influenced by strategies for re-engineering than by the subjective ambition of an entrepreneur. Above all, agricultural SMEs in developing countries depend on government support and favourable stable markets combined with some export synergies to develop from one age band to another (Arudchelvan & Wignaraja, 2015). In this respect the agrarian SME growth model is compounded by the following SME six growth stages as indicated in Table 4.1.

Table 4.1 SME Growth Stages

1.Existence Stage	2.Survival Stage
The lack of 'just in time' management systems and total quality management by SMEs leads to poor performance and as such, SMEs in this phase require re-engineering strategies to survive (Ndiaye, et al.,2018). Usually at this stage, SMEs are yet to stabilize their operations and improve productivity to gain the market share (Srivastava & Kaul, 2014). In many instances, the owner closes operations when capital runs out or sells their businesses for their asset value. According to Yeboah (2015,) Surviving SMEs enter in the next phase of expansion (Yeboah, 2015). This requires an effective management prowess and monitoring SMEs' activities (Nyamutowa, Masunda & Mupaso (2014).	For an SME to succeed in this stage, the management needs to adapt and delegate work to maintain the growth of SMEs in the agrarian sector. (Srivastava & Kaul, 2014). The key difference from mere existence is that SMEs in this category can generate enough cash to break even and replace capital assets as they wear out (Yeboah, 2015). In this stage, SMEs in the agrarian sector increase competition and place importance on price at the expense of delineation since pricing demands cost control which requires SMEs' to formalize leading into the next growth phase.

3.Success Stage	4.Take-Off Stage
SMEs at this stage are stable, profitable, and expanding their operations. More time is spent co-coordinating workflows in this category become more formal and creates more organized structures based on functional lines (Yeboah, 2015). SMEs in the agrarian sector embark on market and product research depending on the nature of the product and this is to expand their product range on a winning basis. But then, due to lack of capital, managers find it tough to adapt to the changing environment. In this regard, a degree of decentralization becomes necessary for the entrepreneur. As such, the owners relinquish power to managers seeking to grow SMEs.	At this stage, the SMEs in the agrarian sector grow rapidly and can finance their growth (Al Buraiki & Khan, 2018). In this phase of growth, SMEs hire competent managers to handle their growth strategies and the complex issues in the business environment. Budgeting measures and, management are accompanied by formalized accounting systems at this growth stage (Yeboah, 2015; Benhassine et al., 2018). At this growth stage, SMEs' are allowed to seek long-term debt by guaranteeing their security in the form of immovable assets. The SMEs continue to operate depending upon the environment and managers hold decision-making ending traditional power base of SMEs (Srivastava & Kaul, 2014).
5.Maturity Stage	**6. Diversification Stage**
The greatest concerns of an SME at this stage entail consolidating and controlling the financial gains brought on by rapid growth through effective managerial talent to preserve the enterprise's entrepreneurial spirit and for it to remain a formidable force in the market (Cho, Y.H. and Lee, J.-H. 2018, Kiseľáková et al., 2018). Authority continues along functional lines. In this phase, SMEs usually stay in this stage; some shrink operations and may end up merging, to become large corporations (Srivastava & Kaul, 2014; Yeboah, 2015).	At this stage SMEs diversification is an effective path showing that SMEs have matured and can be summed up that the diversification leads to rapid agrarian SMEs growth. In these circumstances, the diversification of SMEs uses new product lines to regulate the cash flow system. UNCTAD (2012) posited that diversification is a brand extension across an apparently unconnected range of SME products.

4.2.2. Cluster Theory

Kamoyo, Mavhima and Muranda (2014) and Konstantynova and Lehmann (2017) point out that cluster theories are based on the assumption that SMEs take varying forms, depending on their intensity and complexity. The SME clusters play an integral role in the modern economy and some agricultural cluster examples are agribusiness complexes, agro-industrial parks, agro-export zones, export consortia of food and agricultural products and one SME one product (Fornahl, Hassink & Menzel ,2015; FAO, 2017). The assumptions on cluster theory build value networks and address common SME challenges and at the same time pursue common opportunities (FAO, 2014). The

context of SME clusters is believed to enhance their competitiveness and innovation (Ehrenberger, Koudelkova & Strielkowski, 2015; Baporikar, 2017).The geographic scope of clusters varies across sectors. There are various clustering forms that may ensue to optimise SME competitive advantage. Delgado, Porter and Stern (2014), posits that clustering can be formal or informal, in the public or private sector; horizontal or vertical; physical; and even sometimes virtual. In horizontal clustering SMEs within the same industry sector are co-located in a particular geographic area and might share an industrial and technological base (Kamoyo, Mavhima & Muranda, 2014). Thus the drive for SMEs to collaborate reduces uncertainties in the global economy and is a means of supplementing and complementing limited resources. It is, therefore, a subjective view that the geographical scope of a cluster is important, as postulated by Delgado, Porter and Stern (2014), in seeking to promote the growth intensity of SMEs through sharing resources, skills, competition, and markets. Moreso, this theory is quite effective for SMEs positioned in a similar geographical area (FAO, 2017). SMEs in the agrarian sector learn from each other through increased information systems, experience, training and development, as evidenced by the popular Silicon Valley SME clusters. Fornahl, (2015) agrees that the cluster theory externalities erode the competitiveness of SMEs in the agrarian sector, and their narrow preoccupation with globalization has created a tendency to disregard clusters as diminishing in a technologically changing environment (Arudchelvan & Wignaraja, 2015; Wolfe & Gertler, 2016). The above discussion can create new management approaches seeking to stimulate the growth of SMEs and at the same time increasing exports as well as attracting foreign investments. Figure 4.2 below illustrates SMEs which are in a similar cluster.

Figure 4.2: SME Clusters in a Similar Geographical Setup
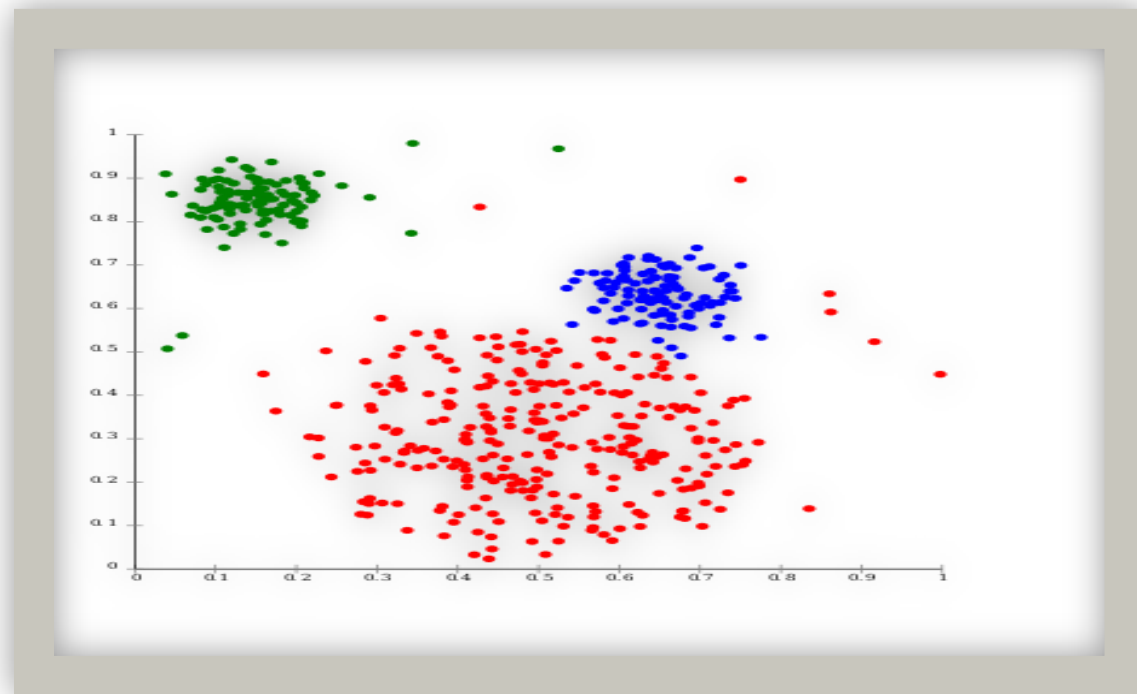
Source: Kriegel, Kroger and Zimek, 2012

The cluster approach recognizes that all SMEs in the agricultural value chain become more innovative and successful through interacting with supporting institutions (Delgado, Porter & Stern, 2014). In case of a market collapse, clusters magnify the SMEs' economic activities. However, clusters are not unique to the Eastern Highlands and the following is an example of notable clusters established to grow SMEs. The notion that clusters have the propensity to grow SMEs (Wolfe & Gertler, 2016) has been evidenced by the following clusters in Table 4.2 These clusters enable SMEs to grow rapidly and to transform into large enterprises. In the clusters, SMEs develop, gain experience and creativity to stimulate their growth. SMEs in clusters grow faster than those existing where there is no competition and cooperation. Konstantynova and Lehmann (2017) opine that clusters have a strong role to play in nurturing the growth of SMEs, since they have a high level of growth awareness.

Empirically, the cluster theory perspective defines clusters as having different sizes and characteristics (Wolfe & Gertler, 2016) which stimulate SMEs' productivity, innovation, specialization and new opportunities which nurture them into transnational companies.

4.2.3. Incremental Theory

The incremental theory helps to frame policy and control behavioural aspects of different policies (Majoni, Mutunhu, & Chaderopa, 2016).This study has adopted the incremental model which emanates from the discipline of policy conveyance as evidenced in Denmark's Windmill Energy project, which was a success. This success resulted from effective government support measures (Wong, 2015).The underlying assumption of the incremental theory focuses more on policy development to create a stable and viable operating environment for SMEs in the agrarian sector to grow. The incremental theory holds choices required to stimulate SME activities. According to Aremu et al (2017) the incremental theory consider objectives that differ incrementally, that is, by small amounts from the status quo and continuously reformulating problems to enhance the growth of SMEs and alternatives-in the course of acquiring new re-engineering information (Huang et al., 2015;OECD,2016).Incremental policy approach gives the impression that policy-makers specifically considers a limited set of policy alternatives that are incremental additions or modifications of a broader set of policies that are considered. This approach is appropriate for improving SME linked policies. The incremental processes cannot be understood unless they lead to fundamental decisions. Thus, incremental decision- making involves a choice between two kinds of decision making models, it should be noted that the cumulative value of the incremental decisions specify or anticipate fundamental decisions (Aremu, et al.,2017).The rational incremental approach is more appropriate in the case of SME problems, which policies need reform to stimulate their growth. The critics of the theory contend that it does not succeed in all economies due to its spatial, political and economic settings, but it still manages to overhaul the whole policy system by breaking down government policies into components and rebuilding the SME policy incrementally to influence the growth of agrarian SMEs and create a stable business environment (Aremu et al., 2017). The incremental theory further promotes SME development and the government. SME policy goal is divided into different achievable ideas where they pass through testing phases to improve on their previous achievements. Therefore, the incremental process implies that the SME policy is adjusted from a previous policy effort as it is the foundation to eliminate policy weaknesses and develop a new policy to be effective in-service delivery within a single economy as illustrated in Figure 4.3.

Figure 4.3: Incremental Model
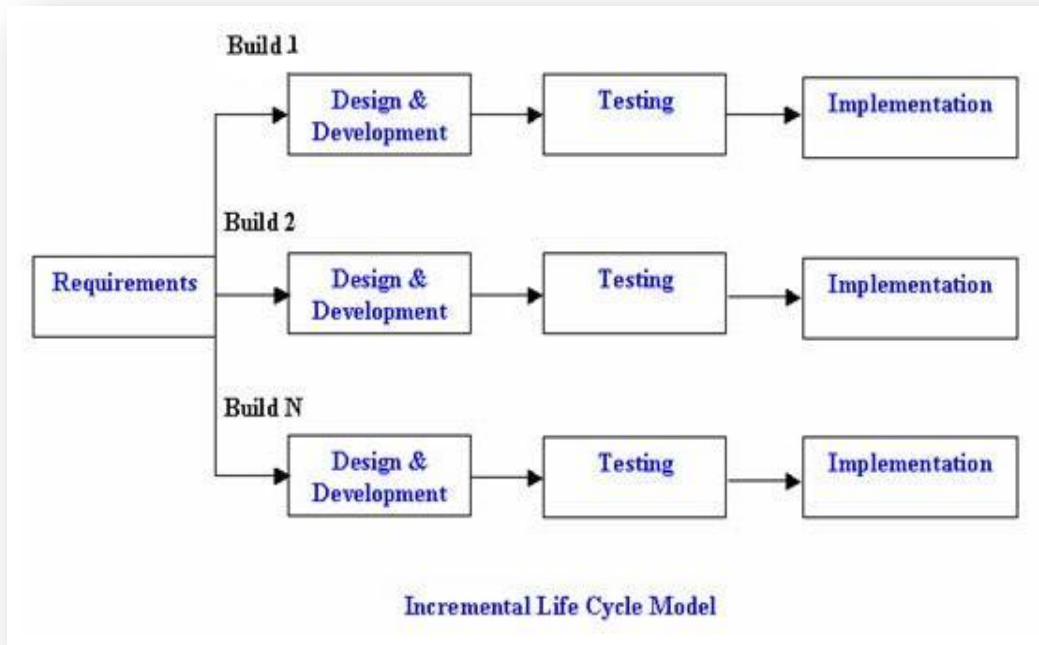
The incremental model is alienated into various 'builds' separated into smaller and easily supervised modules. The incremental model is more flexible and less costly; it makes small improvements, challenging the status- quo of the policy and its processes on an everyday basis as a continuous measure to improve on the policy. This is done using the Kaizen approach based on the philosophical belief that SME growth can be enhanced. The incremental status- quo dictates SME policy simulation (Bomani, Fields & Derera, 2015). The problem with the incremental model as noted already, lies in the nature of underlying decision-making and that it was discredited by critiques on its 'present decision ,adjustment from past approach'. According to Aremu et al, 2017).The incremental theory is an underlying principle that predicts incremental activities that normatively guide SME linked policies leading to the growth of agrarian SMEs.

4.3. Conceptual Framework

The SCAMPER technique was used to build a conceptual framework (Gorevaya & Khayrullina, 2015) necessary to develop SMEs (Mulet et al., 2017; Khankaew, Ussahawanitichakit & Raksong, 2015).The aforementioned authors defined a conceptual framework as a design showing dependent,

intermediate and independent variables, of which all of them have interrelationships. The importance has been highlighted in many studies as pivotal when it comes to promoting the growth of SMEs. The idea generation process is essential to obtaining innovation and creativeness. The SCAMPER technique is explained as follows;

S is for substituting ideas used to create a new conceptual model;

C is for combining ideas from one subject area with theoretical ideas to come-up with a conceptual model;

A is adoption of new ideas on re-engineering the growth and sustainability of SMEs;

M is the minimax principle, where the conceptual idea was minimized (simplified) or maximized (elaborated);

P stands for 'put it to other use', and is where the researcher found new use for strategies to re-engineer SMEs in modern management practices;

E is for extension of value addition towards making SMEs more competent in a diversified economy;

R is for the re-engineering; that is refining and re-engineering, which was a whole mark for stimulating the growth and sustainability of SMEs in the agricultural sector.

By using the SCAMPER creativity approach, the conceptual model became a practical guide to inspire the building of management science theories and to stimulate the growth of SMEs.

4.3.1. Conceptual Model and Hypotheses Development

The conceptual framework is designed to take various forms and indicate how the main variables are related (Khankaew, Ussahawanitichakit & Raksong, 2015; Nowin´ski & Haddoud, 2019). This study aimed to resolve chronic problems causing the failure of SME development, through an effective re-engineering process with conscious regard for their growth and sustainable economic growth (Bakar & Senin, 2016). Since many entrepreneurs lack human skills, they have failed to apply re-engineering concepts and models that have engendered the success of many TNCs (ACET, 2015; Barkhatov, 2016). However, the variables that contributed to the re-engineering process seem too complex for several SMEs who prefer operating illegally and find it difficult to follow formal government regulatory processes (Moyo & Mandizwidza-Moyo, 2017).A conceptual model is a hypothetical statement which the researcher believed can happen, though it is not practical but broad in presenting the possibilities which affect the growth of SMEs (Bakar, 2016). The conceptual model of this research is illustrated in Figure 4.4.

Figure 4.4: Conceptual Model

Independent Variables

SME Challenges
SWOT analysis
Opportunities
Government policies
Adoption
Delivery
Programs
Simulation
Registration and licenses
Environnent complaisance
Environnent stabilité
Agricultural Support
Agricultural Mechanization
Agricultural Extension
Agriculture Loans and Credit Facilities
Agricultural Input Schemes
Command Agriculture
Infrastructure Development
Agricultural Research and development
Agricultural Sustainable Measures
Food security
Produce preservation
SMEDCO Revolving Fund
Resource mobilization
Existing Strategies
Uptake of technologies
E-Commerce
Gender Dynamics
Plural agriculture
Women, Youth
Equal income distributio
SME Management
Succession-planning
Crafty-competencies
-structures
Training and development
Worker-motivation
consumer involvements
SME Reengineering Model
Increased Productivity
SMEs Growth
Proper and effective strategic management

Mediating Variable

Reengineering

Radical Transformation

Dependent Variable

SMES Growth and Sustainability
Food Security
Globalisation
Industrialisation
Standard of Living
Revenue Growth
Employment Growth
Consumer Satisfaction
Market Share
Income Growth
Profitability
SMEs Diversity
SMEs Reputation
Quality Service Delivery
Diversification
Assets
Gross Domestic Product

SMEs Growth Indicators Environment

SMEs and the Environment

Source: Researcher's Development

The conceptual framework maps the strategies for re-engineering agrarian SMEs in the Eastern Highlands, Zimbabwe. It is against this background that several hypotheses will be developed from the existing literature (Khankaew, Ussahawanitichakit & Raksong, 2015; Eniola & Entebang, 2015),

4.3.1.1. SME Challenges and Government Policies

The study proposes that resolving the challenges of SMEs through a re-engineering process and the supportive government SME policies using incremental approaches contributes to the growth of SMEs. Finding lasting solutions mean that identifying the challenges faced by SMEs is important because this forces SMEs to go through a re-engineering process to sustain their growth (Cant, Erdis & Sephapo, 2014). Various studies as referenced by Nyamwanza et al. (2013) examined the interrelationship between the challenges of agrarian SMEs and government regulations/policies. Some studies have found that SMEs which adopt government policies grow much faster than SMEs which violate policy regulations (Zimtrade, 2014; Eniola & Entebang, 2015). Therefore, reviewing the challenges and government policies directed at the SMEs can be conceived as ways through which studies can contribute to the sustainability of SMEs. In the studies of Bomani, Fields and Derera (2015) and that by ILemona (2013), the interrelationship of SME challenges and government policies has been highlighted. The correlation implied that the challenges of SMEs trigger strategies for their re-engineering to exhibit their sustainability prowess (Aggarwal & Ranganathan, 2016).

It is a known fact that challenges which SMEs face drive government to action, since such challenges form part of the basic inadequacies that encourage government to simulate SME policies (Bindu & Chigusiwa, 2013; Aremu et al., 2017). In particular, it is conceptualized that the SMEs' challenges influence policies which support their growth. Therefore, SMEs in the agrarian sector may benefit from adopting supporting government policies as a strategy for their growth. It is against this background that it is hypothesised that:

H1: There are significant relationships between the major SME challenges experienced by agrarian SMEs in the Easter Highlands in Zimbabwe and policies to re-engineer their growth and sustainability.

4.3.1.2. Government Policies/ Regulations, Growth and Sustainability of SMEs

The literature proposes that government regulations stimulate the growth of SMEs since this was alluded to in several international studies which examined the interrelationship between government

regulations and the growth of SMEs (Taneja & Toombs, 2014; Eniola & Entebang, 2015; Aremu et al., 2017). The conceptual arguments of previous research converge on the idea that re-engineering SMEs through adopting government regulations will benefit SMEs more, as they develop from one stage to another. Government regulations are crucial to improving compliance by SMEs, and it has been shown that policies have a bearing on stimulating SME activities, since policies seek to stabilize the operating environment and improve service delivery (Koranteng et al., 2017; Bomani, Fields & Derera, 2015). Notwithstanding the aforementioned, there are considerable variations in the association between government policies/regulations and SMEs. In order to explore their interrelationship further, and more especially with respect to Zimbabwean agrarian SMEs, it is hypothesized as follows:

H2: There are significant relationships between SME-related government policies and their value in re-engineering the growth and sustainability of SMEs in the agrarian sector.

4.3.1.3. Agricultural Support Mechanisms and the Growth and Sustainability of SMEs

It is assumed that for SMEs to grow into formidable entities, government support is needed. Some researchers in the more developed nations have linked agricultural support measures to the growth and sustainability of SMEs, but this link has been given far less priority by researchers in developing nations like Zimbabwe (GoZ & AFDB, 2013). According to Sims and Kienzle (2017), the growth and sustainability of SMEs is influenced by agricultural support measures in a number of ways which work to ensure that food security is attained. The strategies for growth of SMEs in the agrarian sector are largely dependent on government support measures which are applied as relief measures to reduce poverty and improve living standards (World Bank, 2015). The World Bank (2015) asserts that the effects of strategies for re-engineering the growth of SMEs are evident within the informal sector and they seek to improve the growth of SMEs, while simultaneously reducing poverty.

The impact of government support measures is judged by assessing whether there is growth and development of SMEs in developing countries. Regardless of government support, SMEs in the agrarian sector are less sensitive to issues of government interest because they get meager and limited relief in many developing nations. A ZimVac (2013) study indicates that in such cases,

government support is bound to be more stringent and this does not encourage SMEs in the agrarian sector to develop. This does not lessen the importance of the fact that government support measures influence the growth and sustainability of SMEs which they heavily support to engender growth. Therefore, agrarian SMEs are dependent on the degree of government support to influence productivity of agricultural SMEs. Sukume et al (2016) and Saberi and Hamdan (2019) postulate that there could be a correlation between government support measures and the growth and sustainability of agrarian SMEs.

If government focuses on supporting SMEs, it promotes the growth of the informal sector to maximize food security and revenue (OECD, 2016). It can be accepted that if there are good government support measures, SMEs will obviously increase their growth and income and reduce poverty and hunger (Maksimov, Wang & Luo, 2017). What is apparent is that government support efforts have impact on developing agrarian SMEs agricultural sector. This kind of support is summed by Nyamwanza et al (2015) as strong interrelationships exist between government support and SMEs, which interrelationship is directed towards ensuring food security by reducing hunger and poverty (WFP,2014). In order to explore the aforementioned interrelationship further with respect to the Zimbabwean agrarian SME sector, it is hypothesized that:

H3: There are significant relationships between agricultural support mechanisms and strategies to re-engineer the growth and sustainability of agrarian SMEs.

4.3.1.4. SME Re-engineering Process and Economic Development in Zimbabwe

Food Security and Poverty Reduction

Bound by rationality, it can be admitted that strategies for re-engineering the growth of agrarian SMEs are not mutually exclusive of food security concerns seeking to reduce poverty (Christiaensen & Todo, 2013; FAO, 2014; Sutter, Bruton & Chen, 2019). As such, strategies for re-engineering the growth and sustainability of agrarian SMEs contribute significantly to ensure food security (Bellemare & Novak Lindsey, 2017; Mhembwe, Chiunya & Dube, 2019). The aforementioned believes that enough food is important to hunger eradication and food security must, therefore, be maintained. Though this assertion implies that strategies for re-engineering SMEs ensure food

security is obtainable, it is important to understand that the SME developmental objectives are achieved first (OECD, 2016). The study postulates that strategies for re-engineering SMEs in the agrarian sector, although at times driven by other objectives of SMEs, still have an interrelationship with food security (WFP, 2014). Therefore, ways to improve the standards of living in Zimbabwe have been examined and re-engineering SMEs has been found to influence their growth and to consequently mitigate poverty. In contrast, what seems to be apparent is that poverty reduction can be attained (Sutter, Bruton & Chen, 2019). The research, therefore, puts forth that there is a relationship between strategies for re-engineering the growth and sustainability of SMEs to alleviate poverty (Chinamasa, 2016; (Maksimov, Wang & Luo, 2017). Inferring from the literature, and with respect to the agrarian sector in Zimbabwe, it is hypothesized that:

H.4.1: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and food security in the country.

Employment Creation

Katua (2014) investigated the influence that strategies for re-engineering the growth and sustainability of SMEs have on employment creation. The majority of poor people benefit from employment and this has a huge effect on poverty alleviation in developing countries. The results from Sukume et al (2015) study revealed that strategies for re-engineering agrarian SMEs are associated with employment creation. For instance, the Taiwanese SMEs in the agrarian sector have increased employment creation to sustain livelihoods. Furthermore, Katua (2014) argued that SMEs that focus on re-engineering strategies can achieve rapid growth, competitive advantage, and differentiation of products to satisfy consumer taste and also increase employment capabilities(Irungu & Arasa, 2017). Further Sukume et al (2015) suggested that strategies for re-engineering SMEs have an impact on employment creation which then becomes the basis for increasing growth. According to the empirical results, re-engineering SMEs is one of the motivating factors that increase productivity and employment growth.

Sukume et al (2015) investigated the effect of strategies for re-engineering SMEs and employment creation by SMEs in the agrarian sector. The research found out that strategies for re-engineering the growth and sustainability of SMEs have a significant relationship with work creation. Thus, inferring from the literature and the empirical evidence above, it is hypothesized as follows:

H.4.2: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and employment creation by the SMEs.

Economic Growth

Prior studies have found that strategies for re-engineering the growth and sustainability of agrarian SMEs contribute to their development and to economic growth (Arunagiri et al., 2015). In this situation, economic growth is embedded in strategies for re-engineering SMEs relative to stimulating economic development (Bouazza, 2015). To this end, re-engineering SMEs in the agrarian sector stimulates economic wellness and community development, in seeking to improve livelihoods (AfDB, 2013; Hilson, 2016) investigated the influence of re-engineering the agrarian SMEs in Cuban and the results showed that the growth of SMEs influences poverty and hunger eradication, thereby, improving economic growth. The OECD (2016) and Bokor (2017) concurred that strategies for re-engineering agrarian SMEs contributes to the growth of wealth; in fact, they engender rapid growth of SMEs. Thus, drawing from the above discussion, it is therefore hypothesized as follows:

H.4.3: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and economic transformation.

Resource Allocation and Utilisation

In a different context, strategies for re-engineering SMEs are thought of as contributors to efficient resource allocation and effective resource utilization by SMEs (Ifekwem and Adedamola (2016) and De Vries et al (2015) points out that the strategies for re-engineering SMEs is the starting point to compel SMEs to utilize their allocated resources more effectively to realize ROA. Therefore, SMEs in the agrarian sector must re-engineer themselves as a way of increasing resource utilization and to ultimately increase their growth and profitability (Margaretha & Supartika, 2016; Bjornlunda and Pittock, 2017). Thus, re-engineering SMEs helps to deal with poor enterprise growth and it also satisfies consumers' needs and wants. In this regard, re-engineering SMEs is one of the key components that can provide effective resource utilization and increase competitiveness on the market. In addition, Sims and Kienzle (2017) and ILemona (2016) concur that strategies for re-engineering SMEs contribute to effective use of resources to grow SMEs into reputable TNCs (Fuglie & Rada, 2013; Jiang et al., 2018). Furthermore, Ifekwem and Adedamola (2016) conducted a

study which focused on re-engineering businesses and identified that re-engineering SMEs invigorates the growth and sustainability of agrarian SMEs. However, Mbizi, Hove, Tondlana and Kakava (2013) argued that strategies for re-engineering the growth of SMEs help to reduce production expenses. For example, recycling resources may lead to outstanding savings of materials and energy, while significantly reducing the misuse of allocated resources by SMEs in the agrarian sector (Bjornlunda & Pittock, 2017). Therefore, deducing from the discussions, this study proposes that strategies for re-engineering SMEs in the agricultural sector have interrelationships with SMEs resource utilisation. This is captured as a hypothesis as follows:

H.4.4: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and resource allocation.

Market Capitalization

Bjornlunda and Pittock (2017) argues that strategies for re-engineering SMEs are an outcome of competitive restructuring process, in which SMEs signal their key growth characteristics in order to maximize their market capitalization at global level. Furthermore, as reported in the literature (FAO, 2014) there is an interrelationship between strategies for re-engineering SMEs in the agricultural sector and market capitalisation. USAID (2012) also argues that strategies for re-engineering SMEs can be a major factor in contributing to SME market capitalisation (Khankaew, Ussahawanitichakit & Raksong, 2015). In order to explore this relationship with respect to the agrarian SMEs in Zimbabwe, it is hypothesized as follows:

H.4.5: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and market capitalization.

Against the above 'secondary' strategies, the overall impact of re-engineering the growth and sustainability of the agrarian SMEs in the Eastern Highlands in Zimbabwe can be hypothesized as follows:

H4: There are significant relationships between re-engineering the growth and sustainability of agrarian SMEs and economic transformation/wealth creation.

4.3.1.5. Existing Techno-Innovative Strategies and the Growth and Sustainability of SMEs

According to Bello (2017), effective strategies for re-engineering such as implementing technologies, improves the growth of SMEs. Researchers have found out that there are links between existing techno- innovative strategies and development of SMEs. For example, FAO (2014) disclosed that strategies encompass modernization, native knowledge systems and bio-technology, which influence the radical agricultural development of SMEs. Burch (2017) notes though that tech - innovative strategies may fail to radically influence the growth of SMEs for a variety of reasons, which are attributed to poor adaptability and adoptability of the changing environment and technology. Therefore, it is imperative that government support is availed to drastically improve the technological uptake by SMEs. This is a positive contributing factor to development of SMEs although little attention in related studies is being paid to this by researchers in Zimbabwe. The Government of Zimbabwe has placed increasing pressure on improving techno- innovative strategies for SMEs to improve productivity and maintain a green economy (Nyamutowa, Masunda & Mupaso (2014).

In a study by Sukume et al (2016), the association between technological innovations and the growth of SMEs has been implied. The argument was that the effort exerted by techno- innovative strategies on SMEs is indicative of their growth responsiveness to become TNCs. To interpret research, the aforementioned authors posit that it becomes apparent that techno- innovative strategies improve the growth of SMEs. However, it is not clear how successful SME owners have taken special care to make sure that technology is harnessed for the good of their businesses (Bubou, et al., 2014). However, diminutive awareness has been paid to identifying the scope to which SME development strategies relate to their growth. The study by Nyamutowa, Masunda and Mupaso (2014) therefore, proposes the existence of a relationship among strategies and the growth of SMEs. However, strategies have a relationship with Zimbabwean agrarian SMEs. To explore this further and with respect to the agrarian SMEs in the Eastern Highlands of Zimbabwe, it is hypothesized that:

H5: There are significant relationships between the existing SME techno-innovative strategies and re-engineering the growth and sustainability of SMEs in the agrarian sector.

4.3.1.6. Gender Dynamics and the Growth and Sustainability of SMEs

Gender dynamics are considered by taking into account that women compete with men (Chinomona & Maziriri, 2015; FAO, 2017), and researchers have found that SMEs are gender sensitive and this has an optimistic relationship with growth of SMEs (Broegaard, 2013). The application of gender dynamics can be conceived to be vital in an attempt to improve the growth of the SMEs. What is more crucial is that gender mainstreaming provides SMEs in the agrarian sector with the opportunity to improve livelihoods without segregation. This allows for more competition among SME workers across the globe. In Nigeria, there have been requests from the state and other relevant stakeholders, for SMEs to incorporate gender dynamics, as it is conceived that gender dynamics create competition in the place of work and bodes well for production and the welfare of the communities.

According to Agarwal (2015), gender dynamics are evident enough to generate inclusivity which creates value for the growth of SMEs. In most developing nations, the failure to consider women has resulted in gender imbalances. Therefore, mainstreaming gender into entrepreneurship contributes to the growth of SMEs which seeks to reduce poverty in women-headed families (Chinomona & Maziriri, 2015; Li, Ur Rehman, Asim, 2019). In concurrence with Broegaard (2013), the current study posits that there is an association between gender dynamics and strategies for re-engineering SMEs. In order to explore this further and more specifically with respect to agrarian SMEs in the Eastern Highlands of Zimbabwe, it is hypothesized that:

H6: There are significant relationships between gender dynamics and strategies to re-engineer the growth and sustainability of SMEs in the agrarian sector.

4.3.1.7. Management Methods and Agrarian SMEs

In order to understand SME management methods and re-engineering, it is important to understand what SME management is. According to Moyo and Mandizwidza-Moyo (2017), it is a process of eliminating illegal business tendencies by entrepreneurs through leading, directing monitoring and controlling employees to create an SME culture and organizational structure which sets out to share responsibilities among workers(Chivasa,2014). A definition by Bilal, Naveed and Anwar (2017) SME management helps to develop its output and be able to understand the link between re-engineering and management. As such re-engineering is a tool which creates managerial effectiveness through order, and increases SME productivity (Kiseľáková et al., 2018). According to

Martinsons, Davison and Huang (2017) re-engineering is a continuous and incremental process to stimulate the growth and sustainability of SMEs. Therefore, they have the best chances of success, it is best to understand that re-engineering is the way to big gains, but it needs SME managers who reinforce the re-engineering processes as it encourages dramatic results achieved to satisfy customers. In this case, the management of SMEs attempts to improve the efficiency and effectiveness of clerical procedures and the organisation and control of operations within a business (Bilal, Naveed & Anwar, 2017). However, many workers perceive re-engineering as a threat to both their methods of work and existence of their jobs. It is essential that there is quality management of SMEs, as it is from this outcome that other appropriate outcomes can become effective as well. The correlation between SME management strategies and strategies for re-engineering the growth and sustainability of SMEs is quite a paradox. For instance, Ighiebembe (2016) and WFP (2014) argue that while effective management of SMEs may be beneficial to SMEs in the agricultural sector in terms of generating more revenue and food security, the same may not be said about its consequences on the sustainability of the same SMEs. The implication here is that the realization of quality management of SMEs may in turn result in the overuse of resources (Ameyaw et al., 2017). Founded on these opinions, it is projected that there is an interrelationships between management methods and strategies for SME growth. Drawing from the available literature and observed evidence, it is therefore hypothesized as follows:

H7: There are significant relationships between effective management methods and the strategies to re-engineer the growth and sustainability of SMEs in the agrarian sector.

4.4. Hypothesised Relationships

The hypothesized relationships are depicted in Figure4.5 below.

Figure 4.5: Hypothesized Relationships
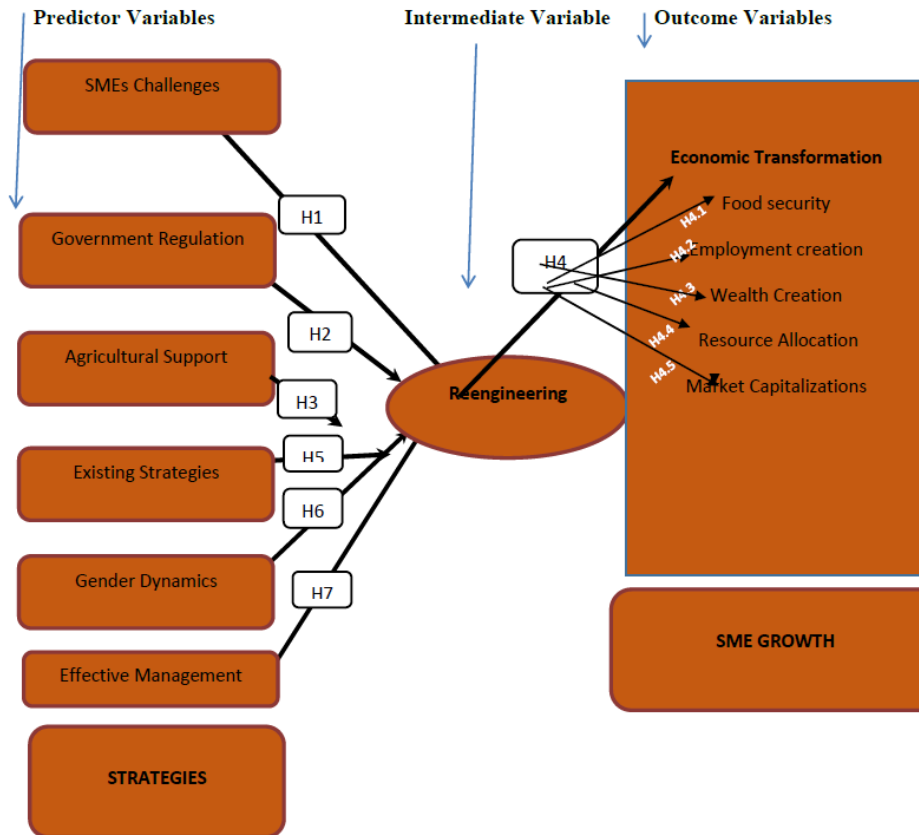
4.5. Summary

The conceptual theoretical section looked at theories seeking to stimulate the growth of SMEs and used SME challenges and re-engineering barriers to inform policy review. The significance of concepts and theories for this study guided the researcher's understanding of the strategies for re-engineering the SMEs in the agrarian sector, which is the basis upon which theoretical and conceptual frameworks can be designed (Khankaew, Ussahawanitichakit and Raksong 2015; Mulet et al., 2017). Conceptually, government policies and the re-engineering process are key concepts for stimulating the growth of SMEs grounded on the research theories. On the theoretical side, the study

employed applicable theories such as the SMEs growth model, cluster theory and incremental theory to guide the re-engineering of SMEs. These frameworks have contributed much in identifying strategies for re-engineering agrarian SMEs. The next chapter unpacks the research methodology employed in this investigation.

CHAPTER FIVE:
RESEARCH METHODOLOGY

5.1. Introduction

This section explains the methodology and issues related to the participants, sample and sampling techniques, tools for collecting data, the process of assembling data and the analysis of data are discussed.

5.2. Research Methodology

According to Kumar (2013) and Apuke (2017), research methodology discusses the approach, design, the philosophical assumptions, strategy and the techniques uniqueness in the context of the study. Research involves a degree of philosophical introspection, making choices which SMEs in the agrarian sector require philosophical underpinnings (Silverman, 2013).It is the procedure through which SME problems with verifiable facts are resolved through government support and comprehensive agricultural strategies for re-engineering their growth and sustainability.

Magwa and Magwa (2015) defines a research paradigm as some generalizations, beliefs, and values in a community which understands the variables under study. Therefore, to attain the thrust of this research, a quantitative research approach was adopted; however, quantitative research is more scientific, objective, fast, focused and acceptable than qualitative research. It collects a large amount of data to erase bias and if more researchers conducted an analysis of the data, they would always end up with the same numbers at the end of it. Therefore, quantitative research is more structured by means of using questionnaires to produce reliable results. The process is relatively less time-consuming. The data from quantitative research such as demographics provide important information for agrarian SMEs to be able to make strategic decisions, since the research quantifies a problem and understands how prevalent it is by looking for results that can be projected to a larger population. As such the research was premised on positivism, in terms of the research philosophy and a deductive approach was used (Creswell, 2013). According to Kumar (2014) the appropriateness of the research methodology significantly impacts on the quality of findings from a study. The researcher employed standardized tools based on quantifiable data to test the hypotheses by directing the investigation to what is perceived by the senses (Wangombe, 2013). The research

design clarifies how the key components of strategies for re-engineering SMEs in the agrarian sector in Zimbabwe were developed.

5.2.1. Research Design

The preceding chapters explored related literature, and represented the theoretical paradigms of the study. The purpose of research is to explain why and how particular empirical methods were selected to investigate the research problem. The chapter explored the major philosophical assumptions underlying the research, which provided the basis for the research strategy. The significance of these assumptions was considered within the literature on re-engineering process and strategies for re-engineering the growth and sustainability of agrarian SMEs and their influence on the study. The ensuing decision to pursue a quantitative research strategy is then explained.

However, Brymann (2015) characterized the research design as a set of guiding principles and directives that allow establishing the research methodology to deal with the research problem. The survey was used as the approach for data collection from SMEs and policy makers using questionnaires. It was necessary to collect data from SMEs and policy- makers as a strategy to find out challenges facing SMEs and how government policies can assist in influencing their sustainable growth. Despite the diverse recompense of employing a survey technique, there are weaknesses in this approach and these had to be effectively managed. One of the major limitations of using a survey design was the weak cause-effect associations (Magwa & Magwa, 2015; Apuke, 2017)). These weaknesses are credited to the way in which the investigative survey approach is carried out (Brymann, 2015). In this case, a survey research design was employed and it had implications of establishing the standard logical attributes such as construct validity of the study which was critical in establishing the validity claims of the study (Creswell, 2013). The effectiveness of a research design is heavily influenced by its ability to deal with a logical problem (Yin, 2014). This means that the research articulates issues in a bid to assess the research problem, questions and hypothesis to avoid flawed conclusions, hence- researchers need to take extra precautions when selecting the most appropriate approach for the study.

5.2.2. Philosophical Assumptions

Implicit in management science research is a range of philosophical assumptions regarding the nature of the business world (Meyer & Meyer, 2017). This includes assumptions around reality, knowledge, and human nature, the purpose and process of research (Leedey & Ormrod, 2013; Bilal,

Naveed & Anwar, 2017). The views are central to research design focusing on testing the hypotheses. There were several philosophical assumptions underpinning the research which were considered in this study. The philosophical assumptions were the ontological, axiological, epistemological, rhetorical and the methodological assumptions. The research paradigm revealed the philosophical assumptions on strategies for re-engineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe. As such, the study was guided by the research onion model in figure 5.1.

Figure 5.1 Onion Model
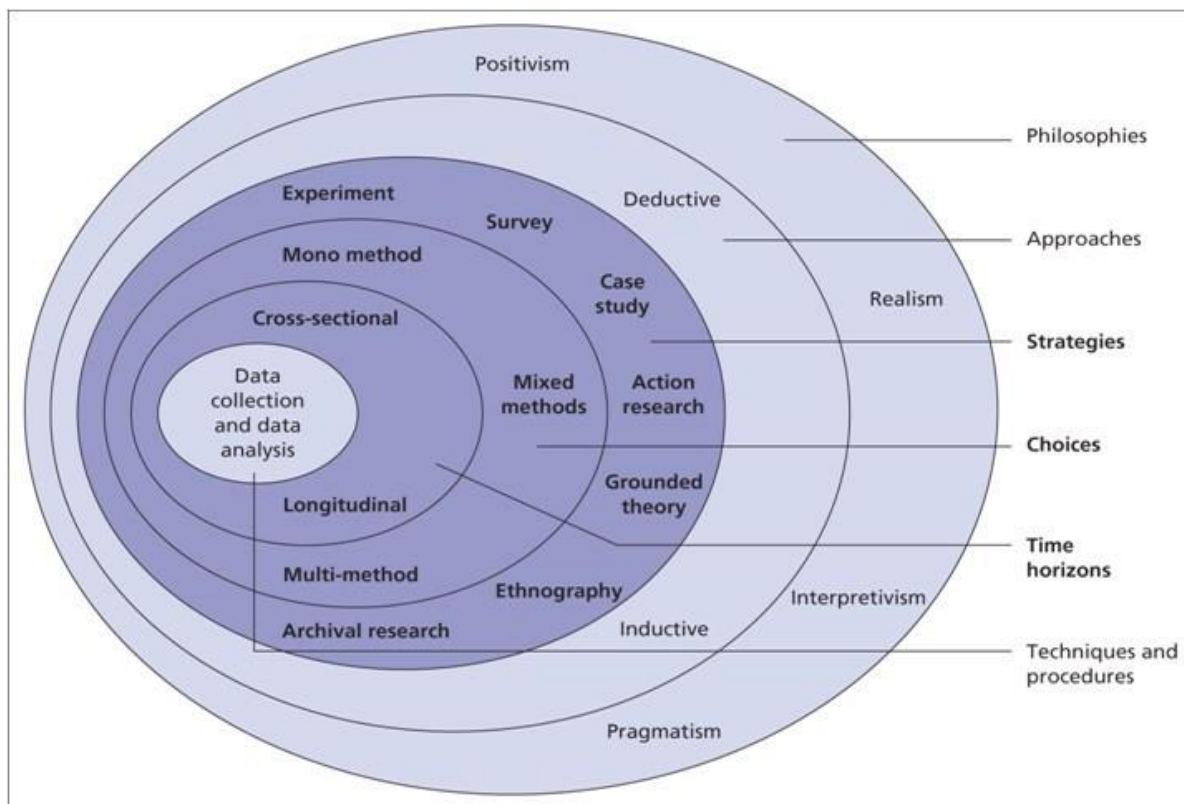
Source: Saunders, Lewis & Thornhill, 2013

In management sciences, humans react to the knowledge produced by studies and they can get feedback into the situation and interfere with the explanations and predictions of the investigation (Saunders, Lewis & Thornhill, 2013). The philosophical assumptions affected this study of strategies for re-engineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe as discussed below;

- **The Ontological assumption** of the research study by nature of reality was socially constructed by the participants. It was also subjective as well as being multiple as this may change over time.

- **The Epistemological assumption** of strategies for re-engineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe was regarded as acceptable knowledge of the study which has subjective meanings of participants and a social phenomenon where the researcher focused on the situation and reality of the under study as was articulated by Saunders et al (2013).

- **Axiological assumption** was the researcher's view on the role of the values in this study .The assumption was that the research study was value- bound as the researcher was part of what was being studied as the researcher cannot be separated from the phenomena under study. The researcher value influenced the study in a very subjective manner since the researcher comes from the Eastern Highlands, Zimbabwe, which is the agricultural hub of Zimbabwe. In terms of exploratory paradigm, the researcher was influenced by own values and was value laden. The positivist perspective was that the researcher was unbiased and value free as discussed by Creswell (2013).

- **The Rhetorical assumptions** of strategies for re-engineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe were quantitative and descriptive, where it was permissible to explain the results and presentation of data. In terms of the research philosophy of descriptive, the language was formal with evolving decisions and the use of quantitative techniques was acceptable as discussed by Creswell (2013). However, in terms of the research philosophy or paradigm of positivism, the language of research was formal based on a set of definitions and the use of quantitative words was acceptable as discussed by Creswell (2013).

- **The Methodological assumptions** study of strategies for re-engineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe used quantitative research approach and an in depth investigation using an average sample as discussed by Saunders et al (2013) .In terms of the research philosophy or paradigm of descriptive research philosophy was a waterfall (deductive) process with mutual simultaneous shaping of factors as well as

merging the design, with categories which were identified during the research process; context bound patterns and theories which were developed for comprehending the study. The accuracy, validity and reliability were established through a verification process. Thus in terms of the research philosophy reality was subjective and multiple as seen by the participants in this research study of strategies for re-engineering SMEs in the agrarian sector in Zimbabwe.

5.2.3. Research Strategy

The research strategy used was a quantitative methodological approach to explore the effects of reengineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe. The fundamental nature of this study is to elucidate a decision taken, how it is implemented, and with what outcomes. The conceptual model in Figure 4.4 demonstrates the theoretical conduit drawn from the literature to test the hypotheses since the conceptual framework combined all aspects of knowledge needed for such a multi-disciplinary theme (Bryman, 2015; Khankaew, Ussahawanitichakit & Raksong, 2015). The conceptual model supports in quantifying the data for purposes of explaining the causal relationships. Although this study was dominated by a quantitative approach, where data collection using questionnaires was considered to be an exhaustive manipulation of all the measured variables .Moreso, the quantitative data sourced from the scientific inquiry helps to illustrate the level of significance of the relationships of the phenomenon (Yin, 2014; Apuke, 2017).However, Dominguez and Hollstein (2014) assert that it is prudent for the study to analyse and analyse data using various data analytical tool.The conceptual model supports quantifying the data for purposes of explaining the causal relationships. Thus, the detailed outcomes from a quantitative scientific inquiry have motivated the need to examine strategies for re-engineering SMEs and the results required the government to boost the agrarian sector by incrementally re-designing SME linked policies to promote the development of SMEs in the agrarian sector to achieve food security Zimbabwe.

5.3. Research Context

5.3.1. Eastern Highlands, Zimbabwe

Zimbabwe was known as the 'Breadbasket' of Africa, and the motivation is buoyed by agricultural SMEs' activities in the Eastern Highlands (Finscope MSME Survey, 2012; Government of Zimbabwe.2014). The Eastern Highlands is in Manicaland Province of Zimbabwe and it is sustained

by agricultural SMEs activities and, over 70% of its population is dependent on agriculture. The agrarian sector accounts for over 30% of merchandise exports and it supplies raw materials to the manufacturing sector (Zimstats, 2014). According to the Encyclopedia of the World (2016), the Eastern Highlands forms the border with neighboring Mozambique and extends for 320 kilometers. The Highlands have an imperturbable typical weather with superior rainfall. This range of special types of environment results in an opulent agricultural life. The Eastern Highlands is also rich in animal life and irresistible to practising massive agriculture (Zimstats, 2014). This study concentrated on the Eastern Highlands of Zimbabwe since it has fertile land suitable for agrarian activities. This has motivated the researcher to explore strategies for re-engineering the growth agrarian SMEs as an intervention to improve food security (WFP, 2014).

The foundation of the study encourages government to boost the agrarian SME sector initiatives to create food security and export earnings, accompanied by investment opportunities which could turn around the Zimbabwean economy and engender the growth of the SMEs. Figure 5.1 depicts a fairly simplistic interpretation of the settlement patterns in the Eastern Highlands by indicating the urban core, urban periphery and rural settlements. Administratively, the Eastern Highlands is divided into seven (7) districts, which are Nyanga, Vumba, Mutare, Honde Valley, Chipinge, Chimanimani and Cashel Valley. The choice of these districts in Manicaland was chiefly influenced by the researcher's prior work in the area which minimized accessibility challenges. The researcher has been working with SMEs in the Manicaland province through a number of government and non-governmental initiatives. In selecting the districts, the choice was based on the recorded volume of farming activities in the province and the areas endowed with culture and natural resources endowments. SMEs in this area practise citrus, poultry and potato farming, among an array of other farming activities. The region offers exciting farming opportunities for SMEs. Figure 5.2 reflects the landscape of the Eastern Highlands.

Figure 5.2: Map of the Eastern Highlands in Zimbabwe

Source: Zimstats 2014

The Eastern Highlands's strategic location along the border with Mozambique means it is an important center of trade in history ((Berg, Mrrewijk &Tamminen, 2018). Each of the districts is under a district administrator and large tracts of rural land fall within the traditional settlement areas. Farming communal activities are regulated by the District Administrators, whilst issues concerning the traditional welfare, family and inheritance land disputes are the prerogative of the chiefs (Dzinotizei, 2019).

Table 5.1: Eastern Highlands Landscape

Area	Topography	Climate conditions	Soils	Type of Farming
Prime agrarian land with surface area of 36,459 km² with verdant hills cloaked in mists.	Lush greenery hills and fast flowing streams. Moist agricultural fertile land on watered slopes. Annual cultivation land where the slopes are less than 12%. The topography vary from 915meters and soars to 2592 meters.	Cooler and wetter climate with high rainfall, heavy mists and dew from the Indian Ocean. A sub-tropical climate with mean temperatures ranging 9-12 degrees. Maximum temperatures ranging 25-28 degrees. The annual rainfall is 741- 2,997mm	The red soil acrisols and ferralsols are suitable for agriculture and related to the underlying rocks giving rise to agricultural activities. The soil is good for evergreen pastures	Citrus Estates Dairy Cash Crops Market garden Horticulture, etc.

Source: The Government of Zimbabwe, 2014

5.4. An Overview of the Agrarian SMEs in the Eastern Highlands

There are various agricultural activities practised by SMEs in the Eastern Highlands which include growing cash crops like maize the staple food, piggery, fishery, poultry, feed-making, chemical production, veterinary services, making animal products and engaging in horticultural activities (Mutambara, 2016). As such, the SME markets in Zimbabwe comprise domestic and far afield consumers (Berisha, Justina & Pula, 2015).

A comprehensive literature review elucidates why SMEs in agriculture are at the heart of the Zimbabwean economy (Bindu & Chigusiwa, 2013; Chingwaru & Jarkata, 2015). Agrarian SMEs in the Zimbabwe generally bore the brunt of international economic sanctions. They mainly depend on social capital (relying on trust, goodwill and linkages created over decades of close association), for funding and access to markets (Evans, 2018; Arunachalam et al., 2018). In certain instances, agrarian SMEs would get all the necessary support in the form of money, intellectual support, and

any other form of help from friends and relatives to support their farming initiatives (Grabowski et al., 2016), From this perspective, SMEs have high annihilation rates with most of them failing to exist beyond success stages. However, SMEs in the Eastern Highlands area are being hailed for their resilience in a turbulent economy.

From this perspective, SMEs have high annihilation rates with most of them failing to exist beyond success stages. However, SMEs in the Eastern Highlands area are being hailed for their resilience in a turbulent economy. On average, the most of the populace (70%) is engaged in agricultural production and the remaining 30% of the population are employees in the central government, council and private organizations. According to a Finscope MSME Survey (2012), the SME sector contributes 60% percent to GDP in Zimbabwe (RBZ, 2012). In recent times, engaging strategies for reengineering is a fundamental move because it engenders SMEs to grow and become TNCs. As such, opportunities for this sector in the Eastern Highlands include the availability of high potential agricultural land and market opportunities (USAID; 2012; IFAD, 2013). It is argued that high levels of SMEs productivity promote higher nutrition, thus leveraging livelihoods to reduce poverty (Mugozhi & Hlabiso, 2017). The agricultural SMEs in this area are not providing enough food and failing to grow due to lack of inputs, land, transport, drought, and lack of government policy implementation (Anseeuw, Kapuya & Saruchera, 2012). Although the Zimbabwean industry derives inputs from agriculture, the sector needs to meet the supply and demand curvature and the failure of SMEs in the Eastern Highlands is high. A myriad of challenges has inhibited the lateral growth of SMEs in Eastern Highlands. According to Jason (2012) the SMEs owners lack managerial skills which are critical to stimulate their growth (Nyamwanza, Paketh, Mhaka, Makaza &Moyo, 2015).

Table 5.2 represents the ratio of agricultural and non-agricultural SME activity distribution in the Eastern Highlands in Zimbabwe. The Eastern highlands area in Zimbabwe dominantly falls within agro-ecological regions 1 and 2, which regions are characterized by good red or black soils that are rich and appropriate for agro based SMEs. The regions are also characterized by appropriate rainfall patterns that are capable of supporting diverse horticultural crops such as potatoes, macadamia, citrus, bananas and pineapples. This is a characteristic that is only unique to the research area compared to other productive communities in Zimbabwe.

Table 5.2: Ratio of Farming to Non Farming SMEs in Selected Communities in the Eastern Highlands

AREA	FARMING (%)	NON-FARMING (%)
CHIMANIMANI	65	35
CHIPINGE	62	38
MUTARE URBAN	40	60
CASHEL VALLEY	61	39
NYANGA	76	24
HONDE VALLEY	70	30
VUMBA	70	30

Source: Zimstats, 2017

According to a Finscope MSME Survey (2012), generally the agrarian SME sector in Zimbabwe contributes 60% percent to the GDP (Mangudya, 2016). In recent times, engaging strategies for re-engineering is a fundamental move because it engenders SMEs to grow and become TNCs. As such, opportunities for this sector in the Eastern Highlands include the availability of high potential agricultural land and market opportunities (USAID; 2012). It is argued that high levels of SMEs productivity promote higher nutrition, thus leveraging livelihoods to reduce poverty (Mugozhi & Hlabiso, 2017; Maksimov, Wang & Luo, 2017).There is a limited supply of food products by the SMEs in this area due to a number of factors, such as lack of untimely supply of inputs, training and mechanization among others (Yang et al., 2013; Chamberlin, Jayne & Headey,2014), Although the Zimbabwean industry derives inputs from agriculture, the sector needs to meet the supply and demand curvature and the failure of SMEs in the Eastern Highlands is high. A myriad of challenges has inhibited the lateral growth of SMEs in Eastern Highlands. According to Arafeh (2016) the SMEs owners lack managerial skills which are critical to stimulate their growth (Nyamwanza et al., 2015; Kiseľáková et al., 2018).

Because of their small investments, many SMEs do not undertake large projects. Chinamasa (2016) posits that the culture of SMEs is heavily influenced by owner managers. SMEs in agriculture provide food security which underlines the importance of reengineering them to improve

productivity and stimulate economic growth. The SMEs in the Eastern Highlands have minute impact on output, leading to reduced turnover inhibiting their growth (FAO, 2014). In the Eastern Highlands, it is difficult to acquire land, rentals are high and most leases are expensive and frequently paid in advance. This affects the extent to which SMEs can get funding from commercial banks, as well as the extent to which they can make long term investment in the farming business as long as they don't have ownership (Jayne et al., 2015), The government therefore must find a lasting solution to the land tenure issue, by giving land rights to landless SME farmers so that they will be able to optimize their productivity. The regulatory framework is not accommodating the emerging needs of the sector. As eluded, the focus is to determine the impact of strategies for reengineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe.

Agricultural SMEs in the Eastern Highlands are characterized by employment creation and asset base of about 6000 to 12000 ZW Dollars (SMEs Amendment Act of 2011). The Finscope MSME Survey (2012) reports that the Eastern Highlands has 24, 941 SMEs owners and accounts for about 80% of the workforce. Table 5.3 captures only actual changes that happened in the areas of interest to the study.

Table 5.3: Total SMEs in the Region over a 3-Year Period.

	YEAR		
AREA	2017	2018	2019
Chimanimani	4745	5833	6002
Chipinge	6433	6566	6744
Mutare Urban	11099	12700	13024
Cashel Valley	4643	3854	4888
Nyanga	5176	6255	7444
Honde Valley	4223	7565	8899
Vumba	5665	6765	7988

Source: SMEAZ, 2019

The trends in Table 5.3 reveal that there has been a net increase in the number of operational SMEs in the research area. The contribution of the agro SMEs has been great in view of an increased

uptake of agriculture to improve household incomes and fostering development. The lack of employment even for the well-educated citizen has seen more and more youth venturing into all sorts of agrarian SME-related activity linked to crop production and animal husbandry.

5.4.1. Rationale for Re-engineering SMEs in the Eastern Highlands

The new paradigm for SMEs in the 'missing middle 'calls for re-engineering process since the re-engineering strategy has originated from scholars in the field of science management (ASMEC, 2013; Meyer & Meyer,2017). Bokor (2017) the aim of re-engineering SMEs in the agrarian sector is a key process to attain food security, improve livelihoods, generates employment and poverty reduction. Furthermore, Bokor (2017) asserts that the core of re-engineering SMEs is based on three pillars which are:

- Capacity for SMEs to compete using technical infrastructure
- Capacity to use information systems
- Capacity to execute changes in response to dynamic forces

The aforementioned author sums up that re-engineering is widely handled through a combination of government support and the management approaches of SMEs. This argument suggests that re-engineering the SMEs will contribute significantly to achieving key policy objectives, in the short term. In the same vein, re-engineering plays a dynamic role in increasing opportunities for SMEs and opening up of new markets to engender their growth (Bahramnejad, Sharafi & Nabiollahi, 2015). With growing awareness on re-engineering the cusp of re-engineering   using modern approaches to turn around the performance of SMEs stimulates their evolution (Al-Matari, Abdullah & BtFadzil, 2014; Chikere & Nwoka, 2015).

5.5. Targeted Population

Wangombe (2013) defines the targeted population as the group of substance, having familiar observable characteristics and it is a homogeneous element that possesses the information sought. In this study, Eastern Highlands have a high concentration of agrarian SMEs. Table 5.4 shows the demographic distribution of all the areas in Manicaland province.

Table 5.4: Demographic Data of Manicaland Province

Area	Micro	Small	Medium
Vumba	2981	425	129
Nyanga	2892	519	211
Honde Valley	3802	1208	526
Mutare	5057	1212	833
Chipinge	2243	817	236
Cashel Valley	1576	454	129
Chimanimani	2821	709	522
Rusape	1875	1426	459
Makoni	1902	599	107
Mutasa	1852	497	291
Buhera	1716	345	241
Burma Valley	1604	593	175

Source: SMEAZ, 2015

The selection of this area as a positivist approach, which afforded the researcher the opportunity to survey agrarian SMEs since they have been receiving government support and they also share intriguing experience (Yin, 2014; Saberi & Hamdan, 2019).Above all, the researcher comes from this region and is both a communal farmer and an entrepreneur. As such, the researcher possesses rich knowledge on SMEs and agriculture. The approach used by the researcher is a cost cutting measure, considering the limited time frame of this study. The data was sourced from SME owner-managers, SME employees, SME policy-makers and agrarian SME owners in the Eastern Highlands who were used as the population of interest. Zimbabwe has 1,182, 023 SMEs and the 24, 941 agricultural SMEs in the Eastern Highlands were used as the population of interest (Finscope MSME Survey, 2012).

5.6 Sample and Sampling Procedures

Rahi (2017**)** asserts that a segment of a research population whose characteristics are measured by behavioral patterns of the whole population is a sample. In this study, a survey was conducted to gather information using two structured questionnaires.

One questionnaire was developed for key informants in agricultural policy-making and implementation. Another questionnaire was administered to agrarian SMEs operators and the participants in the survey were reached through research assistants, who are students studying (agriculture) at Magamba Training Centre in the province (Dominguez & Hollstein, 2014; Apuke, 2017). Therefore there is no need to train them on how to collect data since they reside in the

province. The rationale, therefore, behind the inclusion of policy- makers in the study was because they are knowledgeable about policies affecting the growth and sustainability of agrarian SMEs. Policy-makers contribute to the implementation of the government policies. Data collection was carried out over a period of three (3) months from February 2019 to April 2019. The researcher was assisted in the process by the Agritex Field Marshals in each district to identify the most ideal and experienced respondents. Data collection from the SMEs and policy makers was made possible through the use of research assistants, who were recruited from the nearby Magamba Agricultural Training Institute in Eastern Highlands (Manicaland), since they had vast background knowledge of SMEs in the agricultural sector. Through this team, 126 questionnaires were administered per month ((Etikan & Bala, 2017).

5.6.2 Sample and Sampling Procedures

Bacon-Shone (2020) asserts that a segment of a research population whose characteristics are measured by behavioral patterns of the whole population is a sample. This study was a survey conducted to gather information using two structured questionnaires. One questionnaire was developed for key informants on agricultural policy making and implementation. The second questionnaire was developed for agrarian SMEs and the participants were reached through by research assistants who administered the questionnaires and follow up was one through what's-app, telephone and Electronic mail (Dominguez & Hollstein (2014). The rationale behind the inclusion of policy-makers in the study was because they are knowledgeable about development and implementation of policies affecting the growth and sustainability of SMEs.

Data collection was carried out over a period of three (3) months from February 2019 to April 2019. The researcher was assisted in the process by the Agritex Field Marshals in each district in identifying the most ideal, data rich and experienced respondents. Data collection was made possible through the use of research assistants, who were recruited from the nearby Magamba Agricultural Training Institute in Eastern Highlands (Mutare Urban) who had vast background knowledge of the agricultural SMEs. The researcher administered, through this team, 126 questionnaires per month.

5.6.3 Sample selection

The sample depends on the rationale of the investigation in terms of what credibility is required, what is useful for the research, what is at stake and what can be done within available time (Etikan & Bala, 2017; Bacon-Shone, 2020). It is also an illustration of targeted population, comprising all

potential members (Dominguez, 2014). The selected sample was impartial and completely represented the agrarian SMEs population in the Eastern Highlands.

5.6.3.1 Sampling Procedure

Sampling procedures describe the steps that were taken when determining sample size and the subsequent administration of the sample collection tools. 380 SMEs were selected using purposive (judgmental) sampling technique and 30 policy-makers were selected using simple random sampling technique to give a total sample size of 410 participants that was appropriate for the study(Saunders et al 2013;Magwa & Magwa,2015; Apuke,2017). The use of purposive sampling was based mainly on the discretion of the researcher, as the quality of data to be gathered was not available to anyone. It was a result of experience in the area and other qualities such as knowledge about the farming activities commonly practiced in the Eastern Highlands. The strength of the purposive sampling procedure lies in that it permits the selection of respondents whose qualities and experiences gives way to an understanding of the phenomenon in question making it valued (Rahi, 2017). In addition, purposive sampling helped the researcher to focus on policy-makers with expertise and rich insight into the issues under study. In that regard, it helped in saving time and resources that could have been used to address respondents with no or little knowledge about the research.

Of the 380 questionnaires distributes to the SMEs, only 248 were usable and only 20 policy-makers out of 30 were readily available and willing to complete the questionnaires **(**Etikan & Bala, 2017).

5.6.3.2 Agrarian SMEs Sampling

Random sampling method was used, in which the SMEs were stratified, based on their crops; years in farming and average output per year, which information was obtained from the Agritex Field Marshals' annual records. Within each stratum, random selection was done to select individual participants and this resulted in a representative sample of 380 participants from the SME sector (Magwa & Magwa, 2015).

5.6.3.3 Sampling for Policy- Makers and Agritex Field Marshals

A total of 30 policy- makers and Agritex Field Marshals, were purposively selected for the study based on the following:

- Their long existence in the community meant that they understood the socio economic dynamics of SME farmers in their community
- According to the database at the District offices, there is at most one Field Marshal per ward. The total number of Agritex Field Marshals could not exceed twenty from the research area because the agrarian SMEs are dominantly concentrated in agro-ecological regions 1 and 2 as reflected on Figure 5.2. As such, these areas usually span a limited number of wards, two to three only.
- They complete and keep comprehensive records of individual SME farmer's productivity, thus, making them a reliable source of information.

A questionnaire specifically designed for these professional Agritex Field Marshals was thus administered and subsequently analysed along with the responses from agrarian SMEs. Only 20 out of an anticipated 30 questionnaires were successfully completed and returned by Agritex Field Marshals, chiefs, councilors, and ward development co-coordinators.

Before a sample is randomly chosen, it was necessary to have a population from which to choose the sample size. Rahi (2017) observes that the sample may be in two ways; the first is to make assumptions about the population to establish the sample range so that the degree of confidence for the study is identified (Silverman, 2013). In the same way, the rule of the thumb was applied; because the statistical technique/s to be employed suggests a range of sample sizes. In this study, two levels of sampling were employed (Bryman (2015). Firstly, the study areas were selected and the secondly, participants who included SMEs, policy- makers and Field Marshall, were selected.

5.6.3.4 Sample Size: Policy- Makers and Agritex Field Marshals
5.6.3.4.1 Purposive Sampling
The first step was selection of the districts in the Eastern Highlands which would be included in the survey. Purposive sampling was applied which is useful in providing a wide range of non-probability sampling based on the population characteristics and study objectives (Etikan & Bala, 2017; Bacon-Shone, 2020). It also provides as much insight as possible in the shortest period of time, since it is an acceptable kind of sampling for particular circumstances to quickly reach a targeted sample and draw conclusions. The study covered seven (7) districts in the Eastern Highlands (Nyanga, Vumba,

Mutare, Honde Valley, Chipinge, Chimanimani and Cashel Valley).These were chosen because the SMEs are in clusters (Kamoyo, Mavhima & Muranda, 2014; Wolfe & Gertler, 2016).

The inclusion of 30 policy- makers in the study is because they are responsible for policy formulation, implementation and evaluation and they work with SMEs on a regular basis.

5.6.3.4.2. Sample Size: Agricultural SME sector

Simple random sampling technique was employed to choose the sample from the SME sector to participate in the study. The sample was representative, because the uniqueness of an appropriately drawn sample symbolizes the mother population encompassing the study area which is Nyanga, Vumba, Mutare, Honde Valley, Chipinge, Chimanimani and Cashel Valley. The sample from these districts was representative because the uniqueness of an appropriately drawn sample symbolizes the population in every way. The distribution of the population and the major demographic data is common in the whole of the Eastern Highlands, due to the spread of a common culture, social values and the social fabric that cuts across all the areas under study (Kumar, 2014; Etikan & Bala, 2017). From the sample information, if the population is greatly varied, then the sample needs to be large enough to improve the accuracy of results. However, equivalent estimates of the targeted population were done. A large sample gives a small margin of error; therefore, a confidence interval of 95 % was employed to estimate the likely size of a population parameter (Kumar, 2014; Creswell, 2013) and Bryman (2015) assert that a sample range must factor time, cost, accessibility and accuracy. The aforementioned were considered in determining the final sample.

Etikan and Bala (2017) disagree with that and posit that in a survey, a selected sample size depends on an acceptable error of a population size. Therefore, the tolerable error informs how accurate the findings are. The study used statistical computations to establish the best possible representative sample range from the research population (Wangombe, 2013). The tolerable margin of error is 5% and the level of confidence is 95% and standard deviation .5. The sample size for the agrarian SMEs was determined using the simple random arithmetical method since the extent of the population is well- known to be 24941(Creswell, 2013). Kumar (2014) and Wangombe (2014) state that to control a sample size statistically from a population, the confidence interval estimate was the likely size of a population parameter and the level of confidence was to determine the risk of error which the

researcher acknowledged in the study. The establishment of the sample size follows a formula that was established by Etikan and Bala (2017) which is shown below.

5.6.3.5 Establishment of Sample Size

The aforementioned authors postulated that a finite population size is less than 100,000, thus, the study employed the following statistical equation:

$$n_0 = \frac{no}{1 + \left(\frac{no-1}{N}\right)} \text{----------------- (1)}$$

Where **n** is the sample size; **n0** is the determined sample size that was reduced slightly for a precision sample to be achieved; and **N** is the target population. In this circumstance **n0** = 385and **N** = 24, 941 and was substituted statistically as follows:

At the time of the study, there were seven (7) districts within the Eastern Highlands of Zimbabwe which are Nyanga, Honde Valley, Mutare, Vumba, Cashel Valley, Chimanimani and Chipinge. The proportional allocation of representatives was determined as follows:

$$n0 = \frac{385}{1 + \left(\frac{385-1}{24941}\right)} \qquad (2)$$

$$= \frac{385}{1.0153964}$$

$$n = 379.1622$$

$$\mathbf{n}\text{eff} = \frac{379.1622}{7}$$

$$= 54.166 \text{ per district.}$$

5.7. Data Collection

5.7.1. Pilot Study

The preliminary survey or pilot study (Bacon-Shone, 2020) was conducted from October to November 2018. The pilot questionnaire contained a battery of questions designed to test the ability of the questionnaire to capture accurately the intended data for this study. The primary aim was to

check the questionnaire's reliability. The questions were designed and aligned to the main research question and objectives, so that statistical inferences could be made that would enable the testing of the research hypotheses.

The pilot test was carried out in Rusape and a total of 10 questionnaires - six (6) were distributed to SMEs and four (4) to policy-makers. The policy-makers completed the questionnaires at the District Office, whilst the other (SME) questionnaires were administered by the researcher and an assistant (Bacon-Shone, 2020). Respondents were assured of their privacy and confidentiality in relation to the responses they provided in accordance with the ethical guidelines of UKZN.

The collated data was analysed using the SPSS V17 package. The alpha values were all above 0.7; however, there were some questions that had to be modified to improve their internal consistency. The data did not yield too many out of context responses but there were challenges in the ability of respondents to comprehend and accurately respond to some terminologies used in the questionnaire. The responses from these self-administered questionnaires were very positive with minor issues around the clarity of specific terms used to describe some research constructs like growth, food security, re-engineering and economic growth. Some respondents understood the context of the study, which the researcher recognized as critically important. In the final questionnaire this issue was addressed. The insights from the pilot study were used to resolve issues that were identified to be a challenge in terms of reliability, accuracy, effectiveness and efficient administration of the questionnaire. The wording of the questionnaire was improved using the hessians Eigen values which were used to eliminate errors and unwanted questions. This was applied to rotate the result back to the original basis which gives a randomized estimate complete to model original data in a satisfactory manner. This process provided greater clarity on the questions and also improved the quality of responses from the respondents (Rahi, 2017).

The researcher concurs with Kumar (2014), that the pilot survey was an indispensable research procedure that made it possible to test and refine aspects of the final data collection and analysis procedures. Thus, the questionnaires for the SMEs and policy-makers were pre-tested to establish their suitability before being adopted and deployed as final questionnaires for administration (data collection).

139

Magwa and Magwa (2015) elucidated and recognized that issues (inconsistencies and inadequacies) in questionnaires were always supposed to be based on the respondents' feedback so that the final questionnaire is reformulated for validity and reliability. The pre-exercise presented insights into the phenomenon to ensure that errors were resolved at minimum cost.

The pilot study was carried out in the Nyanga area, using 10 questionnaires (7 for agrarian SMEs and 3 for Policy- Makers) and this enhanced the quality of the final questionnaire used in the major study. The questionnaires were distributed to the chosen SMEs and the collected data were evaluated to determine the reliability of the variables under study (Kumar, 2014). The pilot study showed that certain questions had some ambiguity and the respondents did not have a common understanding of some of the questions. These were restructured to provide for a common meaning to the research participants. Some of the questions in the questionnaire were re-worded whilst others were completely re-structured. The responses indicated that the predictor, mediator, and outcome variables were acceptable. The pre-research exercise also managed to test the strength of the questionnaires in collecting information which is effective for the study (Creswell, 2013). The pilot survey allowed instituting the time required to conduct the research. Furthermore, the pilot study revealed significant relationships between the variables under study and this increased the experience of the researcher to be conversant with quantitative studies (Zikmund, Babin, Carr & Griffin, 2013). For example, the pilot pointed out that output was chiefly influenced by the kind of support that the SMEs would have received. It provided the researcher with the opportunity to identify any shortcomings in the research environment, in order to develop strategies to prevent errors from occurring during the main research. This was done to check whether all questions and instructions were clear, and that items that did not yield suitable data were eliminated (Wangombe, 2014). This trial was a forerunner to the main data collection process.

A great deal of focus was given to the reliability and validity of the research. The process involved checking data accuracy before starting the research. Without reliability, the study would be insignificant as it loses its value and becomes an imaginary tale. As such, in the pre-research exercise, the responses indicated that the predictor, mediator and outcome variables were acceptable for the study and were to be repeated at a later date. The pilot study provided the opportunity to

identify the shortcomings of the environment and build up precautions to prevent errors during the main research (Magwa. & Magwa, 2015).

5.8. Research Tools

The procedure of constructing a research technique involves scheming how the research data is composed from the sample under study (Saunders, Lewis & Thornhill, 2013). The study was conducted using primary and secondary data sources which are pragmatic in coming up with effective results.

5.8.2. Questionnaires

The researcher used two different structured questionnaires (Appendices A and B) to gather data using a research sample from agrarian SMEs as well as policy-makers and Agritex Field Marshals. The questionnaire approach was adopted because it was the most practical way to reach a large number of respondents which could be analysed statistically and produce acceptable research (Bacon-Shone, 2020). Questionnaires also enabled the efficient data collection from the primary source, making them more accurate. This approach was also considered time effective, since the researcher had limited financial and manpower resources to reach out to a larger sample population (Jiang et al., 2018). Kumar (2014) asserts that structured questionnaires build up the technique of data collection and are a form of laid down questions targeted at a certain population to gather the required data. The researcher used a survey to collect data from the policy- makers, Agritex Field Marshals and SMEs in the Eastern Highlands through research assistants who had knowledge in agriculture, as such the distribution of the structured questionnaires was made easy and accessible to the responents.Another weakness of questionnaires was the lack of control over the respondents' environment (Chamberlin, Jayne & Headey, 2014). Hence, one cannot be sure that the right respondent completed the questions, as the survey questionnaire assumes that all respondents are literate. A review of the questionnaire was done to increase accuracy and precision before carrying out the study (Rahi, 2017).According to Kumar (2014), questionnaires as primary sources of data were used to solicit information from the respondents because they are easier to construct, cheaper to administer and are very useful in collecting large amounts of data (Wangombe, 2013). As such, the questionnaires were developed in two formats. Table 5.6 reflects the questions asked to SMEs.

Table 5.5: Content of the Questionnaires for SMEs

Section	Questionnaire A: for SMEs	Justifications For Using The Questions
A	The Questions looked at the socio-demographics of the respondents such as their gender composition, age ,position at work and their qualifications	The reasons for these questions was to ascertain the extent to which the socio-demographics of SMEs employees such as gender composition, age, position at work and their qualifications affected the growth and sustainability of SMEs. Aspects such as gender distribution, age range and distribution and work experience all play a significant role in determining the growth and sustainability of SMEs (Bilal, Naveed & Anwar, 2017; Fidrmuc & Gundacker, 2017 Eijdenberg and Masurel, 2013).
B	The questionnaire explored the current status and challenges being encountered by agrarian SMEs. The geographical location of SMEs, their categories, significant changes in number of employees since inception. It explored the ownerships structure number of years the SME has been in existence, source of funding, percentage ranges indicating the SME productivity sequence.	Section B was to determine the extent to which agricultural SME challenges helped inform SME policy development (Majoni, Mutunhu & Chaderopa,2016; AlBuraiki & Khan,2018) Furthermore the researcher will explore more information on the geographical location of SMEs, their categories, significant changes in number of employees since inception, the ownerships structure, and number of years the SME has been in existence, source of funding and the percentage ranges indicating the SME productivity sequence(Sujová & Čierna, 2018).These questions had the ability to bring out levels of growth and development of individual SMEs and to be able to determines which categories of SMEs were performing well. This would make it possible to establish whether SMEs need re-engineering in terms of policy intervention and support (Bokor, 2017; De Oliveira & Jabbour, 2017).
C	The questionnaire assessed the extent to which government policies impact on the growth of SMEs and sought to. address the challenges being encountered by SMEs. It assessed whether government policies have been successful in re-engineering the growth of SMEs or not.	The questions in section C was intended to determine the extent **to which** government policies promoted the growth of agrarian SMEs. The questionnaire assessed the extent to which government policies impact on the growth of SMEs and seeking to address the challenges being encountered by SMEs (Nyamwanza et al., 2015; Bomani, Fields & Derera, 2015; OECD, 2016). It assessed whether government policies have been successful in re-engineering the growth of SMEs or not. The questions also provided insight into the perceptions about the type, relevance and applicability of government policy interventions and whether these policies were being formulated, implemented and evaluated in line with expectations of the SMEs (Eniola & Entebang, 2015; Maunganidze ,2013; Saberi & Hamdan,2019),

D	The questionnaire evaluated whether an array of agricultural support mechanisms and sustainable measures influence the growth and sustainability of SMEs or not	Section D served to ascertain to what extent government agricultural support mechanisms (inputs, support programs, tractors (Jayne & Rashid, 2013), infrastructure, land ownership and capital among others (Saberi & Hamdan, 2019; Doss et al., 2015.), stimulate the growth and sustainability of agrarian SMEs. The questions asked in this section of the questionnaire were relevant for establishing whether there had been a "return on investment" on the government support initiatives (Saberi & Hamdan, 2019).
E	The questionnaire looked into whether existing SME development strategies and uptake of technologies re- engineer the growth of SMEs. The questionnaires looked into whether the impact of re-engineering influences the growth of SMEs and overall economic growth	The questions in Section E served to find out to what extent the existing SME strategies have been used to expedite the sustainable growth of agrarian SMEs (Bilal,Naveed & Anwar, 2017; Chikere, & Nwoka, 2015;Durendez,Ruiz-Palomo,Garcia-Perez-de-Lema, & Dieguez-Soto,2016). The questions in this section were thus based on the premise that developing and or evolving SMEs can be said to be growing when they take up technologies and incorporate them into their production processes as a way of improving efficiency (Baporikar, 2017; Bello, 2017). Development strategies implemented by the government that are meant to re-engineer growth and sustainability which must translate into expansion of operations with the evidence of increased usage of current technologies and application of latest best practices suited to the respective category of the SME (Bouazza, 2015; Ighiebembe, 2016).
F	The questionnaire reviewed whether the extent of gender mainstreaming influences the growth of SMEs and assessed whether the inclusion of women promotes food security and nutriment?	Section F questions were to ascertain to what extent gender dynamics influenced the growth and sustainability of SMEs in the agricultural sector. Inclusion of women and girls in mainstream development and economic activity is a modern and appropriate indicator of SME growth as the SMEs re-engineer themselves from being solely dependent on men for their success and shifting to equitable and balanced reliance on established structures and institutions that engender diversity (Broegaard, 2013; Doss et al., 2015;Quisumbing, et al., 2014).
G	The questionnaire explored whether knowledge, understanding and effective management of SMEs influence their growth. and sustainability in Zimbabwe	Section G was to find out to what extent effective management strategies would influence the growth and sustainability of SMEs in the agricultural sector (Ighiebembe, 2016; Brooks, 2014; Chikere & Nwoka, 2015).This section established the significance of education and training on the growth and sustainability of SMEs. This is premised on the understanding that the agrarian sector is constantly evolving , thus, for SMEs to re-engineer themselves, they need to use best practices available on the market (Arunachalam et al., 2018). This can only be possible in the case where SMEs have adequate knowledge systems that are passed along through training and capacity building. The questions also sought to determine the role of Agritex Field Marshals in building capacity of SMEs
H	The questionnaire	The questions in section G were aimed at ascertaining the

| | valuated whether SME re-engineering framework influences the productivity and growth of SMEs | extent to which a SME re-engineering framework would influence the growth of agrarian SMEs. The focus was on establishing whether agrarian SMEs apply good SME management ,re-engineering framework and good governance practices in the conduct of their daily businesses to continuously improve their growth and sustainability (De Oliveira & Jabbour,2017; Khankaew, Ussahawanitichakit & Raksong,2015; Sulaiman., Sheihnaz & Samuel,2016) Good governance practices are an indicator of growth and sustainability among SMEs. |

Source: Researcher's Development

Table 5.6: Content of the Questionnaires for Policy- Makers and Agricultural Field Marshals

Section	Questionnaire A: for Policy-Makers and Agritex Fields Marshals	Justifications For Using The Questions
A	The questionnaire explored the socio-demographics of respondents such as gender, job and experience gained by government officials during their tenure in assisting SMEs to grow.	Section A questions aimed to determine the socio-demographics of the participants, since gender, age and experience tend to inspire the confidence and trust in the Agritex Field Marshals among SMEs (ILemona, 2013; Aremu et al, 2017; Anicic, Vukotic & Krstic, 2016).
B	The questionnaire explored the extent to which SME challenges can help to inform policy review. The questions also asked about the extent of growth of SMEs in Eastern Highlands using several growth indicators	Section B questions determined the extent to which agricultural SME challenges helped inform SME policy review as a means to re-engineer the growth and sustainability of agrarian SMEs (Majoni, Mutunhu & Chaderopa,2016;AlBuraiki, & Khan, 2018). The questions would act as an indicator of the effectiveness of prior policy initiatives that have so far been implemented in the research area (Aremu et al., 2017.
C	The questionnaire assessed the extent to which government policies influence the growth of SMEs. The questions looked at whether government policies in Zimbabwe are addressing economic disparities and re-engineering SMEs in the agrarian sector to improve livelihoods.	Section C was to find to what extent government policies promoted the growth of agrarian SMEs.The e respondents were asked whether government policies in Zimbabwe are addressing economic disparities and re-engineering SMEs in the agrarian sector to improve livelihoods (Nyamwanza et al., 2015; Bomani, Fields & Derera, 2015; OECD, 2016).

D	The questionnaire evaluated the impact of agricultural support mechanisms/sustainable measures	Section D was to evaluate the impact of agricultural support mechanisms (such as inputs, tractors, infrastructure, land ownership and capital among others) (Jayne et al., 2015) on efforts to stimulate the growth and sustainability of agrarian SMEs. Through this section, the researcher would be able to establish the relevance of input support initiatives towards stimulating or sustaining growth of SMEs (Saberi & Hamdan, 2019; Doss et al., 2015).
E	The questionnaire looked into existing SME development strategies to re-engineer the growth of SMEs	Section E aimed to find out to what extent the existing SME strategies have been used to expedite the sustainable growth of agrarian SMEs. Thus, the researcher would be able to establish whether SMEs were being transformed into more formal and large scale establishments and related policy frameworks that have been able to successfully drive SMEs into larger companies (Bilal, Naveed & Anwar,2017; Chikere & Nwoka, 2015;Durendez et al., 2016;Baporikar,2017; Bello, 2017;Bouazza,2015; Ighiebembe, 2016).
F	The questionnaire reviewed the extent to which the inclusion of women and other disadvantaged people in agrarian SME activities promotes the growth of SMEs in Zimbabwe	The reasons for the questions in section F was to find out whether the inclusion of women and other disadvantaged people in agrarian SME activities promotes the growth of SMEs in Zimbabwe. Inclusive development is a key aspect of sustainability. Inclusion of women, girls and the physically challenged in agriculture is a key indicator of re-engineered growth and sustainability of SMEs (Broegaard, 2013; Doss et al., 2015; Quisumbing et al., 2014).
G	The questionnaire explored whether knowledge and understanding of management of SMEs influence or increase the growth, development and sustainability of SMEs in the agricultural sector in Zimbabwe.	Section G served to find out to what extent effective management methods increased the growth and sustainability of SMEs in the agricultural sector. The implications of this section were meant to establish the capacity of Agritex Field Marshals to facilitate technology, information and knowledge transfer among SMEs (De Oliveira & Jabbour, 2017; Khankaew, Ussahawanitichakit & Raksong, 2015; Sulaiman, Sheihnaz & Samuel, 2016).
H	The questionnaire evaluated whether the SME re-engineering framework influences the productivity and growth of SMEs through effective management.	Section G was to find out to what extent a SME re-engineering framework could influence the growth of agrarian SMEs. This question was based on the background of a fragile economic operating environment in which SMEs in Zimbabwe operate which is characterized by currency instabilities and

		constantly changing policy frameworks. It is difficult for SMEs to plan effectively where there is uncertainty. Consistently changing frameworks tend to retard SME growth and sustainability (Nowinˊski & Haddoud, 2019; De Oliveira & Jabbour, 2017; Khankaew, Ussahawanitichakit & Raksong, 2015; Sulaiman, Sheihnaz & Samuel, 2016).

Source: Researcher's Development

The list of questions captured above, were designed to gain the most pertinent facts regarding strategies for re-engineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe and the questionnaire (G) was specifically developed for policy- makers.

5.8.2.1 Questionnaire Standardisation

Questionnaires were standardized before they were administered. The questions were structured in the form of the Likert scale. Firstly, the researcher administered the questionnaires among the team members who would go out to collect data to ensure that they had a common understanding of what each question on the questionnaire entailed, in terms of the quality of responses required. The research assistants in turn, were able to explain the questions to respondents so that they had a clear understanding of some or the entire questions (Apuke, 2017) .The questionnaire for the policy-makers was administered by the researcher at the district offices for consistency.

5.8.2.1. Interval scale

The questionnaires were integrated into interval scales which enabled respondents to provide basic descriptors about themselves and their behavior. The interval scales allowed respondents to articulate their responses from the questionnaires easily. The measurement scales aided the statistical analysis since questionnaires employed Likert scales which required participants to either agree or disagree with a range of questions (Aggarwal, 2016). The other measurements included the calculation of the mean, the standard deviation, t-tests, and other parametric tests (Dominguez & Hollstein, 2014).The questions addressed a variety of factors that contribute to re-engineering the growth of SMEs. After pilot testing, the final questionnaires were distributed to 380 SMEs and 30 of them were redistributed to policy- makers and Agritex Field Marshals in the Eastern Highlands to get firsthand information. Later the researcher collected them for data analysis

5.8.3. Reliability and Validity of Research

To establish the questionnaires' completeness and their shortcomings, a pilot-test was carried out in Nyanga, in the Eastern Highlands of Zimbabwe (Wangombe, 2013; Rahi, 2020). As such, the multi-faceted nature of re-engineering SMEs required rich data around specific issues to capture their contextual complexity.

5.8.3.1. Validity of Research

This process exposed some concepts which the respondents could not understand which required refining the research questions. Validity is the extent to which a measure correctly represents the conceptual model of a study (Creswell, 2013).The soundness of the outcomes denotes that the questionnaire satisfactorily embodies the underlying construct to measure a change in the dependent variable (Dominguez & Hollstein, 2014). Therefore, to ensure the validity of the questionnaire, a KMO and Bartlett's test of spherecity was carried out to test the strategies for re-engineering the growth and sustainability of agrarian SMEs. Kaiser-Meyer-Olkin (KMO) and Bartlett's test was vital in ensuring the representativeness of the study. The Kaiser-Meyer-Olkin was used as a measure of sampling adequacy and Bartlett's test for testing Sphericity of the data collected. The results from KMO and Bartlett's test on on food security, re-engineering the growth and sustainability of SMEs, techno innovative strategies, gender dynamics and management methods used by SMEs, shows that the instrument used was valid. The data collection tool was, therefore, further validated by either increasing the sample size or increasing the variety of questions asked to the respondents until the acceptable KMO and Bartlet test values were achieved (Rahi, 2020). Thus, the instrument was able meet the demands of the research study hence valid data was obtained.

5.8.3.2. Reliability of Research

The Cronbach's alpha was used to establish the reliability of the questionnaire as a measure of the research constructs covered in the topic and objectives of the study. Cronbach's coefficient alpha reliability refers to statistical procedures that measure the internal consistency of an assessment tool (Questionnaire). Thus, according to Apuke (2017), the Cronbach's alpha was determined during the Pilot survey by constantly reviewing the questioning technique to determine whether there was consistency in the questioning technique and that the responses that were being received were able to explain the variability in the dependent variables, that is, SMEs growth and sustainability. Therefore, to ensure the reliability of the questionnaires' on food security, re-engineering the growth and

sustainability of SMEs, techno innovative strategies, gender dynamics and management methods Cronbach's alpha was able to give consistency answers pertaining the area of study through pilot study. The response given shows that the instrument used was reliable. According to Magwa and Magwa (2015), reliability is the degree of consistency between measurements of multiple variables. In other words, are the set of variables consistent with what they are intended to measure? Generally, it is the extent of the accuracy and consistency of research instruments which are assessed by evaluating and as well as using the sampling techniques to weigh the extent to which they reduce ambiguity and minimize bias (Kumar, 2014). The researcher acknowledged that reliability is influenced by endogenous and exogenous factors which affect the reliability. For instance, the respondent error ensured that inferential statistical and descriptive analysis was conducted accurately to determine the sample size. The reliability of an instrument differs from validity in that the former does not relate to what should be measured, but instead to how it is measured (Creswell, 2013). A number of different methods are available for assessing validity and reliability (Yin, 2014). In this study several methods were used to ensure the reliability and validity of the data was attainable.

5.9. Data Analysis

A quantitative analysis according to Saunders, Lewis and Thornhill (2013) is a highly structured research approach that involves the quantification of concepts in order to measure and conduct evaluations. Data were analysed using quantitative statistical techniques (Chi square, ANOVA, Tobit and Regression) through SPSS and Gretel Software. Rahi (2020) adds that quantitative research uses formal questions to elicit adequate relevant information that would test the research hypotheses based on at least two variables (Dependent and Independent variables). According to Wangombe (2014), data analysis shows patterns that may be used to draw general conclusions from the data collected. Quantitative data analysis permits a researcher to gain in-depth approaches into factoring associations of the variables under study (Yin, 2014). This is fundamental as the research seeks to quantify and measure strengths between variables. In other words, Creswell (2013) opines that data analysis is the procedure of bringing order, structure and meaning to the gathered data. The raw data from the response to the questionnaires was captured onto the SPSS software after cleaning. The data was then coded and further subjected to standardization and coding before analysis was eventually done. The process also involved checking for data accuracy, consistency and completeness before entering it onto the data analysis soft wares (SPSS and Gretel). The data from the respondents was collected from all study areas prior to ensuring its legibility and accuracy and,

thereafter, the data was analysed by a statistician using the SPSS software and Gretel software packages. After independently analyzing the data, it was amalgamated by comparing and sanitizing the results of the survey with results obtained from documentary instruments, seeking to minimize bias and ensure the reliability, and validity of the study is sustained (Dominguez & Hollstein, 2014).The following sections discusses in detail multiple regression tests which were used to determine the effectiveness of strategies for re-engineering the growth of agrarian SMEs.

5.9.1. Correlation Analysis

As described by Creswell (2013), correlation is a statistical technique which shows how strongly, the pairs of variables (independent and dependent) is related. The strength of the relationship is determined on a scale ranging from +1 and -1, whereby, an outcome of +1 represents a strong positive relationship between the independent variable and the dependent variable while a value that is -1 represents a strong negative correlation between variables. In this study, correlation analysis using regression analysis was adopted to analyse the strength of the relationship between strategies (policies, government support, management methods, gender dynamics and uptake of technology) for re-engineering the growth and sustainability of SMEs in the agrarian sector in Zimbabwe, with outcomes such as food security, employment creation, etc. Thus, correlation testing involves testing the association between variables under study (Aggarwal & Ranganathan, 2016; Bacon-Shone, 2020; Rahi, 2020).

5.9.2. Descriptive Statistics

Descriptive statistics are utilized to describe and present the basic features of the data received. According to Kumar (2014), it is used to summarise data collected and understanding the information through the use of graphs and frequencies. Thus, descriptive analysis enables the identification of patterns and distribution of data of the study variables through simple summaries and this generally, forms the basis of most quantitative studies (Zikmund, Babin, Carr & Griffin, 2013).The study employed descriptive statistics such as measures of dispersion, measures of central tendencies and the measures of peakedness. Therefore, information obtained from the questionnaires was used to determine whether re-engineering strategies stimulate the growth of SMEs in the agrarian sector in Zimbabwe. Descriptive statistics summarized and or organized characteristics of data collected from the respondents in the form of tables, graphs and numbers or percentages. It used measures of central tendency to estimate the center, or average of data set to show the mean, median

and mode to find the average. Furthermore the measures of variability indicate the spread of the response values in terms of the standard deviation. The next step was to conduct inferential statistical analysis, to decide whether data confirms or refutes the hypotheses and whether it is generalizable to a larger population.

5.9.3. Factor Analysis

Factor analysis is a statistical approach that can be used to analyse interrelationships among a large number of variables and explain these variables in terms of their common underlying dimensions Kumar, 2014). According to Rahi (2917) the study used principal component factor analysis technique, because it is easy to simplify the structure of the questionnaire, grouping the items into more representative factors and explaining the data variability, and excluding those that do not have relevance to any of the factors. Its major objective is to find a way of condensing the information contained in a number of original variables into a smaller set of variables with a minimal loss of information (Creswell, 2013). In this study factor analysis was performed on several grounds.

The objective of conducting factor analysis on the observed variables was to find underlying factors that positively or negatively affected the growth and sustainability of agrarian SMEs. For example, the growth and sustainability of the agrarian SMEs may be influenced by underlying variables such as physical location of SMEs, age of the owner-manager, experience of employees and gender would become some of the factors for consideration from results of the analysis.

The goal for conducting this factor analysis was to firstly assess the internal reliability of the measuring instrument used in this study. Secondly, factor analysis was used to aid data interpretation based on the outcome of corresponding analysis meant to understand and explain the impact of re-engineering strategies on the growth and sustainability of the agrarian SMEs. Through factor analysis, the researcher was able to reduce the number of items that were used to explain growth and sustainability of agrarian SMEs by creating new composite variables for each factor (on a summated scale).

5.9.4. One Way Analysis of Variance

The One-way Analysis of Variance (ANOVA) is a statistical technique for examining the differences among two or more populations (Wangombe, 2013). This technique is very handy in determining the significance of the mean differences across groups. However, the quantitative data

was analyzed using regression analysis (Wangombe, 2013; Aggarwal & Ranganathan, (2016). Thus, the p-value is significant in the study context.

5.9.5 Chi-Square Test

The Chi-square test was used to summarize a series of counts which were arranged in a tabular format to evaluate whether there is an association between the rows and columns in a contingency table. More specifically, this statistical technique was used to determine whether there is any difference between the study groups in the proportions of the risk factor of interest. This method describes in detail which type of data was used, the assumptions associated with its application and its associated P-value (Aggarwal & Ranganathan, 2016). The Chi-square test was used in this research to determine, whether, there was an association between the dependent variables (growth and sustainability of agrarian SMEs), intermediate variables (food security, employment creation, economic growth, resource utilization and market share) and the independent variables (strategies use to re-engineer growth of SMEs (Arunachalam et al., 2018). The Chi-square test was conducted using the SPSS software and the decision was based on the p-value, whereby, the H_0 would be rejected if $p > .0.05$, at 5% level of significance (Zikmund, Babin, Carr & Griffin, 2013).

5.9.6 The Tobit Model

According to Rahi (2017) censored regression or the Tobit model is employed to test the relationship between dependent variable(Y) and descriptive variables (X). In this study, the dependent variable was the growth and sustainability of the agrarian SMEs. In a censored sample, some observations on the dependent variable, corresponding to known values of the independent variables, are not observable (Y*). For example, one respondent has a functional Management structure, however, fails to benefit from the government support program. Thus, we do not observe the dependent variables over the entire range of questions asked during the data collection. Coefficients in a Tobit model are estimated by the likelihood method. The model as used in this research assumed that there was a latent (i.e. unobservable) variable Y* and that this variable linearly depended on X_i via a parameter (vector) b which determined the relationship between the independent variable (and vector) X_i and the latent variable Y* (just as in a linear mode). In addition, there was a normally distributed error term u_i to capture random influences on this relationship. The Tobit model was, thus, based on the following latent variable model:

$$Y^* = b' X + u_i$$

Where X was a k-vector of repressors, possibly including 1's for the intercept, and the error term u is $N(0, S_2)$ distributed, conditionally on X. The latent variable Y^* was only observed $(Y=Y^*)$ if $Y^* > 0$. Thus the model was $Y^*=bX+u$; $Y^*=bX+u$ if $bX+u >0 =0$. In this case, one cannot rely on only the observation for which $Y^* > 0$, to estimate the regression equation by ordinary least squares (OLS) because the residuals did not satisfy the condition $E(u) = 0$ if we consider only those residuals such that $u > - bX$. In the present study, state support programs may have had a significant effect on the growth and sustainability of SMEs. Some observations may have made a hundred percent contribution to growth and sustainability and some may have not. The Tobit model overcomes bias and inconsistencies that arise. Hence, the Tobit model is used for the present analysis. In particular, the actual dependent variable was:

$$Y = Max(0, Y^*)$$

The definition of the variables included in the model is given below:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_6 + b_8X_8 + b_9X_9 + b_{10}X_{10} + ...$$

Where:

$Y=$ Growth and sustainability of SMEs

$X1=$ SME challenges

$X2=$ Government policies

$X3=$ SME strategies

$X4=$ SME management methods

$X5=$ Gender dynamics

$X6=$ SME re-engineering framework

5.9.7. Multiple-Regression Analysis

Multiple regressions are a broader class of regression that encompasses linear and nonlinear regression. This statistical technique is used to analyse the relationship between dependent variable and independent variables. The general assumption is that there is a linear correlation between the dependent variable and the independent variable(s) (Wangombe, 2013). As indicated, the aim objective of this study was to investigate strategies to re-engineer the agrarian SMEs so that this

sector grows into Transnational Companies and guarantee food security in Zimbabwe. Linear regression analysis is therefore, an appropriate statistical technique for examining such relationships.

5.9.8. Linear Regression

In contrast to multiple regressions, linear regression is a simple statistical technique which establishes the relationship between two variables using a straight line. It attempts to draw a line that comes closest to the data by finding the slope and intercept that define the line and minimize regression errors. Thus, the objective of this study was to determine simultaneously the direct and indirect effect of strategies for re-engineering the growth and sustainability of SMEs in the agrarian sector, using a Tobit regression model to test the relationship between dependent variable(Y) and descriptive (independent) variables (X), to overcome bias and inconsistency. This allows for a more precise estimation of the effect of the variables under study (Creswell, 2013). In the literature, Tobit Analysis is also frequently reported to be most appropriate for the study (Kumar, 2014).

5.9.9. Cronbach's Coefficient Alpha

According to Aggarwal and Ranganathan (2016), internal consistency tests are essential to measure the reliability of both the measurement instrument and the data received. This study utilized Cronbach's Coefficient Alpha to test for internal consistency of the questionnaire, which is an indication of its ability to consistently measure the variables of interest. Authors such Creswell (2013) and Wangombe (2014) indicate that typical values for Cronbach's alpha range from zero to one, where higher scores indicate a higher reliability and, generally, in most social science research situations, a score above 0.70 is considered acceptable. Cronbach's alpha is technically speaking, not a statistical test, however, it is a coefficient of reliability (or consistency). High alpha values do not imply that the measure is uni-dimensional; therefore, in order to provide evidence that the scale being measured is uni-dimensional, additional analyses need to be performed (Bryman, 2015).

5.10. Ethical Deliberations

Ethics in research is concerned with the need to prevent harm to the research participants. As such, there are ethical issues which need to be dealt with in research (Kumar, 2014). Among these ethical issues, were the tensions between the aims of the research that generates knowledge for the good of others and the right to concealment of the participants' names since it is a human right and the protection of participants was of great importance? To conduct the study, the researcher observed

ethical standards of UKZN academic research, by guaranteeing the confidentiality of the information and increase interaction and access to the information sought (Kumar, 2014). The respondents were knowledgeable about the potential impact of the investigation. This was done by way of a cover letter attached to the front of the questionnaire (Creswell, 2013). Some of the information that was supplied to the researcher was treated as confidential which protected the identity of the research participants, the names of the SME owner-mangers remained anonymous, and the participation by the respondents was voluntary based on informed consent (Creswell, 2013). The ethical issues in quantitative methodology were very delicate, compared to qualitative research as there were potential conflicts in gaining access to government policies, information, and some documents.

Usually, ethical issues in quantitative methodology are very delicate compared to purely qualitative research and the study made extensive use of questionnaires and documentary evidence to avoid potential conflict in dealing with the phenomenon. In addition, the data collection process was employed with no variations to a particular area seeking to avoid biases (Bryman, 2015). The respondents, being owners of agrarian SMEs, were relatively low-income earners, and naturally expected some practical solutions to their problems to come out of the research process. This study was, however, largely for academic purposes therefore, could not easily meet such expectations. Building rapport with the respondents and gaining access to them was, therefore, dependent on resolving this dilemma. As explained by Rahi (2017), the only ethical way to resolve the dilemma and gain access to the respondents was to avoid making any false promises to them and to immediately dispel any hopes of material gains resulting directly from the study. It was, therefore, important for the respondents to appreciate that the information collected by the study might probably help to bring their activities to a wider audience, such as government and potential donors. Following this advice, it was made clear to them that there was no direct material benefit resulting from their participation in the study. Therefore, the accomplishment of this study relied on the participants' willingness to respond to the questions asked during the survey (Wangombe, 2013).

5.11. Limitations of the Study

There was limited time to carry out the research and financial constraints compelled the researcher to focus on a particular section of the economy of Zimbabwe, namely the Eastern Highlands, to conduct the study. Furthermore, the respondents were not willing to release certain information due

to confidentiality and it became impractical to conduct a large study covering all SMEs in the agrarian sector in Zimbabwe (Creswell, 2013). The researcher, however, attempted to overcome the restrictions by using a letter of introduction from UKZN, as a measure to assure the respondents that their information was for academic purposes only. The other limitation was the official economic data sourced from inaccurate statistics which accounted for informal transactions, as is the case with Zimbabwe from the year 2000 onwards (Chingwaru & Jarkata, 2015). Therefore, the highly predicted limitation was the circumspection where the research did not consider SMEs from other sectors of the economy, but solely focused on agrarian SMEs in Eastern Highlands (Dominguez & Hollstein, 2014). Since Zimbabwe is still currently in deep political crisis, most participants were not willing to reveal information fearing persecution.

5.12. Summary

The chapter explored the research integrity to draw convincing conclusions. The suitability of quantitative methodological approach was significant in making the research successful. The foundation of this study minimized risks by employing quantitative research techniques which focused on research design. The study focus set to investigate ways of how strategies for re-engineering can engender the growth of SMEs to attain food security in Zimbabwe.

A quantitative approach was used to understand emerging issues relevant to re-engineering of SMEs to develop. The survey technique drew mechanisms that supported the re-engineering process for the agrarian SMEs in Eastern Highlands, Zimbabwe. Therefore, strategies for re-engineering SMEs in the agrarian sector were the basis upon which the study was explored. In the following chapter, the research findings are presented.

CHAPTER SIX:
RESEARCH FINDINGS

6.1. Introduction

The findings were reported in two sections. The first section will report the findings pertaining to the agrarian SMEs and the second section will be the data collected from the policy- makers and Agritex Field Marshals. The study investigated strategies for re-engineering the growth and sustainability of agrarian SMEs in the Eastern Highlands, Zimbabwe. The agrarian sector was considered as the mainstay of the economy and agrarian SMEs' participation in Zimbabwe was noted from previous studies (Nyamwanza et al., 2015).The part is organized into segments following the structure of the data obtained from the main data collection techniques which were questionnaires for SMEs, policy-makers and Agritex Field Marshals. For ease of referencing, the study used both statistical and exploratory analytical skills in reporting the findings.

Demographic data

6.2. Response Rate of Agrarian SMEs

As indicated in Table 6.1, the actual usable sample size was, for varying reasons, reduced to 248, giving in total a response rate of 65.26%.There was a sum of 380 questionnaires which were circulated with a targeted population of 410 participants. From 380 questionnaires distributed, only 248 were returned. Generally, 65.26 % participants were considered as ideal (Leedy & Ormrod, 2013; Magwa & Magwa, 2015) for the study as it is not possible to get a 100% response rate.

Table 6.1: Response Rate of the SME Participants

Category	Value	Response rate
Sample size	380	n/a
Usable	248	65.265%

Source: Researcher's Development

FINDINGS FROM THE SME SURVEY

6.3. Reliability

The Cronbach's alpha coefficients for all the measurement instruments were above 0.6 (Table 6.2), indicating reliability of the measuring scales employed in this research.

Table 6.2: SME Questionnaire Reliability Test

Section	Questionnaire Category	Cronbach's Alpha	No of Items
B	SME Challenges	.885	32
C	Government Policies	.997	9
D	Agriculture Support	.619	11
E	Existing strategies	.825	9
F	Gender Dynamics	.825	9
G	Management	.825	9

Source: Developed by the Researcher

The results in Table 6.2 reveal that the highest coefficient of 0.997 was for government policies and the lowest Cronbach Alpha of 0.619 was for agricultural support mechanisms. Therefore, the survey instrument was deemed reliable (Dominguez & Hollstein, 2014).The applicability of government policies is impartial across all sectors of the economy (Majoni, Mutunhu & Chaderopa, 2016) thus, the level of consistency being .997. However, the applicability of agricultural support mechanisms varies across districts and this accounts for why it scored less in terms of internal consistency. Reliability tests were run to explore the extent to which the research instruments measured exactly that which they were intended to measure without any degree of ambiguity (Rahi, 2020; Saunders, Lewis & Thornhill, 2013). What makes the Cronbach's Alpha great is the fact that the research questions would be in the same direction (Aggarwal & Ranganathan, 2016). The value would be low if there are some questions which are not in sync with the majority of the questions which were measured for each questionnaire category.

6.4. Validity of the SME Questionnaire (KMO)

The results of the KMO and Bartlett's test indicate a significant result of 0.729 which is above the standard 0.5. This, therefore, confirms the validity of the research instrument as a measure of the intended research questions (Wangombe, 2013; Yin, 2014).

Table 6.3: Questionnaire Validity

KMO Measure of Sampling Adequacy.		.729
Bartlett's Test of Sphericity	Approx. Chi-Square	375.213
	Df	6
	Sig.	.000

Before the hypotheses were tested, factor analysis was done using the Principal Component Analysis (PCA) technique which checked the strengths of the inter-correlations among the additional attributes which were included in the questionnaire instrument used in this study (Zikmund, Babin, Carr & Griffin, 2013; Aggarwal & Ranganathan, 2016).

6.5. Factor Analysis
(A). SME Challenges to Inform Policy

Table 6.4 shows results of factor analysis on SME challenges. The Educational Policy is the most important variable because many respondents need training and development and without this key policy, their lack of education will influence the challenges faced by the SMEs. This is the major reason why this policy accrued the highest of (3.82) mean.

Table 6.4:-SME Challenges Descriptive Statistics

	Mean	Std. Deviation	Analysis N
ToWhatExtentHasTheSMEPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgriculture Sector	2.70	.956	248
ToWhatExtentHasTheZIMASSETPolicySoughtToAddressTheChallengesBeingFacedBySMEsInThe AgricultureSector	2.88	1.370	248
ToWhatExtentHasTheEducationPolicySoughtToAddressTheChallengesBeingFacedBySMEsInThe AgricultureSector	3.82	.927	248
ToWhatExtentHasTheIndeginisationEconomicEmpowermentPolicySoughtToAddressTheChallengesBeing FacedBySMEsInTheAgricultureSector	3.29	1.127	248
ToWhatExtentHasTheICTPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgriculture Sector	3.47	1.291	248
ToWhatExtentHasTheNationalGenderPolicySoughtToAddressTheChallengesBeingFacedBySMEsInThe AgricultureSector	3.00	1.240	248
ToWhatExtentHasTheInfrastructuralDevelopmentPolicySoughtToAddressTheChallengesBeingFacedBy SMEsInTheAgricultureSector	3.41	.913	248
ToWhatExtentHasTheLandPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgriculture Sector	2.35	1.136	248
ToWhatExtentHasTheLookEastPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgriculture Sector	3.11	1.235	248

In order to address SME challenges, with respect to effective policy delivery and implementation to stimulate their sustainable growth, it can be noted that addressing education policy will be pivotal to bringing about prosperity within the sector. It is, therefore, imperative that the research addresses issues relating to training and (development) capacity building of SMEs as far as it limits their full potential to achieving their full growth. The ZIMASSET policy framework, having the highest standard deviation (1.370), implies that there is a lot of variation in terms of opinion in as far as it seeks to address challenges being faced by the agrarian SME sector (Cant & Wiid, 2013;AlBuraiki & Khan, 2018). Therefore, this research needs to recommend to policy- makers to address policy inconsistencies within the SME sector that come as a result of the Transitional Stabilisation Programs in Zimbabwe.

Table 6.5: Communalities-SME Challenges

	Initial	Extraction
ToWhatExtentHasTheSMEPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgricultureSector	1.000	.885
ToWhatExtentHasTheZIMASSETPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgriculture Sector	1.000	.834
ToWhatExtentHasTheEducationPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgriculture Sector	1.000	.970
ToWhatExtentHasTheIndeginisationEconomicEmpowermentPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgricultureSector	1.000	.968
ToWhatExtentHasTheICTPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgricultureSector	1.000	.732
ToWhatExtentHasTheNationalGenderPolicySoughtToAddressTheChallengesBeingFacedBySMEsInThe AgricultureSector	1.000	.967
ToWhatExtentHasTheInfrastructuralDevelopmentPolicySoughtToAddressTheChallengesBeingFacedBySMEsIn TheAgricultureSector	1.000	.992
ToWhatExtentHasTheLandPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgricultureSector	1.000	.776
ToWhatExtentHasTheLookEastPolicySoughtToAddressTheChallengesBeingFacedBySMEsInTheAgriculture Sector	1.000	.960

Extraction Technique – Principal Component Analysis

Higher communalities shared by all the factors indicated that large amounts of the variance had been extracted by the factor solution. Since the communalities were predominantly above 0.4, it can be concluded variables that were chosen to determine the effectiveness of strategies for re-engineering SMEs growth were adequate to provide satisfactory results of analysis based on the research tool designed for the research (Huang et al., 2015; Bhaskar, 2016).

Table 6.6: Combined Variance Analysis of SME Challenges

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.097	40.972	40.972	4.097	40.972	40.972
2	1.662	16.619	57.591	1.662	16.619	57.591
3	1.514	15.138	72.729	1.514	15.138	72.729
4	1.167	11.667	84.397	1.167	11.667	84.397
5	.918	9.184	93.580			
6	.516	5.164	98.745			
7	.126	1.255	100.000			
8	6.129E-15	6.129E-14	100.000			
9	1.097E-15	1.097E-14	100.000			
10	-4.130E-16	-4.130E-15	100.000			

Extraction Technique(PCA)

Table 6.6 reflects the combined variance which shows that factors such lack of inputs such as seeds, equipment and fertilizer, lack of training and development, lack of capital finance, lack of land ownership, lack of transport and lack of access to international markets for their produce, were factors which were significant, in terms of informing a policy review. However, lack of land ownership accounted for a cumulative variance of 84.4%.

b. Government Regulations

Table 6.7: Policies

	Mean	Std. Deviation	Analysis N
ToWhatExtentHasTheSMEPolicySoughtToAddressTheChallengesBeing FacedBySMEsInTheAgricultureSector	2.70	.956	248
ToWhatExtentHasTheTransitionalStabilisationProgramSoughtToAddressT heChallenges BeingFacedBySMEsInTheAgricultureSector	2.88	1.370	248
ToWhatExtentHasTheEducationPolicySoughtToAddressTheChallenges BeingFacedBySMEsInTheAgricultureSector	3.82	.927	248
ToWhatExtentHasTheIndigenousEconomicEmpowermentPolicySoughtTo AddressTheChallengesBeingFacedBySMEsInTheAgricultureSector	3.29	1.127	248
ToWhatExtentHasTheICTPolicySoughtToAddressTheChallengesBeing FacedBySMEsInTheAgricultureSector	3.47	1.291	248
ToWhatExtentHasTheNationalGenderPolicySoughtToAddress TheChallengesBeingFacedBySMEsInTheAgricultureSector	3.00	1.240	248
ToWhatExtentHasTheInfrastructuralDevelopmentPolicySoughtTo AddressTheChallengesBeingFacedBySMEsInTheAgricultureSector	3.41	.913	248
ToWhatExtentHasTheLandPolicySoughtToAddressTheChallenges BeingFacedBySMEsInTheAgricultureSector	2.35	1.136	248
ToWhatExtentHasTheLookEastPolicySoughtToAddressTheChallenges BeingFacedBySMEsInTheAgricultureSector	3.11	1.235	248
GovernementPoliciesAreSuccessfulInGrowingSMEsInTheAgrarianSector	3.35	.967	248
GovernmentPoliciesAreDesignedToReengineerTheGrowthOfTheAgrarian Sector	2.88	1.281	248
GovernmentPoliciesAreBeingImplementedToGrowSMEsIntoTransnational Companies	3.77	.732	248

To effectively and efficiently implement government regulations with respect to policy delivery and implementation, it can be noted that addressing the education policy (mean=3.82) will be pivotal to bringing about prosperity within the sector. It is therefore imperative that the research addresses issues pertaining to capacitating Agritex Field Marshals, supporting institutions and structures at local level (including NGOs, civic organizations, local MPs and councilors), for training and development, interpretation and guidance of policies to agrarian SMEs.The ZIMASSET Policy, having the highest standard deviation (1.370), implies that there is a lot of variation in terms of

opinion in as far as implementation and compliance by SMEs, of government regulations aimed to support SME policies. There will be need for this research to therefore, address aspects of regulatory enforcements to increase SME compliance.

Table 6.8: Communalities Government Policies

	Initial	Extraction
ToWhatExtentHasTheSMEPolicySoughtToAddressTheChallengesBeingFaced BySMEsInTheAgricultureSector	1.000	.933
ToWhatExtentHasTheTransitionalStabilisationProgramSoughtToAddressTheC hallengesBeingFacedBySMEsInTheAgricultureSector	1.000	.852
ToWhatExtentHasTheEducationPolicySoughtToAddressTheChallengesBeingF acedBySMEsInTheAgricultureSector	1.000	.908
ToWhatExtentHasTheIndeginisationEconomicEmpowermentPolicySoughtToA ddressTheChallengesBeingFacedBySMEsInTheAgricultureSector	1.000	.952
ToWhatExtentHasTheICTPolicySoughtToAddressTheChallengesBeingFacedB ySMEsInTheAgricultureSector	1.000	.762
ToWhatExtentHasTheNationalGenderPolicySoughtToAddressTheChallengesB eingFacedBySMEsInTheAgricultureSector	1.000	.995
ToWhatExtentHasTheInfrastructuralDevelopmentPolicySoughtToAddressThe ChallengesBeingFacedBySMEsInTheAgricultureSector	1.000	.996
ToWhatExtentHasTheLandPolicySoughtToAddressTheChallengesBeingFaced BySMEsInTheAgricultureSector	1.000	.955
ToWhatExtentHasTheLookEastPolicySoughtToAddressTheChallengesBeingFa cedBySMEsInTheAgricultureSector	1.000	.820
GovernementPoliciesAreSuccessfulInGrowingSMEsInTheAgrarianSector	1.000	.459
GovernmentPoliciesAreDesignedToReengineerTheGrowthOfTheAgrarianSect or	1.000	.976
GovernmentPoliciesAreBeingImplementedToGrowSMEsIntoTransnationalCo mpanies	1.000	.884

Extraction Technique (PCA)

Higher communalities shared by all the factors indicated that large amounts of the variance had been extracted by the factor solution. Since the communalities were predominantly above 0.4, it can be concluded that the variables that were chosen to determine the effectiveness of government regulations/policies (Ameyaw et al., 2017) adequately provided satisfactory results of analysis based on the research tool designed for the research.

Table 6.9: Combined Variance Analysis of Government Policies

Component	Initial Eigen Values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.921	41.007	41.007	4.921	41.007	41.007
2	2.245	18.710	59.717	2.245	18.710	59.717
3	1.781	14.843	74.560	1.781	14.843	74.560
4	1.545	12.872	87.432	1.545	12.872	87.432
5	.970	8.081	95.514			
6	.538	4.486	100.000			
7	$7.024\text{E-}15$	$5.853\text{E-}14$	100.000			
8	$2.211\text{E-}15$	$1.843\text{E-}14$	100.000			
9	$1.688\text{E-}15$	$1.406\text{E-}14$	100.000			
10	$9.394\text{E-}16$	$7.829\text{E-}15$	100.000			
11	$-4.038\text{E-}17$	$-3.365\text{E-}16$	100.000			
12	$-1.249\text{E-}15$	$-1.041\text{E-}14$	100.000			

Extraction Technique: PCA

Table 6.9 shows that the first four factors were significant, in terms of evaluating policies to influence the growth and sustainability of agrarian SMEs. However, although all SME-related government policies sought to address the challenges faced by SMEs, the Indigenization Economic Empowerment Policy accounted for a cumulative variance of 87.4%, because the majority of entrepreneurs were excited and ventured into some businesses due to government influence (Fuglie & Rada, 2013; Jouzi et al., 2017).

c. Agriculture Support Mechanisms

Table 6.10: Descriptive Statistics of Agricultural Support Mechanisms

	Mean	Std. Deviation	Analysis N
TaxReliefPromotesDomesticResourceMobilasationAndStrengthenGovernmentSupportForSMEs	1.70	1.272	248
EnvironmentManagementAuthorityPromotesEnvironmentalCleanilinessawarenessAndSMECompliance	1.59	.774	248
LandProvisionAndEntitlementdeedsPromoteThePowerOfBorrowingFromBanks	1.53	.500	248
AgriculturalMechanisationtractorsPloughspumpsetcInfluenceTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	4.00	1.032	248
AgriculturalExtensionSystemtrainingAndFieldShowsInfluenceTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	4.53	.500	248
AgriculturalLoansandCreditFacilitiesagribankAndMicrofinanceInfluenceTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	3.35	1.572	248
CommandAgriculturegovernmentCreditFacilityInfluencesTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	3.35	1.329	248
InfrastructureDevelopmentInfluencesTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	4.12	.322	248
AgriculturalResearchclimateproductDevelopmentInfluencesTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	4.12	.322	248

The results of factor analysis on agriculture support initiatives (Table 6.10) indicated that Agritex extension services and field shows were the most influential in ensuring growth and sustainability of SMEs with a mean score of 4.53. Thus, the research needed to address the strength and capacity of Agritex Field Marshals in terms of facilitating platforms such as the Farmer-Field Schools and Master Farmer classes. It was noted that there was a great standard deviation among respondents in terms of the effectiveness of microfinance, loans and credit guarantee schemes(standards deviation= 1.329). Thus, the research needed to also interrogate through the research tools aspects of agro-SME financing.

Table 6.11: Communalities Agriculture Support Mechanisms

	Initial	Extraction
TaxReliefPromotesDomesticResourceMobilasationAndStrengthenGovernmentSupportForSMEs	1.000	.994
EnvironmentManagementAuthorityPromotesEnvironmentalCleanilinessawarenessAndSMECompliance	1.000	.897
LandProvisionAndEntitlementdeedsPromoteThePowerOfBorrowingFromBanks	1.000	.983
AgriculturalMechanisationtractorsPloughspumpsetcInfluenceTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	1.000	.909
AgriculturalExtensionSystemtrainingAndFieldShowsInfluenceTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	1.000	.896
AgriculturalLoansandCreditFacilitiesagribankAndMicrofinanceInfluenceTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	1.000	.925
CommandAgriculturegovernmentCreditFacilityInfluencesTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	1.000	.938
InfrastructureDevelopmentInfluencesTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	1.000	.999
AgriculturalResearchclimateproductDevelopmentInfluencesTheGrowthAndSustainabilityOfSMESInTheAgriculturalSector	1.000	.999

Extraction Technique: PCA.

Table 6.11 reveals that the communality values are above 0.5; thus all the variables are considered for the measurement of the impact of agriculture support mechanisms and sustainable measures were retained for further analysis. At least 89.6% of variance was accounted for in all the variables selected to evaluate the effectiveness of Agriculture support initiatives and sustainable measures. Agriculture training and field shows had the highest mean compared to all the other variables in effectiveness of Agritex Field Marshals and this shows that statistically it is deemed, the most successful of variables in communality values (Government of Zimbabwe.2014; Saberi & Hamdan, 2019). While initiatives such as tractors and plough provision also recorded a somewhat high mean of 4, showing the significance that this has in communality values. However, initiatives such as land provision had the lowest, mean of 1.53, showing that this has no great effect on communality values.

Table 6.12: Combined Variance Analysis of Agriculture Support Mechanisms

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.242	47.132	47.132	4.242	47.132	47.132
2	1.873	20.809	67.941	1.873	20.809	67.941
3	1.303	14.480	82.421	1.303	14.480	82.421
4	1.120	12.449	94.870	1.120	12.449	94.870
5	.277	3.076	97.946			
6	.185	2.054	100.000			
7	3.760E-15	4.178E-14	100.000			
8	-1.554E-16	-1.726E-15	100.000			
9	-4.189E-16	-4.654E-15	100.000			

Extraction Technique (PCA)

Table 6.12 shows that the following factors, namely, agricultural mechanization such as tractors, ploughs, pumps, agricultural extension systems which include SME training and field shows, agriculture loans, credit facilities, agricultural subsidies and infrastructure development were considered for analysis. However, a cumulative variance of 94.8% was due to government subsidies which the majority of SMEs relied heavily on for their business to breakeven and to realise sustainable growth.

d. Existing SME Development Strategies

Table 6.13: Descriptive Statistics of SME Techno- Innovative Strategies

	Mean	Std. Deviation	Analysis N
TradePromotionInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoods AndPovertyReduction	4.12	.899	248
ValueAdditionInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoods AndPovertyReduction	4.23	.424	248
ConsumerParticipationInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImprove LivilihoodsAndPovertyReduction	4.53	.500	248
SMEsRevolvingFundsmedcoInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImprove LivilihoodsAndPovertyReduction	4.29	.457	248
ProductBrandingAndNicheMarketingBySMEsImprovesProductDifferentiationFocusAndCost LeadershipToSafeguardConsumerLoyalty	4.00	.000	248
AcquisitionsAndMergersIncreaseTheCompetitivenessOfSMEs	4.00	.000	248
AgriculturalIncubatorsAndClustersRadicallyDevelopSkillsToGrowSMEsIntoTransnational Companies	4.12	.322	248
AgriculturalCreditGuaranteeSchemesImproveTheWorkingCapitalOfSMEs	4.41	.493	248
ContractFarmingEngendersTheGrwothOfSMEsAndTheirProductivity	4.41	.493	248
UptakeOfTechnologiesImprovesTheGrowthOfSMEs	4.06	.873	248
TheSMELinkageProgrammeInPartnershipWithGovernmentAndThePrivateSectorImprovesTheGr owthOfSMEs	4.29	.457	248
EMarketingUsingECommerceEnhancesTheCompetitivenessOfSMEs	3.94	.803	248
SavingsAndCreditCooperativeSocietiesInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingT oImproveLivilihoodsAndPovertyReduction	4.23	.424	248
LandOwnershipInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoodsA ndPovertyReduction	4.23	.424	248
FoodPreservationInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoods AndPovertyReduction	4.12	.322	248

As reflected in Table 6.13, Consumer participation, with a mean score of 4.53, was noted to be the most important strategy in influencing sustainable growth of SMEs and ultimately improving livelihoods (Hilson,2016,FAO,2017),It was noted that there was a standard deviation of 0.899 on trade promotion (SME marketing)(Nwodo et al., 2017;Berg,Mrrewijk & Tamminen, 2018).It was therefore noted that the aspects of trade promotion needed to be addressed as there seemed to be no consensus among respondents as far as this was relevant to promoting the growth of SMEs.

Table 6.14: Communalities SME Techno- Innovative Stratégies

	Initial	Extraction
TradePromotionInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoodsAnd Poverty Reduction	1.000	.991
ValueAdditionInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoodsAndPoverty Reduction	1.000	.961
ConsumerParticipationInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoodsAnd PovertyReduction	1.000	.837
SMEsRevolvingFundsmedcoInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImprove LivilihoodsAndPovertyReduction	1.000	.912
AgriculturalIncubatorsAndClustersRadicallyDevelopSkillsToGrowSMEsIntoTransnationalCompanies	1.000	.991
AgriculturalCreditGuaranteeSchemesImproveTheWorkingCapitalOfSMEs	1.000	.970
ContractFarmingEngendersTheGrwothOfSMEsAndTheirProductivity	1.000	.970
UptakeOfTechnologiesImprovesTheGrowthOfSMEs	1.000	.998
TheSMELinkageProgrammeInPartnershipWithGovernmentAndThePrivateSectorImprovesTheGrowthOf SMEs	1.000	.954
EMarketingUsingECommerceEnhancesTheCompetitivenessOfSMEs	1.000	.966
SavingsAndCreditCooperativeSocietiesInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImprove LivilihoodsAndPovertyReduction	1.000	.969
LandOwnershipInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoodsAndPoverty Reduction	1.000	.961
FoodPreservationInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoodsAnd PovertyReduction	1.000	.991

Extraction Technique (PCA)

Higher communalities shared by all the factors indicated that large amounts of the variance had been extracted by the factor solution. Since the communalities were predominantly above 0.4, it can be concluded variables that were chosen to determine the effectiveness of existing SME techno innovative strategies for re-engineering SMEs were adequate to provide satisfactory results for analysis based on the research tool designed for the research(Nyanga et al., 2013; Bilal, Naveed & Anwar, 2017).

Table 6.15: Combined Variance Analysis of SME Techno- Innovative Strategies

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.614	35.491	35.491	4.614	35.491	35.491
2	3.162	24.325	59.817	3.162	24.325	59.817
3	2.595	19.960	79.776	2.595	19.960	79.776
4	1.086	8.353	88.129	1.086	8.353	88.129
5	1.015	7.806	95.935	1.015	7.806	95.935
6	.528	4.065	100.000			
7	6.647E-15	5.113E-14	100.000			
8	5.393E-16	4.148E-15	100.000			
9	2.212E-16	1.701E-15	100.000			
10	1.118E-17	8.600E-17	100.000			
11	-7.271E-17	-5.593E-16	100.000			
12	-1.628E-15	-1.252E-14	100.000			
13	-4.625E-15	-3.558E-14	100.000			

Extraction Technique (PCA).

The first five factors were deemed significant in accounting for the variance at 35.5%, 24%, 19%, 8% and 8 %.respectively, where trade promotion is noted to have the highest percentage in influencing the growth and sustainability of SMEs that have a specific agenda to improve livelihoods and poverty reduction. Some of factors considered were product branding, acquisitions and mergers, incubation clusters, contract farming and agricultural indigenous knowledge systems. However, a cumulative variance of 95.9% was contract farming where the findings show that the majority of agrarian SMEs were performing better due to credit farming initiatives being given to them by stakeholders. It can, however, also be noted that Contract farming was proven to have a slightly higher influence as shown in the table

Table 6.16: Descriptive Facts of Gender Dynamics

	Mean	Std. Deviation	Analysis N
GovernmenrPoliciesInfluenceWomenInAgribusinessGrowTheirSMEsInTheSector	.801	.477	248
PromotionOfGenderImprovesTheEquitableDistributionOfIncomeSoAsToGrowSMEs	.711	.492	248
InclusionOfWomenInRunningSMEsInTheAgricultureSectorPromoteFoodSecurityNutriment	2.76	1.560	248

Extraction Method: Principal Component Analysis

The mean of 2.76 as reflected in Table 6.16 was significant and implies that the inclusion of women in running SMEs was deemed very important to addressing the inequality gap, poverty and food insecurity in communities.

Table 6.17: Communalities Gender Dynamics

	Initial	Extraction
GovernmenrPoliciesInfluenceWomenInAgribusinessGrowTheirSMEsInTheSector	1.000	.533
PromotionOfGenderImprovesTheEquitableDistributionOfIncomeSoAsToGrowSMEs	1.000	.412
InclusionOfWomenInRunningSMEsInTheAgricultureSectorPromoteFoodSecurityNutriment	1.000	.981

Extraction Method: Principal Component Analysis.

Not all factors on gender issues were significant only the inclusion of women and gender related policies were included in the subsequent analysis, because they were way above the minimum threshold value of 0.50.

Table 6.18: Combined Variance Analysis of Gender Dynamics

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.126	53.153	53.153	2.126	53.153	53.153
2	1.087	27.167	80.320			
3	.641	16.036	96.356	1.087	27.167	80.320

Extraction Method: Principal Component Analysis

The first two factors (government policy on gender and inclusion of women) to participate in agrarian SMEs were deemed significant in determining the impact of re-engineering the growth and sustainability of agrarian (Broegaard, 2013; Agarwal, 2015).

Table 6.19: Descriptive Facts- Management Methods of SMEs

	Mean	Std. Deviation	Analysis N
StrategicManagementDevelopmentInfluencesTheGrowthAndSustainabilityOfSMEsIn Zimbabwe	4.11	.317	248
SMESStructureInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	3.77	.644	248
SocialResponsibilityInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	4.18	.383	248
EmployeeMotivationInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	4.12	.322	248
NetworkingAndInformationDisserminationInfluencesTheGrowthAndSustainabilityOfSMEs InZimbabwe	4.41	.493	248
EntrepreneurialGrowthInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	4.12	.322	248
TrainingAndDevelopmentInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	4.54	.500	248
ConsumerSatisfactionInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	4.18	.383	248
DelagatingDutiesInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	4.18	.383	248

Training and development was deemed as the most important variable in determining successful management of SMEs, since it had a mean score of 4.54.

Table 6.20: Communalities Management Methods of SMEs

	Initial	Extraction
StrategicManagementDevelopmentInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.396
SMEsStructureInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.990
SocialResponsibilityInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.974
EmployeeMotivationInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.990
NetworkingAndInformationDisseminationInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.911
EntrepreneurialGrowthInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.990
TrainingAndDevelopmentInfluenceTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.843
ConsumerSatisfactionInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.782
DelegatingDutiesInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	1.000	.974

Extraction Method: Principal Component Analysis.

The strategic management development variable and how it influences the growth and sustainability of SMEs was excluded in subsequent analyses as it had a score of 0.396. The Management methods were considered for subsequent analyses.

Table 6.21: Combined Variance Analysis Management Methods of SMEs

Component	Initial Eigen values			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.627	40.300	40.300	3.627	40.300	40.300
2	2.288	25.428	65.728	2.288	25.428	65.728
3	1.934	21.486	87.214	1.934	21.486	87.214
4	.737	8.194	95.408			
5	.335	3.717	99.125			
6	.079	.875	100.000			
7	4.918E-16	5.465E-15	100.000			
8	1.233E-17	1.370E-16	100.000			
9	-1.681E-16	-1.868E-15	100.000			

Extraction Method: Principal Component

The first three factors were deemed significant for evaluation of the effectiveness of SME management practices (Meyer & Meyer, 2017).

6.6. Demographic Data for SME Respondents

6.6.1. The Ages of SME Owners and Employees

Figure 6.1 depicts age ranges of SME participants and those in age group (35-55years) were the majority in the study. The majority of the respondents were, thus, in this age range because they are always working onsite and most of the workers in this age group are trained and mature to manage agricultural projects.

Figure 6.1: Age of SME Respondents
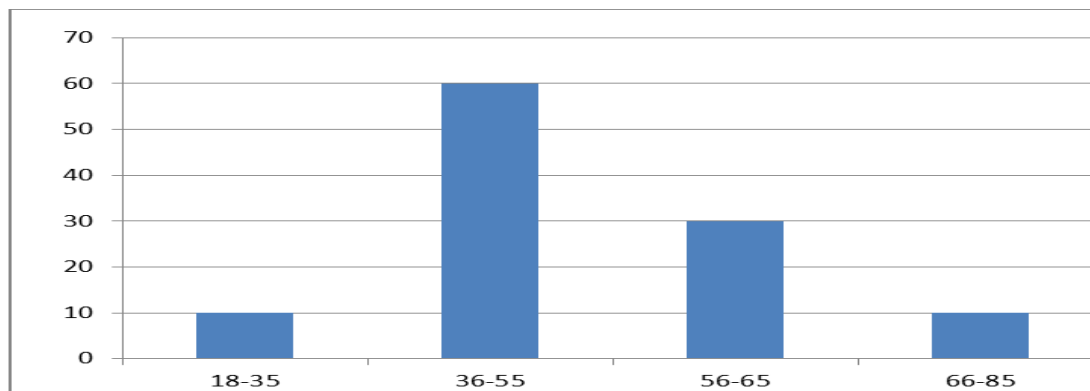
6.6.2. Gender of Participants

In the study, gender composition is a very critical aspect of any SME as it gives population insights of gender. The gender of respondents is reflected in Table 6.22.

Table 6.22: Gender of SME Respondents

Age	Male	Percent	Female	Percent	Total
18-35	40	24.69	10	11.62	50
36-55	80	49.38	40	46.51	120
56-65	30	18.5	30	23.26	60
66-85	12	7.4	16	18.60	28
Total	162	100.00	86	100.00	**248**

Generally, the study was dominated by males who constituted 162 0f 248 respondents (65%) of the respondents, with females constituting 86 of 248 (35%).The dominating age group of both males and female is 36-55 whereas the least ages is 66-85 because most of them have large farms and others are no longer interested in farming activities. This variation between male and female respondents may have resulted from the overall cultural background in Zimbabwe, where the prerogative to talk to strangers, for example during a survey, and to work in a manually demanding environment, falls on men, who are considered more out-going and bigger risk-takers than women, who normally prefer household chores (Agarwal ,2015;Chinomona & Maziriri, 2015). This confirms a report by

the SME Association of Zimbabwe (2016) which showed the males dominating in the SMEs sector although a growing number of female players were coming into play in the sector with each passing year. The gender composition of SMEs is a very critical aspect which needs to be properly managed to reduce inequality and increase competitiveness in the sector (Irungu & Arasa, 2017).

6.6.3. Position of SME Respondents

Table 6.23 reflects the position that each participating respondent holds in the SMEs.

Position	Frequency	Percent	Valid %	Cumulative %
Owner	128	52.8	52.8	52.8
Manager	70	35.5	35.5	88.3
Employee	50	11.7	11.7	100.0
Total	248	100.0	100.0	

Table 6.23 reflected that 88.3% of the respondents were managers and this has an effect on their level of knowledge and on the management of SMEs (Bilal, Naveed & Anwar, 2017; Meyer & Meyer, 2017).The justification for fielding questions to managers could be the fact that SME owners are hiring management seeking to grow their businesses, thus, the managers are in most cases best placed to have the know -how about agrarian SME operations.

Table 6.24: ANOVA Analysis on Positions of SME Respondents

ANOVA		Sum of Squares	df	Mean Square	F	Sig.
Major challenges faced by SMEs	Between Groups	1.414	2	.707	.711	.492
	Within Groups	243.485	245	.994		
	Total	244.899	247			
SMEsRevolvingFundsmedcoInfluenceTheGrowthAndSustainabilityOfSMEsiSeekingToImproveLivilihoodsAndPovertyReduction	Between Groups	6.932	2	3.466	19.048	.000
	Within Groups	44.580	245	.182		
	Total	51.512	247			
AcquisitionsAndMergersIncreaseTheCompetitivenessOfSMEs	Between Groups	.000	2	.000	-	-
	Within Groups	.000	245	.000		
	Total	.000	247			
AgriculturalIncubatorsAndClustersRadicallyDevelopSkillsToGrowSMEsIntoTransnationalCompanies	Between Groups	3.029	2	1.514	16.431	.000
	Within Groups	22.580	245	.092		
	Total	25.609	247			
UptakeOfTechnologiesImproveTheGrowthOfSMEs	Between Groups	143.513	2	71.756	394.352	.000
	Within Groups	44.580	245	.182		
	Total	188.093	247			
TheSMELinkageProgrammeInPartnershipWithGovernmentAndThePrivateSectorImprovesTheGrowth	Between Groups	6.932	2	3.466	19.048	.000
	Within Groups	44.580	245	.182		
OfSMEs	Total	51.512	247			
ReengineeringInfluencesTheGrowthOfSMEsToAchieveFoodSecurityAndImprovingTheStandardOfLivingInZimbabwe	Between Groups	.000	2	.000	-	-
	Within Groups	.000	245	.000		
	Total	.000	247			
ReengineeringTheGrowthAndSustainabilityOfSMEsInfleuncesEconomicGrowthInZimbabweonAndEmploymentCreationInZimbabwe	Between Groups	14.194	2	7.097	79.032	.000
	Within Groups	22.000	245	.090		
	Total	36.194	247			
GovernmenrPoliciesInfluenceWomenInAgribusinessGrowTheirSMEsInTheSector	Between Groups	48.459	2	24.230	31.697	.000
	Within Groups	187.282	245	.764		
	Total	235.742	247			
TrainingAndDevelopmentInfluencesTheGrowthAndSustainabilityOfSMEsInZimbabwe	Between Groups	12.878	2	6.439	32.330	.000
	Within Groups	48.795	245	.199		
	Total	61.673	247			

From the table above, the position of the respondents had influence on the overall responses given during the survey (p<0.05). The similarities were based on perceptions of both respondents and the differences were affected by the position and experience of the respondents. The respondents' 'position' has a great bearing on their perspectives of re-engineering SMEs.

6.6.4. Educational Level of the Respondents

Table 6.25: Educational Qualifications of the SME Respondents

Level of Education	Male	Female	Total	Percent
Bachelor's Degree	7	3	10	4.0
Diploma	20	14	34	13.7
O and A Level	20	25	45	18.1
Certificate	35	25	60	24..2
Non Educated	39	60	99	39.9
Total	121	127	248	100.0

The total number of respondents' was 248 and their levels of education are reflected in Table 6.24 above. The highest number of non-educated respondents is women, which implies that women are more engaged in farming sector either as employees or owners. Moreso the table reflects that the male holds highest level of education; hence they are engaged in other businesses which are not farming. Figure 6.2 below reflects that only 4.04 % of the respondents hold degrees whilst the highest number (40.32%) were unqualified. This confirms that the majorities of people who are starting SMEs are those with no academic qualifications and may be failing to get formal jobs in the economy. These are the people who are willing to be trained and become innovative by starting agrarian SME businesses in Zimbabwe (Zimstats, 2017; SMEAZ, 2017).

Figure 6.2: Educational Qualifications of the SME Respondents
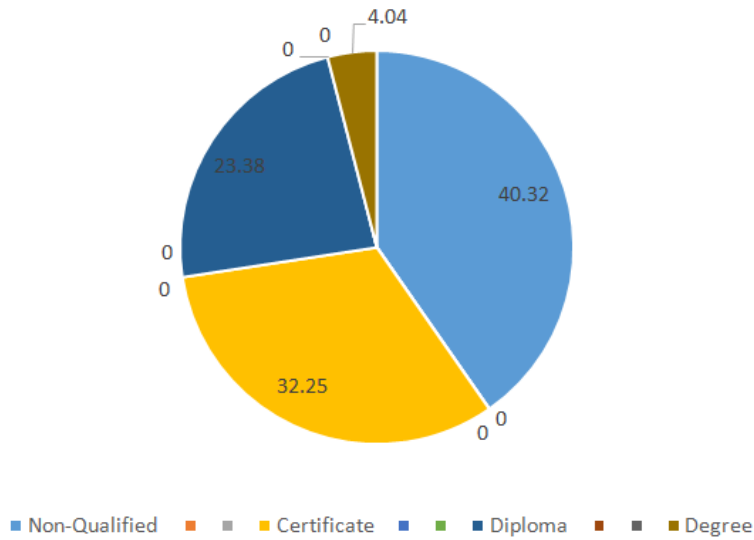
6.6.5. Physical Location of SME

To better contextualize the role of the strategies for re-engineering SMEs, a brief section on the main status and challenges of SMEs is important to assess their effect of educational background on the growth of SME in the Eastern Highlands (Finscope MSME Survey, 2012).To this end, the study looked at the places where each participating SME was located within the Eastern Highlands as shown in Figure 6.3.
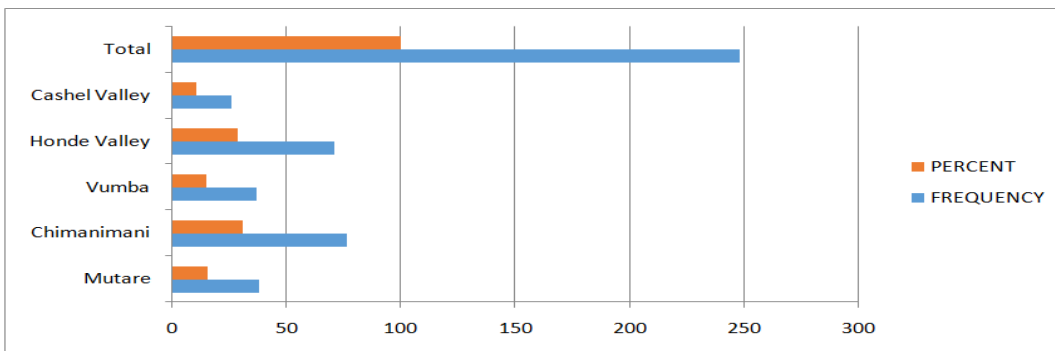
Figure 6.3 Location of SME

Figure 6.3 depicts that the highest number of SMEs (30.6%) is situated in Chimanimani.

**Table 6.26: One-Way ANOVA for SME Business Location and Impact of Policies**

		Sum of Squares	df	Mean Square	F	Sig.
ToWhatExtendHasTheSMEPolicyS oughtToAddressTheChallengesBei ngFacedBySMEsInTheAgriculture Sector	Between Groups	60.465	4	15.116	22.201	.000
	Within Groups	165.454	243	.681		
	Total	225.919	247			
ToWhatExtendHasTheZIMASSETP olicySoughtToAddressTheChallen gesBeingFacedBySMEsInTheAgric ultureSector	Between Groups	209.720	4	52.430	50.181	.000
	Within Groups	253.889	243	1.045		
	Total	463.609	247			
ToWhatExtendHasTheEducationP olicySoughtToAddressTheChallen gesBeingFacedBySMEsInTheAgric ultureSector	Between Groups	115.230	4	28.807	72.194	.000
	Within Groups	96.964	243	.399		
	Total	212.194	247			
ToWhatExtendHasTheIndeginisati onEconomicEmpowermentPolicy SoughtToAddressTheChallengesB eing Faced BySMEsIn The Agricultur eSector	Between Groups	50.206	4	12.551	11.583	.000
	Within Groups	263.307	243	1.084		
	Total	313.512	247			
ToWhatExtendHasTheAgricultura lPolicySoughtToAddressTheChalle ngesBeingFacedBySMEsInTheAgri cultureSector	Between Groups	.000	4	.000	.	.
	Within Groups	.000	243	.000		
	Total	.000	247			
ToWhatExtendHasTheICTPolicyS oughtToAddressTheChallengesBei ngFacedBySMEsInTheAgriculture Sector	Between Groups	146.146	4	36.537	33.421	.000
	Within Groups	265.656	243	1.093		
	Total	411.802	247			
ToWhatExtendHasTheNationalInv estmentPolicySoughtToAddressT heChallengesBeingFacedBySMEsI nTheAgricultureSector	Between Groups	.000	4	.000	.	.
	Within Groups	.000	243	.000		
	Total	.000	247			
ToWhatExtendHasTheNationalGe nderPolicySoughtToAddressTheC hallengesBeingFacedBySMEsInTh eAgricultureSector	Between Groups	249.537	4	62.384	116.197	.000
	Within Groups	130.463	243	.537		
	Total	380.000	247			
ToWhatExtendHasTheInfrastruct uralDevelopmentPolicySoughtTo AddressTheChallengesBeingFaced BySMEsIn The Agriculture Sector	Between Groups	45.153	4	11.288	17.049	.000
	Within Groups	160.896	243	.662		
	Total	206.048	247			
ToWhatExtendHasTheLandPolicy SoughtToAddressTheChallengesB eing Faced BySMEsInThe Agricultur eSector	Between Groups	131.284	4	32.821	42.533	.000
	Within Groups	187.491	243	.772		
	Total	318.774	247			
ToWhatExtendHasTheLookEastPo licySoughtToAddressTheChalleng esBeingFacedBySMEsInTheAgricu ltureSector	Between Groups	262.354	4	65.588	139.215	.000
	Within Groups	114.485	243	.471		
	Total	376.839	247			

Interestingly, Table 6.26 reveals that the location of the SMEs significantly influences the impact that government policy has on the growth of SMEs in that area. The p-value for all the variables is 0.000, which is an indication of the significance of the relationship. The analysis also shows that 65% of the variation in the respondent's perceptions of the extent to which the ''Look East'' policy affects SME growth, can be attributable to the location of the respondent, while 12% of the variation in respondent's perception on the impact of the Indigenization Policy, could be attributable to the location of the respondents. The physical location fits well with the cluster theory to build value networks and evenly develop communities, since the sector pursues common goals of realizing food security (FAO, 2014; Ehrenberger, Koudelkova & Strielkowski, 2015; Baporikar, 2017).

6.6.6. Category of SMEs

As shown in Figure 6.4, most of the participating SMEs were in the category of medium-sized entrepreneurs (60%), whilst 40% were micro and/or small-sized enterprises.

Figure 6.4: Classifying SMEs

	Small	Medium	
■ Percent	40.3	59.7	
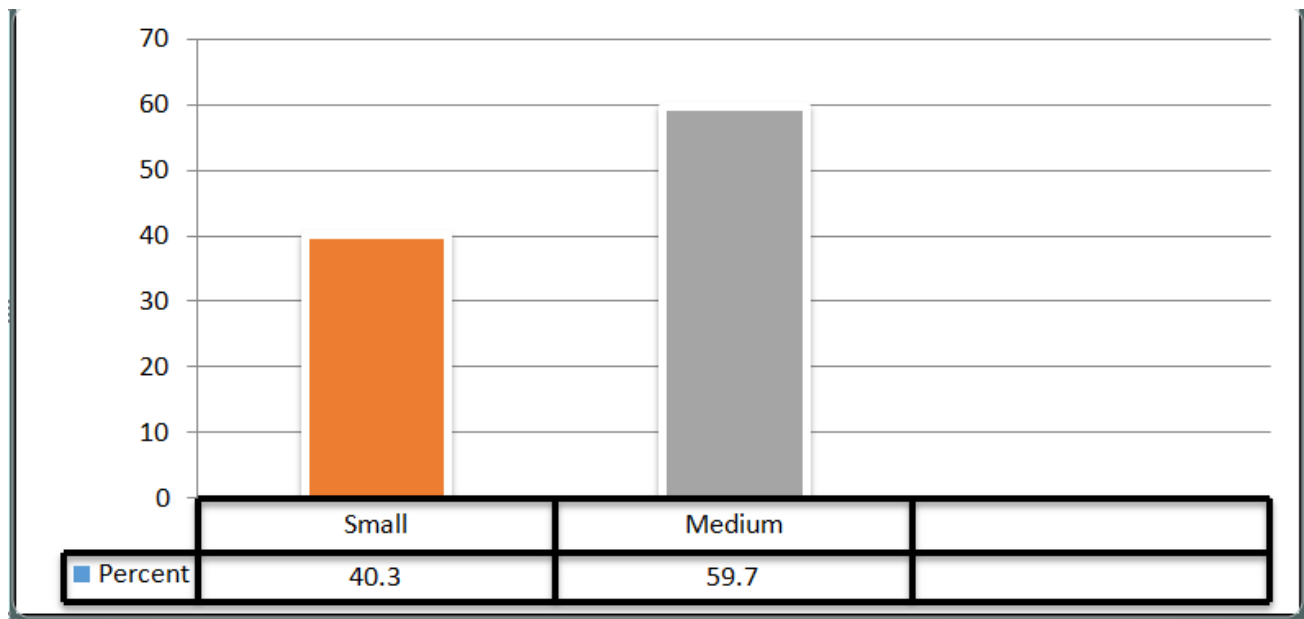
6.6.7. Change in SME Employees

The study sought to explore the recent growth of the SMEs that were surveyed in the study.

Table 6.26: Changes in SME Employees

Location of Business	Gender of respondent		Age of respondents		PleaseIndicateIfThereHasBeenAnySignificantChangeInTheNumberOfPersonnelEmployedSinceTheInceptionOfTheSME		
					Increase	Decline	No Variation
					Count	Count	Count
Mutare	Gender of respondent	Male	Age of respondents	18-35	0	1	0
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
		Female	Age of respondents	18-35	34	0	3
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
Chimanimani	Gender of respondent	Male	Age of respondents	18-35	0	46	2
				36-55	0	0	0
				56-65	0	0	0
				65-85	0	0	0
		Female	Age of respondents	18-35	0	0	0
				36-55	0	8	0
				56-65	0	7	1
				65-85	1	11	0
Vumba	Gender of respondent	Male	Age of respondents	18-35	36	0	1
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
		Female	Age of respondents	18-35	0	0	0
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
Honde Valley	Gender of respondent	Male	Age of respondents	18-35	2	39	2
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
		Female	Age of respondents	18-35	3	0	25
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
Cashel Valley	Gender of respondent	Male	Age of respondents	18-35	4	12	1
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
		Female	Age of respondents	18-35	6	0	2
				36-55	0	0	1
				56-65	0	0	0
				66-85	0	0	0
Chipinge	Gender of respondent	Male	Age of respondents	18-35	0	0	0
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
		Female	Age of respondents	18-35	0	0	0
				36-55	0	0	0
				63-65	0	0	0
				66-85	0	0	0
Nyanga	Gender of respondent	Male	Age of respondents	18-35	0	0	0
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0
		Female	Age of respondents	18-35	0	0	0
				36-55	0	0	0
				56-65	0	0	0
				66-85	0	0	0

On being asked whether there have been any significant changes in the number of people employed by SMEs, it was noted that there were neither responses in Nyanga and Chipinge. It was noted that 34 female respondents indicated that there had been a significant increase in the number of people employed by SMEs. In the Honde Valley, 39 male respondents felt that there had been a decline in the number of employees employed through SMEs. The researcher observed that generally,

respondents aged between 18-31 years are dominating in this sector depending on their locations as shown in the table above. From the above, it can be concluded that perceptions of changes in employee turnover vary in terms of the location, gender and age of the respondents.

However, the most affected age range of 18-31 is the one that is actively looking for employment and dominantly in the school- leavers' age range who are constantly moving from one opportunity to another.

6.6.8. Ownership Structure of SMEs

Table 6.28 shows that 50.8% of the SMEs are family-owned, followed by sole proprietors and a few are operated as private limited companies. All land in Zimbabwe is state land and communal land ownership is usually allocated through chiefs and local village heads in family units. Thus, outside family conflicts, land ownership is highly secure in communal Zimbabwe, other than in the case where the land is acquired for state use such as mining and development. Thus, on being asked about the ownership structure of their agrarian SMEs, 126 respondents (50.8%) indicated that their SME was owned by their respective families, while 102 respondents (41.1%) were sole proprietors, meaning that they owned their piece of land on which their SME was located. It may be noted that what is usually family-owned land may be allocated by families to individuals at the stage where they get married and have to start their own household from what was previously family- owned land. It is, thus, the responsibility of the father to ensure that their beneficiaries get pieces of land on which to set up their own SMEs as soon as they achieve marriage age.

**Table 6.28: Ownership Structure of SMEs**

	Frequency	Percent
Sole Proprietor	102	41.1
Family Owned	126	50.8
Limited	20	8.1

The majority (50.8%) of the agrarian SMEs is family- owned and very few are private limited businesses.

6.6.9. SME Business Duration

Figure 6.5 shows the response from the respondents concerning the period of existence of the SMEs.

Figure 6.5: SME Business Duration
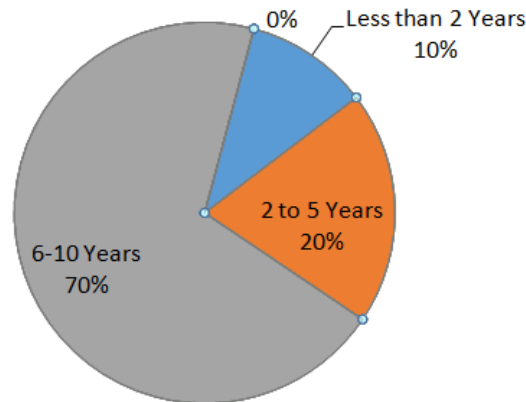
As reflected in Figure 6.5, only 10% of the respondents indicated that their operations had been in existence for less than 2 years, whilst only 20% of the respondents indicated that they had been in existence for a period between 2-5 years. The vast majority (70%) of the SMEs have been in existence for a period of between 6 and 10 years. The findings thus show that the majority of the SMEs have been in existence long enough to have grown and become sustainable in maintaining the livelihoods of the individual households. The period of existence of these SMEs also corresponds to the period in which the land reform in Zimbabwe had been at its peak and at the time in which government support for agrarian SMEs had been prevalent through various initiatives and policy frameworks aimed at stimulating the agrarian sector.

6.6.9.1 Cross Tabulation of Business Location and Period of Existence of the Business

It was ascertained that the Honde Valley has more young SMEs than in any other location, whilst Chimanimani has older SMEs than any other locations.

Table 6.29 Cross Tabulation of Business Location and Period in Business

		For how long has your SMEs been in existence				
		Less than 2 Years	2 to 5 Years	6-10 Years	11 to 15 Years	16+ Years
		Count	Count	Count	Count	Count
Location of business	Mutare	0	1	37	0	0
	Chimanimani	0	21	55	0	0
	Vumba	0	0	37	0	0
	Honde Valley	24	24	23	0	0
	Cashel Valley	2	3	21	0	0
	Chipinge	0	0	0	0	0
	Nyanga	0	0	0	0	0

Source: Developed by the Researcher

On being asked on the duration in which their SMEs had been in existence, 173 respondents indicated that their business had been in existence for between 6-10 years. There is high concentration of older SMEs in Chimanimani and Honde Valley. This can be attributed to the unique geographical characteristics of these communities in terms of terrain, rainfall patterns and temperature conditions. These characteristics are favourable for successful farming of diverse horticultural and floricultural commodities such as pineapples, bananas and various tubers (yams and sweet potatoes).A one-way ANOVA was conducted in which the location of the business was the predictor of the impact of the various government policies. With a $p<0.05$ value, the H0 was rejected and it was concluded that the regression model does explain the variation between the time of existence of the agrarian SMEs and the location of the SME. Thus, there is ample evidence to believe and conclude that there are certain areas in which the SMEs have been in existence for longer periods by virtue of their locations. As indicted above, it was noted that Chimanimani and Honde valley which share the same environmental characteristics have the oldest SMEs compared to other regions under study in this research.

Table 6.20 ANOVA Analysis: Period In Existence of an SME

For how long has your SMEs been in existence

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	39.595	4	9.899	33.282	.000
Within Groups	72.272	243	.297		
Total	111.867	247			

There is significant relationship between location and period of operation of SME.

6.6.10. Sources of SME Funding

Table 6.31 reflects the mean values of the funding sources for SMEs. As shown in Table 6.27, 58% of SMEs are self-funded and the least source of funding is from government and the local banks.

Table 6.31: Sources of SME Funding

Funding	Frequency	Percent
Self-funded	160	58.9
Government	22	11.7
Bank loan	26	11.7
Social Capital	40	17.7
Total	248	100

It can be noted from Table 6.31, that 160 respondents (58.9%) indicated that their agrarian SMEs were self-funded, while 22(11.7%) indicated that their SMEs relied on the government for funding. Forty respondents (17.7%) indicated that their agrarian SMEs depended on social capital as source of funding. Those relying on social capital probably rely on remittances from relatives in other geographical areas such as Harare and the diaspora community. It may be noted that government policy on input support schemes seem not to have much impact in this case as far as provision of materials such as inputs is a concern. The reliance on self-funding may, however, is taken to imply that the SMEs have grown and are operating sustainably. Thus, they will not have to rely on

government financial support policies. This enables SMEs to either save or access a loan from a Bank to fund their activities, while at the same time being capable of paying back the loans.

6.6.11. The Productivity Sequences of SMEs.

Table 6.32 reflects the growth in productivity of the SMEs in the recent past.

Table 6.32: Productivity Sequences of SMEs

Range of Production	Frequency	Percent	Valid Percent	Cumulative Percent
Not more than 40	110	58.9	58.9	58.9
Not More than 60	96	29.4	29.4	88.3
Not more than 80	42	11.7	11.7	100.0
Total	248	100.0	100.0	

As shown in Table 6.32, 110 respondents (58.9%) indicated that they had achieved not more than 40% capacity with regards to utilization of their land, while 96 (29.4%) had achieved up to 60%. The low utilization of land in certain areas such as Chimanimani and Honde Valley could be attributed to the terrain (steep mountains slopes), on which their farming plots are located. This is as is shown in the table below. SMEs have seen growth in productivity of not more than 40% and this represented 59% of the SMEs whilst only 12% of the respondents had a growth in productivity of 61 to 80%.

**Table 6.33: Capacity/Resource Mobilization**

		UseTheFollowingPercentageRangesToIndicateTheProductivitySequenceOfYourSME		
		Not more than 40	Not More than 60	Not more than 80
		Count	Count	Count
Location of business	Mutare	37	0	1
	Chimanimani	28	26	22
	Vumba	0	37	0
	Honde Valley	68	3	0
	Cashel Valley	13	7	6
	Chipinge	0	0	0
	Nyanga	0	0	0

According to Table 6.33 Honde Valley is leading in capacity utilisation. This is due to improved government support programs.

6.7. Major SMEs Challenges

Figure 6.7 which depict the analysis of the greatest challenges being faced by SMEs, reflects that 53.31% of the respondents indicated that they lacked access to finance, while another2.02% indicated that they lacked access to international markets. However, 12.10% cited lack of land ownership as their main challenge while 10.89% and 7.26% indicated lack of inputs and lack of adequate rain and capacity building, respectively, as their main challenges.

Figure 6.6 Major SME Challenges
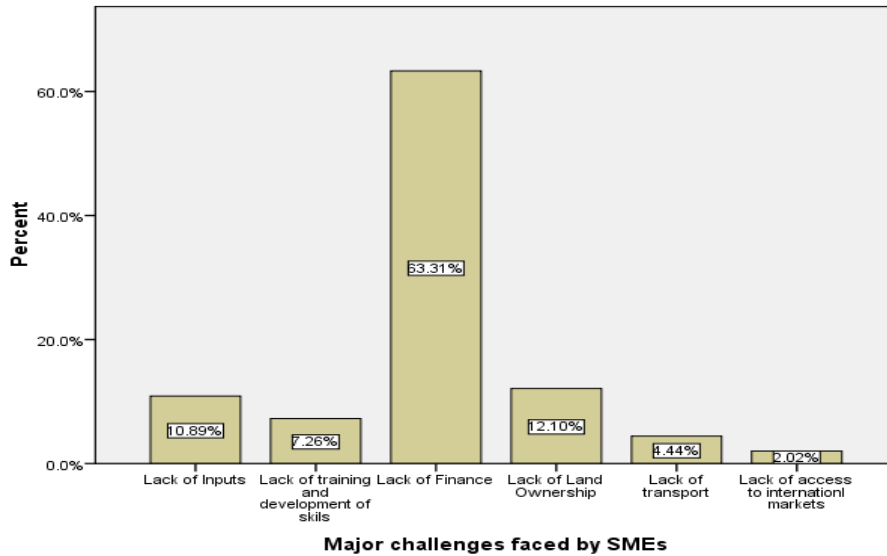
The results on SME challenges reveal that 63.31% of the respondents show lack of capital as the most serious challenge to growth, while only 2.02% of the participants cited lack of access to international markets. If adequate finance is given to SMEs, they will be a great improvement of services and good outcomes may be attained and also it will attract more people to participate .Furthermore, by ensuring that agrarian SMEs receive appropriate and targeted training, their capacity improves and it creates easy access to finances through various government channels. The SME training may include training hands-on, as this rakes in profits to invest in capital assets such as houses, land and vehicles which can be used in the future as collateral to access much larger loans that are capable of financing capital investment on their plots, such as equipment and micro-processing plants that aid in value addition.

6.7.1. How SME Challenges Inform Government Policy

A Tobit analysis was conducted to measure if the challenges being faced by SMEs have been used to inform government policy. On the extreme left column of Table 6.29, is the list of the major government policies in Zimbabwe which have either a direct or indirect relationship with SMEs' challenges in the country.

189

Table 6.34 Tobit Analysis: SME Challenges and Government Policies

	Coefficient	std. error	z	p- value
Const	3.23659	0.588155	5.503	3.73e-08 ***
SME Policy	0.152995	0.356235	0.4295	0.6676
ZIMASSET Policy	0.350836	0.617177	0.5685	0.5697
Education Policy	-0.406653	0.619541	-0.6564	0.5116
IEEP Policy	-0.401254	0.692076	-0.5798	0.5621
ICT Policy	0.308168	0.446652	0.6900	0.4902
Land Policy	0.0530303	0.0785902	0.6748	0.4998
Chi-square (6)	4.046053	p-value		0.67044

NB: Omitted due to exact co linearity: Agric Policy, NI Policy, Gender Policy

Table 6.34 indicates that there is a relationship between the SME challenges and related SME Policies in place in Zimbabwe. There was no statistical data to conclude that SME policies can be related to the SME challenges (p>0.005). It can, therefore, be concluded that lack of effective policy implementation is failing to facilitate the successful operation and growth of SMEs. However, it was noted that there was exact co-linearity between Agricultural Policy, Gender Policy, Infrastructure Development and Look- East Policy Thus, in Zimbabwe, there is a direct relationship between Agriculture Policy, Look East- Policy, Gender and the Infrastructure. Challenges in the Agro-SME sector in Zimbabwe are not necessarily related to government policy frameworks, but are signs of linkages among the predictor variables tested in this case. Since the results are insignificant, the thrust is to lobby the authorities to re-design the policies incrementally and come up with effective ways of implementing through working closely with agrarian SMEs as a measure to stimulate their growth.

6.8. Role of Government Policies in Re-engineering SME Growth and Sustainability

The mean values given in Table 6.35 below provided a detailed narrative of the responses with regard to the impact of government policy on the SMEs.

Table 6.35: Impact of Government Policies

	SME Policy	ZIMASSET Policy	Education Policy	Indigenisation Economic Empowerment Policy	Agricultural Policy	ICT Policy	National Investment Policy	National Gender Policy	Infrastructure Develop Policy	Land Policy	Look East Policy
Mean	2.79	2.88	1.82	3.29	4.0	3.47	2.00	3.00	3.41	2.35	3.11
Mode	2	4	4	4	4	2	2	4	4	2	4
Std. Deviation	.956	1.370	.927	1.127	.000	1.291	.000	1.240	.913	1.136	1.235
Skewedness	.629	.482	.993	-1.097	-	-.102	-	-.565	.908	.489	.788
Std. Error of Skewedness	.155	.155	.155	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
P- Values	1.0000	1.000	1.0000	<0.00001***	<0.00001***	0.00001	1.0000	<0.00001***	<0.00001***	1.0000	<0.00001***

The agriculture policy (mean of 4.0) was the most important policy for re-engineering the growth and sustainability of SMEs. Respondents tended to all agree that the key policy for growth was based on available legal frameworks in the form of the Land reform and Agriculture Acts. However, the table indicates that there were inconsistencies among respondents in as far as they agreed to the importance of the ZIMASSET (s.d=1.370). The SME policy, while equally important (mean 2.70), tended to be overshadowed by the Agricultural policy since the SMEs under investigation were in the agricultural sector. The Transitional Stabilisation Programme is noted in this research as a temporary and or short term policy framework that is easily influenced by changing socio-political and environmental factors. Thus the ZIMASSET has been replaced by the Transitional Stabilisation Policy (TSP), which has brought the concept of SMART agriculture. Albeit, the major legal frameworks that ushered in the proliferation of agrarian SMEs such as the Land Resettlement act are influential and consistent.

Table 6.36: Pearsoon Correlations Analysis on the Impact of Government Policies

Pearson Correlations

		SME Policy	ZIMASSET Policy	Education Policy	Indeginisation & Economic Empowerment Policy	Agricultural Policy	ICT Policy	National Investment Policy	National Gender Policy	Infrastructural Development Policy	Land Policy	Look East Policy
SME Policy	Pearson Correlation	1	-.296**	.141*	-.192**	a	-.269**	a	-.198**	-.063	-.014	.529**
	Sig. (2-tailed)		.000	.026	.002	.	.000	.	.002	.324	.827	.000
ZIMASSET Policy	Pearson Correlation	-.296**	1	.685**	.864**	a	.535**	a	-.245**	.890**	-.197**	.044
	Sig. (2-tailed)	.000		.000	.000	.	.000	.	.000	.000	.002	.493
Education Policy	Pearson Correlation	.141*	.685**	1	.562**	a	.666**	a	-.620**	.718**	.060	.018
	Sig. (2-tailed)	.026	.000		.000	.	.000	.	.000	.000	.346	.783
Indigenisation & Economic Empowerment Policy	Pearson Correlation	-.192**	.864**	.562**	1	a	.717**	a	-.003	.972**	-.354**	.060
	Sig. (2-tailed)	.002	.000	.000		.	.000	.	.964	.000	.000	.344
Agricultural Policy	Pearson Correlation	a	a	a	a	a	a	a	a	a	a	a
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.	.	.
ICT Policy	Pearson Correlation	-.269**	.535**	.666**	.717**	a	1	a	-.078	.738**	-.032	-.183**
	Sig. (2-tailed)	.000	.000	.000	.000	.		.	.219	.000	.618	.004
National Investment Policy	Pearson Correlation	a	a	a	a	a	a	a	a	a	a	a
	Sig. (2-tailed)	.	.	.	.	.	.	.	.	.	.	.
National Gender Policy	Pearson Correlation	-.198**	-.245**	-.620**	-.003	a	-.078	a	1	-.107	.086	.465**
	Sig. (2-tailed)	.002	.000	.000	.964	.	.219	.		.092	.176	.000
Infrastructural Development Policy	Pearson Correlation	-.063	.890**	.718**	.972**	a	.738**	a	-.107	1	-.250**	.167**
	Sig. (2-tailed)	.324	.000	.000	.000	.	.000	.	.092		.000	.008
Land Policy	Pearson Correlation	-.014	-.197**	.060	-.354**	a	-.032	a	.086	-.250**	1	.225**
	Sig. (2-tailed)	.827	.002	.346	.000	.	.618	.	.176	.000		.000
Look East Policy	Pearson Correlation	.529**	.044	.018	.060	a	-.183**	a	.465**	.167**	.225**	1
	Sig. (2-tailed)	.000	.493	.783	.344	.	.004	.	.000	.008	.000	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

a. Cannot be computed because at least one of the variables is constant.

Generally results show that policies are complementary to each other. As such, certain policies always have an effect on performance of policies linked to re-engineering the growth and sustainability of agrarian SMEs and eventual their success on global competition. It was noted, for example, that there was a significant relationship between the SME Policy and the Look East Policy ($p<0.005$) it was also observed that the Land Policy and Infrastructure Development Policy were significantly correlated ($p<0.005$). Results of the analysis, therefore, imply that there is generally strong positive correlations between SME- linked policies which in turn have impact on their sustainable growth. However, some policies seem not to have any relationship at all, for example, the results of analysis show that there was no correlation between the Education Policy and the Look East Policy ($p>0.005$) or the ICT Policy and the Gender Policy ($p>0.005$).

6.8.1. Effect of Government Regulations/Policies on Re-engineering Agrarian SMEs

The information in Table 6.37 shows a Tobit Model analysis of the correlation among the government policies and SMEs in the agrarian sector. The results reveal that there was exact co linearity on policy design, reputation, credit guarantees and land tenure. Thus, these variables were directly related to each other and could not be evaluated to determine the extent of their influence on the SME policies. In view of this, it was also noted that SME policies had a direct influence on land tenure security/title deeds, policy design, tax relief and environmental management to influence food security, economic growth, resources utilization and employment creation and opening access to international markets ($p < 0.005$). There was no effect of SME policy design and implementation on improving the growth and sustainability of SMEs.

Table 6.37 Tobit Analysis: Government Policies

	Coefficient	Std. Error	Z	p-value	
Policy Design	1.61538	0.244155	6.6162	<0.00001	***
Reputation	-2.49573	0.18779	-13.2900	<0.00001	***
Registration/licensi	-0.495726	0.123037	-4.0291	0.00006	***
Credit Guarantees	0	0.155764	0.0000	1.00000	
Land tenure	2	0.155764	12.8399	<0.00001	***

6.8.2. Government Policies Re-engineer the Growth of the Agrarian Sector

The results shown in Figure 6.7 indicate that 47.18% of the respondents agree that government policies have not been well implemented or redesigned to re-engineer growth in the agrarian sector. However, 29.44% strongly disagreed that government policies were designed to re-engineer the growth of the agrarian sector.

Figure 6.7: Re-designing Government Policies
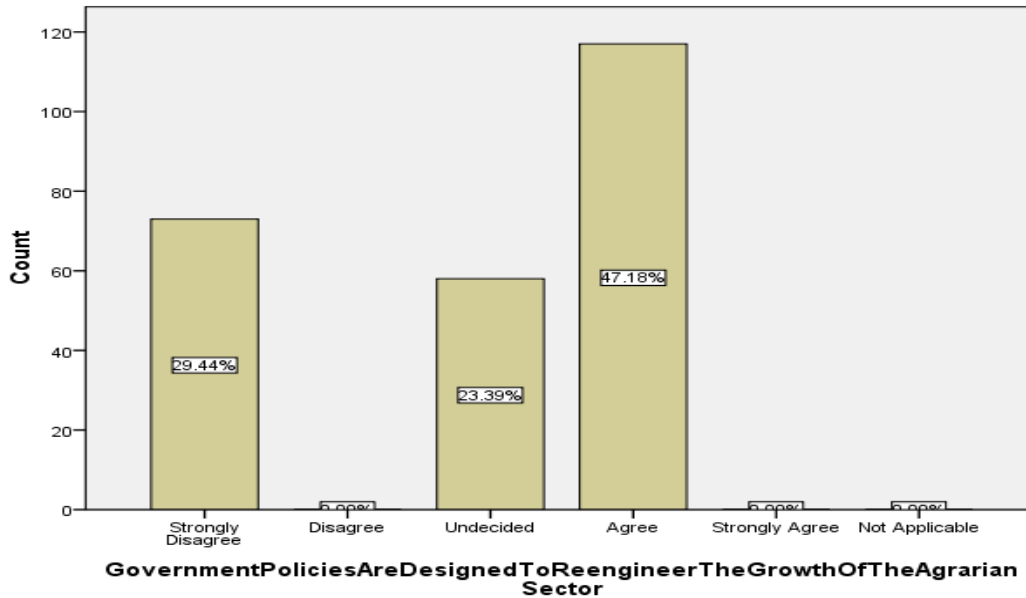
6.8.3 Tax Relief Promotes SME Resource Mobilization

Tax relief is a policy incentive that is used to incentivize SMEs to become formal and stimulate their growth and sustainability. Table 638 depicts that tax relief in the Zimbabwean scenario has significant contribution towards resource mobilization as indicated by 50% of the respondents.

Table 6.38: Tax Relief Promotes Domestic Resource Mobilisation/Support for SMEs

TaxReliefPromoteDomesticResourceMobilasationandStrengthenGovernmentSupport For SMEs					
Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Not Applicable
Count	Count	Count	Count	Count	Count
190	0	0	58	0	0

On being asked on whether tax relief could promote domestic resource mobilization, 190 respondents strongly agreed while only 58 agreed. The level and scale of operations by the agrarian SMEs do not warrant sufficient relief from government per se. rather, the relief is indirectly provided to the agrarian SMEs in the form government input support schemes.

6.8.4. Impact of a Stable Macro-Economic Environment on SME Competitiveness

Figure 6.10 depicts that 75% of the respondents strongly agree that if the political environment is being improved and government policies are well implemented, this will promote stability in the

macro-economic environment hence SMEs in the agrarian sector competitiveness is facilitated while 5% of the respondents disagree.

Figure 6.8: Impact of Stability of the Macro-Economic Environment
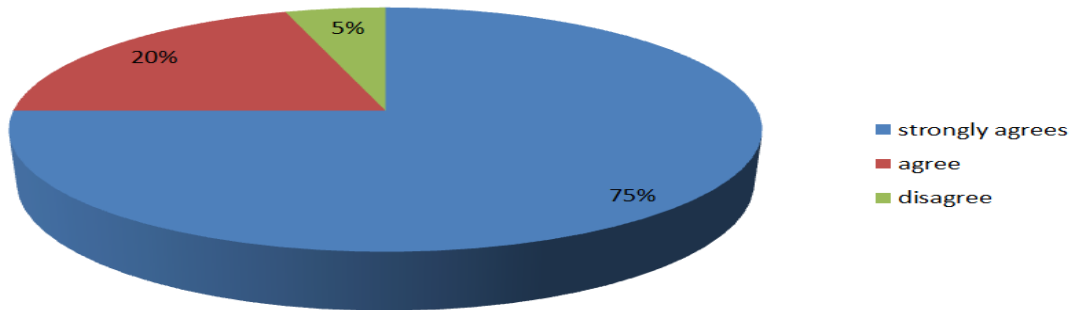
As depicted in Figure 6.8, borrowing from banks through land security tenure was considered a critical aspect in influencing the growth and competitiveness of the SME sector.

Figure 6.9: Borrowing by SMEs from Banks
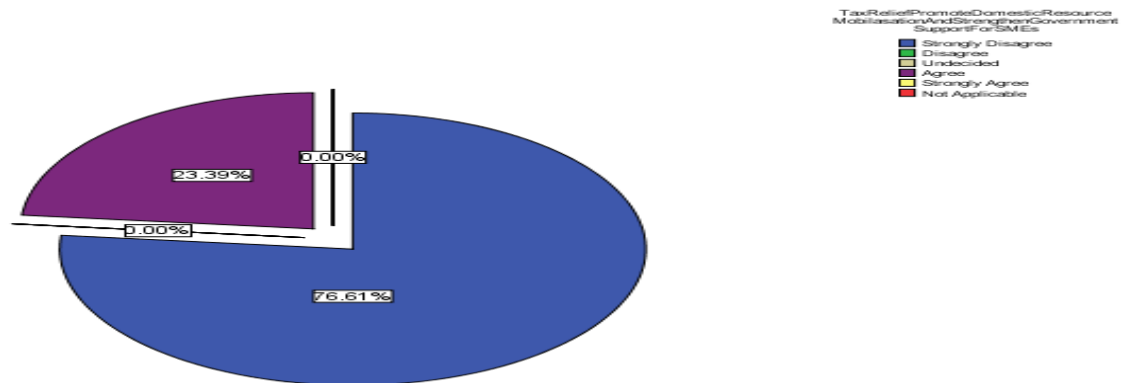
On whether tax relief promotes domestic resource mobilization and strengthens government support for SMEs, 76.61% of the respondents strongly disagreed, while 23.39% of the respondents were undecided.

6.9. Agriculture Support Mechanisms

The growth and competitiveness of SMEs depends much on government support for SMEs. For growth of SMEs in Zimbabwe, agricultural support plays a very critical role and the study sought to

quantify the role played by agricultural support on the growth and sustainability of SMEs. The next section looks at Tobit analysis of the factors directly related to this agricultural support.

6.9.1. The impact of Agricultural Sustainable Measures in Re-engineering the Growth of Agrarian SMEs.

Table 6.40 shows that all government support programs have been relevant and or significant in stimulating the growth and sustainability among agrarian SMEs in Zimbabwe. The frame Mechanization Program which saw SME farmers receive various implements under the government of Zimbabwe quasi fiscal programs spearheaded by the RBZ, were important for equipping farmers with appropriate tools necessary to stimulate productivity(ZimVac,2016;FAO,2017).

Table 6.39 Tobit Analysis: Agricultural Support

	Coefficient	Std. Error	Z	p-value	Standard errors based on Hessian
Mechanisation	0.315531	0.0330457	9.5483	<0.00001	***
Agric Ex Systems	-0.703461	0.0460729	-15.2684	<0.00001	***
Cooperative Faci	-0.224797	0.0256263	-8.7721	<0.00001	***
Infrastructure	-2.48434	0.055555	-44.7185	<0.00001	***
Landownership	-2.21739	0.21536	-10.2962	<0.00001	***
Loans & Credits	-1.21739	0.0954111	-12.7594	<0.00001	***
Command Agriculture	1.93478	0.0928063	20.8475	<0.00001	***
SCCS	2.65217	0.125851	21.0738	<0.00001	***

Chi-square(4)	3579.152	p-value		0.000000
Log-likelihood	-3.650634	Akaike criterion		19.30127
Schwarz criterion	40.38184	Hannan-Quinn		27.78751

Sigma = 0.245559 (0.0110259)   Left-censored observations: 0
Right-censored observations: 0
Test for normality of residual - Null hypothesis: error is normally distributed
Test statistic: Chi-square (2) = 248With p-value = 1.40438e-05

The Hessian had positive Eigen values which were constant, showing that the critical errors were minimal in the study. Although some farm owners have 99 year leases, the question still remains why the leases are not accepted as collateral in mainstream banking sectors in Zimbabwe? However, this devalues the land, if banks do not accept them as security of ownership of land. Hence, some of the support systems remain controversial in the mainstream politics of Zimbabwe, thus, they will always remain contentious issues that may affect former markets for commodities that need exports.

6.9.2. Agricultural Sustainable Measures

As reflected in Table 6.40, all agricultural support programs were found to have influence on agrarian SMEs (p<0.05). The Tobit analysis results (Table 6.40) indicates that support mechanisms introduced to assist SMEs in the agriculture sector were effective in re-engineering growth and sustainability of the SMEs (p<0.05). It is notable that financial capitalization, collaboration and land tenure are critical for ensuring sustainable operation of agrarian SMEs. Government initiatives such as Agricultural Loans and Credit facilities, Agricultural Mechanization provisions and land ownership were noted to have negative effect on sustainability of SMEs, perhaps as a result of them being related to financial capabilities of SMEs .It would seem to suggest that aspects of SMEs that have a financial bearing on their operations tend to weigh down sustainability of such. However, the Command Agriculture, land ownership and tax relief were not to provide a strong basis for the sustainability of SMEs and they indicated positive correlation with the goal of re-engineering growth and sustainability of SMEs in the study areas. This was probably because these variables have direct financial implications for the SMEs, as is the case with other variables such as land tenure which is a direct variable in the bankability of 99-year leases for the SMEs in the agrarian sector. Results of the analysis indicated that government support mechanisms introduced to assist SMEs in the agriculture sector were effective in re-engineering the growth and sustainability of SMEs (p<0.05). It is notable that financial capitalization, collaboration and land tenure are critical for ensuring sustainable operations of agrarian SMEs.

Table 6.40 Tobit Analysis: Agricultural Sustainable Measures

	Coefficient	Std. Error	Z	p-value	
				Standard errors based on Hessian	
food process	-9.10987	0.462604	-19.6926	<0.00001	***
land tenure	-1	0.157875	-6.3341	<0.00001	***
Cop credit facility	6.3485	0.403808	15.7216	<0.00001	***
Resource utilize	0	0.157875	0.0000	1.00000	
food security	2.11617	0.121571	17.4069	<0.00001	***
value addition	2.11617	0.121571	17.4069	<0.00001	***
Log-likelihood	-248.8673	Akaike criterion			511.7345
Schwarz criterion	536.3286	Hannan-Quinn			521.6352

Sigma = 0.660049 (0.0296371)
Left-censored observations: 0   Right-censored observations: 0

Resource utilisation was not significant in that it did not play a statistically important role (p>0.05) in constituting a successful sustainable measure to influence the growth and sustainability of agrarian SMEs.

6.9.2. Sustainable Support Measures

Table 6.41 is a summary of the support measures for SMEs in the agrarian sector. Support measures such as revolving funds, inputs, contract farming and mechanization (tractors, drought, and combine harvesters) and markets among others are very critical in the growth of the SMEs sector as noted by 35.1% of respondents who agreed to a greater extent. Another 47.2% just agreed to a great extent and the total of these two overwhelm the other responses. Respondents agreed that Tax relief for agrarian SMEs, Command Agriculture, infrastructure development (Irrigation schemes, dams and solar installations) and agricultural research, are some of the government support measures that have successfully stimulated growth and sustainability of agrarian SMEs.

Table 6.41 Summary of the Support Measures

Overall Summary on Sustainable Support Measures	Percent
Lower Extent	17.7
Great Extent	47.2
Very Great Extent	35.1
Total	100.0

6.9.3 .Location of SMEs and Agricultural Support

The study carried out a cross-tabulation of the location of business and the quantity and type of agriculture support mechanisms received in the area. The details are shown in the table below.

Table 6.42: Geographical Location of SMEs and Agricultural Resource Distribution

Location of business	Agriculture Support Mechanisms							Total
	Agriculture Mechanisation	Agriculture Extension System	Agriculture Loans and Credit Facility	Agriculture Input Schemes	Command Agriculture	Infrastructure Development	Agricultural Research and SME product development	
Mutare	20	18	60	10	10	18	18	154
Chimanimani	50	20	40	60	60	20	20	270
Vumba	30	40	8	30	30	40	40	218
Honde Valley	60	50	30	60	60	50	50	360
Cashel Valley	40	30	30	18	18	30	30	196
Chipinge	18	60	60	10	10	30	60	278
Nyanga	30	30	20	60	60	60	30	260
Total	248	248	248	248	248	248	248	1736

The results of the analysis show that Honde valley had the highest cumulative number of respondents who received support from government initiatives. Table 6.42 above shows that a total of 360 subsidies and or support initiatives were highly distributed to the Honde valley, compared to other areas in the form of seed, fertilizers, training and development and agricultural extension services to stimulate SME growth. Even though the respondents remained at 248, the obvious statistics on total agriculture resource distribution (support) differs depending on the type and amount of resource availed in the areas under study.

6.10. The Influence of Innovative Strategies on SMEs

Development strategies influence SMEs growth as shown by the Tobit analysis below. The need to achieve food security and create employment were noted to have great influence on the need to re-engineer SMEs for Economic growth ($p<0.05$).

Table 6.43: Tobit Analysis: SME Techno Innovative Strategies

	Coefficient	Std. Error	Z	p-value	
Acquisition and Mergers	1.34161	0.0754799	17.7745	<0.00001	***
Product branding	-0.273292	0.054989	-4.9699	<0.00001	***
Contract farming	-0.288292	0.0594489	-4.97899	<0.00001	***
Incubation	1.34171	0.0764799	17.8745	<0.00001	***

Log-likelihood	-97.88653	Akaike criterion	203.7731
Schwarz criterion	217.8268	Hannan-Quinn	209.4306

Sigma = 0.359071 (0.0161228)

Left-censored observations: 0   Right-censored observations: 0

The hessian Eigen values extracted these parameters (acquisition and mergers, product branding, contract farming and incubation which were considered significant for the study. The results of the analysis indicated that all strategies have significant p value of <0.00001, which implies that these strategies have a positive influence on the growth of SMEs.

6.10.1. Influence of Uptake of Technologies on SMEs

Agrarian SMEs in Zimbabwe are strongly influenced by uptake in technologies to grow. To validate this statement, a Tobit analysis was carried out in the study.

Table 6.44: Tobit Analysis: Uptake of Technologies

	Coefficient	Std. Error	Z	p-value	
AKIS	-0.541388	0.0334371	-16.1912	<0.00001	***
Competitive Strategy	0.881625	0.106277	8.2955	<0.00001	***
Value Addition	2.36044	0.111978	21.0795	<0.00001	***
Agricredit	0.277136	0.0802376	3.4539	0.00055	***
Ecommerce	0.0106693	0.0479275	0.2226	0.82384	
Biotechnology	-1.7122	0.0942922	-18.1584	<0.00001	***

Log-likelihood	-225.9110	Akaike criterion	461.8220
Schwarz criterion	479.3891	Hannan-Quinn	468.8939

Sigma = 0.601694 (0.0270168)
Left-censored observations: 0   Right-censored observations: 0

As is evident from Table 6.44, improved agricultural knowledge, indigenous systems, value addition, e-commerce, bio-technology and agriculture credit guarantee schemes are seen in this analysis as being important ($p<0.05$) in facilitating and or expediting growth of SMEs towards Transnational Companies. However, SMEs seem to lag behind as far as taking up new technologies to improve their operations. The results of the analysis indicate that e-commerce did not have a significant influencing on the uptake of technologies. This was because the use of ICT has become more and more pronounced in Zimbabwe based on a cell phone penetration rate of up to 97%(Chen & Zhang, 2015; Rahayu & Day, 2016). The terrain/topography in most of these areas is prohibitive to the use of modern technologies; hence, technology did not contribute much to the growth and sustainability of agrarian SMEs in the Eastern Highlands.

6.10.1. Source of Funding and SME Techno- Innovative Strategies

As reflected in Figure 6.10, the study confirmed that the source of funding for the SMEs differs, but the highest was self-funding and the lowest was bank loans.

Figure 6.10: SME Techno- Innovative Strategies
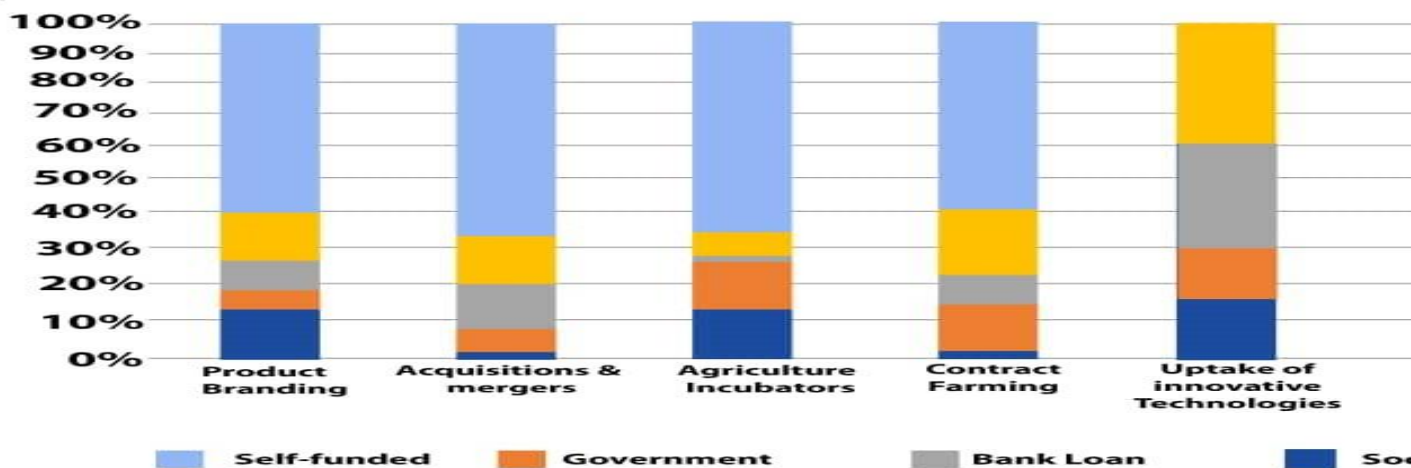
This shows that local banks have not taken agricultural activities by SMEs as a serious business. They still cannot afford to lend meaningful capital to this sector due to lack of security (collateral) by SME-owners. However these results show that entrepreneurs in this sector largely self-finance their activities and were being complimented by social capital and partial support from government to sustain the growth of their SMEs.

6.10.2. The Impact of the Re-engineering of SMEs on Overall Economic Growth

The findings confirmed that 16% agreed that re-engineering SMEs stimulates income distribution and employment creation to improve the standards of living and economic growth.

Figure 6.11: Effect of Re-engineering on Overall Economic Growth
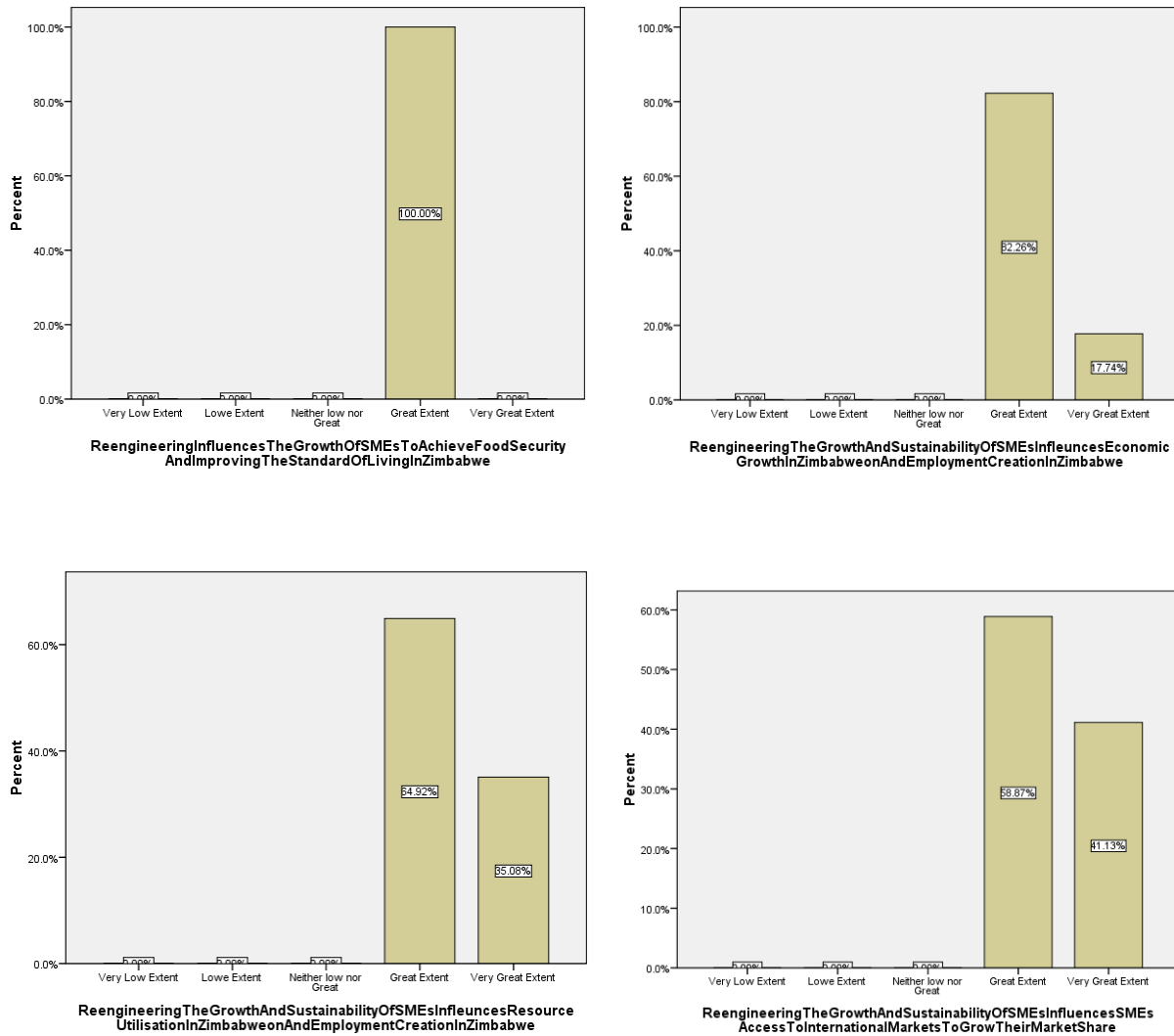
As reflected in Figure 6.10, the majority of the respondents agreed that SME policies were, to a greater extent, key in re-engineering the growth and sustainability of SMEs. It is, therefore, notable that current existent policies on SMEs in all their diversity are capable of at least improving

livelihoods though they are not statistically sufficient to improve quality of life and facilitate income distribution.

6.10.3. Impact of the Re- Engineering Process on the Growth of SMEs

As reflected in Fig 6.14, the majority of the respondents agreed that SME policies were, to a greater extent, key in re-engineering the growth and sustainability of SMEs. It is, therefore, notable that current existent policies on SMEs in all their diversity are capable of at least improving livelihoods although they are not statistically significant to improve the quality of life and facilitate income distribution.

Figure 6.12: Impact of Re-engineering SME Policy
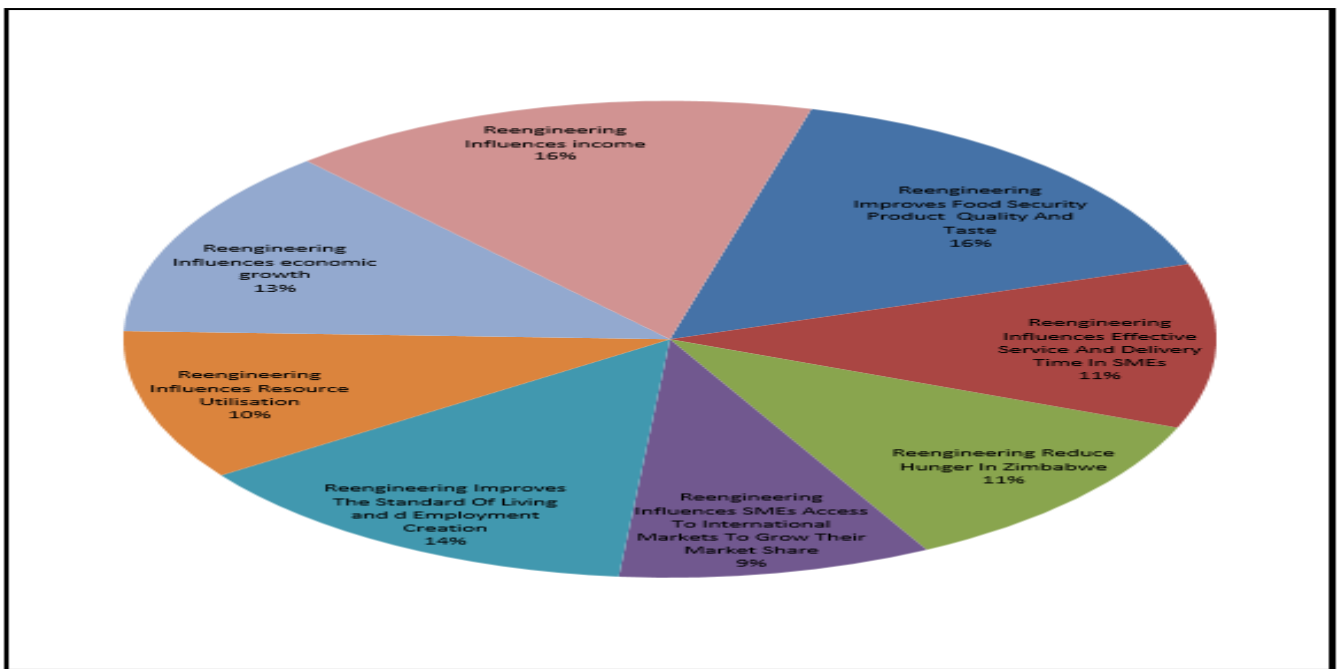
Figure 6.14 reveals that food security and economic growth were influenced by the growth of SMEs in the agrarian sector. The re-engineering process of this sector is supported by the SME growth model as proposed by Ameyaw et al. (2017), who argued that this model can contribute to the development of SMEs through the phases to grow them into Transnational Companies.

Table 6.45: Tobit Analysis on Successfully Re-engineering the Growth of SMEs

	Coefficient	Std. Error	z	p-value	
Food Security	3	0.229942	13.0468	<0.00001	***
Employment	-1	0.128284	-7.7952	<0.00001	***
Econ Growth	-1.5	0.116491	-12.8766	<0.00001	***
Standard of Living	0.5	0.164978	3.0307	0.00244	***
Log-likelihood	-272.2819		Akaike criterion	554.5637	
Schwarz criterion	572.1309		Hannan-Quinn	561.6356	

Sigma = 0.725403 (0.0325716)
Left-censored observations: 0   Right-censored observations: 0

As is evident from Table 6.45, re-engineered SMEs have an effect on economic growth, standards of living, food security and employment creation.

6.11. SME and Gender Dynamics

Gender is critical in the development of SMEs and the economy in general and this happens in the agriculture sector as well. In this section, the researcher looked at the influence of gender dynamics on the growth and sustainability of SMEs.

6.11.1. Cross-Tabulation of Gender and Productivity

Table 6.46 provides an Anova presentation of the cross tabulation results on the relationship between gender and productivity.

Table 6.46: SME Gender Productivity Sequences

		SMEs Productivity Sequence					Total
		Less Than 10%	Not More than 40%	Not More than 60%	Not More than 80%	100% and above	
Male	170	25	50	35	40	20	170
Female	78	5	13	10	30	20	78

204

Table 6.46 reveals that women contribute significantly to the growth of the agricultural sector.This cross tabulation shows that 50 women had an output of above 60% (increment) annually.

6.11.2. Gender Influence on the Growth of SMEs

Table 6.47: Tobit Analysis: Gender Influence on SMEs

	Coefficient	Std. Error	Z	p-value	
Gender Policies	0.236095	0.0970145	2.4336	0.01495	**
Gender Promotion	0.0628253	0.11628	0.5403	0.58900	
Women Inclusion	0.810649	0.10891	7.4433	<0.00001	***

Log-likelihood	-477.4900		Akaike criterion	962.9799
Schwarz criterion	977.0337		Hannan-Quinn	968.6374

Sigma = 1.65935 (0.0745069)   Left-censored observations: 0
Left-censored observations: 0   Right-censored observations: 0
Test for normality of residual –
 Null hypothesis: error is normally distributed
Test statistic: Chi-square (2) = 247.511
With p-value = 1.79341e-054

Gender policies and women inclusion are seen in this Tobit analysis (Table 6.47), as being critical to engendering the growth of agrarian SMEs, though gender promoting programs were noted as having not much effect on engendering the growth of SMEs (Broegaard, 2013; Chinomona & Maziriri, 2015,). Women are a key aspect in the growth of agrarian SMEs. The creation of gender inclusive policies is indicative of a country that understands the role of women in agriculture. Gender promotion did not seem to have a significant role in the growth and development of agrarian SMEs. This is probably because of the often prevalent confusion in the use of the terms gender inclusion, equity and promotion (Cunningham et al., 2015).

6.11.3. Gender and SME Ownership Status

Table 6.48 Gender and SME Ownership Structure

		Total		
		Limited	Sole Proprietorship	Family Owned
		20	102	126
Male	170	-	67	-
Female	78	-	35	-

As shown in Table 6.48, the sample comprised 102 sole proprietors with only 35 females and the remaining being males. The other ownership structures consisted of limited companies and family-owned businesses which cannot be classified into either male or female.

6.12. SMEs and Management Methods

The study also captured data on management as a variable that affects SME growth and their sustainability. The results of the Tobit analysis (Table 6.49) on the relationship between the growth of SMEs (dependent variable) and various management practices (independent variables), indicated that Strategic management, Corporate Social Responsibility activities, employee motivation and networking were the most significant variables that had potential to catalyse the growth of SMEs ($p<0.05$).

Table 6.49 Tobit Analysis: SMEs and Management

	Coefficient	Std. Error	Z	p-value	
Strategic Mgt	-2.95946	0.0419804	-70.4963	<0.00001	***
SME structure	1.28941	0.0371269	34.7299	<0.00001	***
Social responsibility	0.0405405	0.0606837	0.6681	0.50409	
Employee Motivation	3.57883	0.0684883	52.2546	<0.00001	***
Networking	-0.959459	0.0659532	-14.5476	<0.00001	***
Training	0	0.0550987	0.0000	1.00000	
Customer Satisfaction	0	0.0452722	0.0000	1.00000	

Log-likelihood	60.99966		Akaike criterion	-105.9993
Schwarz criterion	-77.89189		Hannan-Quinn	-94.68434

Sigma = 0.189209 (0.00849572)   Left-censored observations: 0
Right-censored observations: 0

Social responsibility, training and customer satisfaction did not seem to have any significant influence on the growth and sustainability of agrarian SMEs. According to Kamoyo, Mavhima and Muranda (2014) and Konstantynova and Lehmann (2017), the effective management of SMEs to stimulate their growth fits well with the cluster theories to improve their intensity through modern agricultural clusters such as agro-industrial parks, agro-export zones and export consortia of food and agricultural products. This builds value networks to address common SME challenges, since the context of SME clusters is believed to enhance their competitiveness and innovation (Ehrenberger, Koudelkova & Strielkowski, 2015; Baporikar, 2017).

Table 6.50 Summary of *T*obit Analysis

DEPENDENT VARIABLE	INDEPENDENT VARIABLE(S)	p VALUES
Growth and Sustainability of Agrarian SMEs in Zimbabwe	SME Challenges	<0.0001
	Government Policies	<0.0001
	Agriculture Support Mechanisms	<0.0001
	Agricultural Sustainable Measures	<0.0001
	Existing SME Development Strategies	<0.0001
	Uptake of Technologies	<0.0001
	Reengineering SMEs	<0.0001
	Gender Influence on SMEs	<0.0001
	SME Management	<0.0001

6.13. Multiple Regression Analysis Results

Thus, the first hypothesis was stated as follows:

Table 6.51: Pearson Correlation Results

	N	Sig	Correlation	Result
Challenges faced by SMEs	248	1	-0.14	Not Supported
Government policies	248	1	.832.	Supported

The results indicate that to some extent there is a relationship between challenges faced by the SMEs and government policies, depending on the situation encountered by SMEs which is a direct result of poor management. However, it is assumed that based on effective policy implementation, the challenges faced by SMEs can be addressed through re-engineering to influence their growth and sustainability (Zimvac, 2013).

Table 6.52: Paired T-Test Results

	Paired Differences Mean	T Std. Deviation	Df	Sig. (2-tailed)	Result
Zimbabwean Government Regulations/ Policies	1.048	1.692	0.837	0.000	Accept

The T value means policies play an important role in re-engineering the growth and sustainability of SMEs.

Table 6.53: ANOVA Results

	Sum of squares	Df	Mean Square	F	Sig.	Result
Agricultural support initiatives	36.194	259	6.032	3.666	.000	Supported
gender dynamics of SME owner-managers	28.766	450	.479	3.710	.000	Supported
Knowledge and understanding of management	24.839	247	.419	4.217	.041	Supported

In summary, the ANOVA results indicate that the above variables are significant in re-engineering the growth and sustainability of SMEs.

Table 6.54: Linear Regression Results

MODEL Residual	B	S.E.	T	P.	Result
Existing SME Techno Innovative Strategies	1.849	.110	36 .154	.000	Supported
Constant	2.101	12.501	24.935	.000	

The existing SME strategies in Table 6.54 influence positive change in the growth of SMEs.

Table 6.55: Regression Analysis Results

	B	S.E.	Wald	Df	Sig.	Exp(B)	Results
Food Security and Nutriment	1.912	.498	16.383	1	.000	6.595	Supported
Employment Creation	1.601	.472	15.881	1	.000	5.548	Supported
Economic Growth	1.700	.465	17.650	1	.000	6.720	Supported
Resource Utilisation	1.905	.479	17.348	1	.000	6.738	Supported
Market Share	1.701	.468	15.991	1	.000	5.748	Supported
Constant	1.000	1.422	24.935	1	.000	.005	

The regression test results in Table 6.55 reveal that if SMEs are re-engineered, they have significant influence on improving the economic, socio-cultural and political well-being of the SMEs.

6.14 Decision on Hypotheses Testing

This section covers the hypothesis testing and significance in the context of the study.

6.14.1 Bias Minimisation

According to Apuke (2017) and Rahi (2020), the control of bias was done through the following:

- The Hessian technique
- The consistency guide in data collection using research assistants who had knowledge about the research.
- Crafting a good sample section which was adequate in representing the entire population.

6.14.2. Hypotheses Testing and Significance

Multiple regression analysis was conducted on the data to test the hypotheses postulated in this research. The dependent variable (DV) in the study was the growth and sustainability of SMEs whilst the independent variables were strategies for re-engineering the SMEs.

H1: There are significant relationships between the major SME challenges experienced by agrarian SMEs in the Easter Highlands in Zimbabwe and policies to re-engineer their growth and sustainability.

The results in Table 6.51 indicate that the respondents did not agree that the challenges they were facing as agro-SMEs were associated with SME government policies/regulations (p>0.05). That is, the p value of 0.832 is greater than 0.05, indicating that the result is not significant, thereby rejecting H1. The results show that only 1.4% of the variation in challenges being faced by SMEs was a direct result of SME policies, thus, representing an extremely weak negative correlation between SME Policies and challenges faced by the agro-SME sector. This is in line with the outcome of results shown in Table 6.51, where it was also noted that the SMEs under investigation are more likely to be influenced by agriculture and land resettlement policies than by the SME Policy.

The second hypothesis was stated as follows:

H2: There are significant relationships between SME-related government policies and their value in re-engineering the growth and sustainability of SMEs in the agrarian sector.

The results in Table 6.52 support H2, since the respondents indicated that government regulations have interrelationships with re-engineering the growth and sustainability of SMEs, as more SMEs are likely to sustain operations and formalization through government support. The results are significant as indicated by the t-test results (t = 1.692), and the p-value (p=.0000) which is less than 0.05(Aggarwal & Ranganathan, 2016). The SMEs agree that effective government policy on SMEs influences their growth and the growth of the SMEs is accompanied by re-engineering.

The third hypothesis was stated as follows:

H3: There are significant relationships between agricultural support mechanisms and strategies to re-engineer the growth and sustainability of agrarian SMEs.

An ANOVA test was conducted with agricultural support mechanisms (tractors, fertilizer, inputs, contract farming) as the independent variables and the growth and sustainability of SMEs are the dependent variables. The results in Table 6.53 do support the hypothesis (H3), since there was significant evidence as reflected in the test results (F=3.666; p=0.000). The hypothesis is, therefore, accepted since p=0.000 and is greater than .0005 (Etikan and Bala, 2017). In essence, the participants who received government support did agree that SME relief influences their growth to become transnational companies. The most plausible explanation could be that agricultural support for SMEs influences their – make sure that thye are the same performance and contributes to increased food security and their growth.

The sub hypotheses were stated as follows:

H4.1: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and food security in the country.

As indicated in Table 6.55, it was confirmed that there have been significant increases in food security (β = 1.912, p=.0000) thus, confirming that re-engineering the SMEs will influence their growth and sustainability. The p-value of 0.000 for food security is less than (p<0.05) 0.0005, indicating that the result is significant, thereby supporting H4.1. These strategies have been able to transform the livelihoods of the farmers through the various value chains that are defined through agriculture. The findings as supported by FAO (2014) which stated that food security included having safe and nutritious food. Hence, various SMEs were using strategies for re-engineering to attain food security. In addition, it is evident that per-capita of the SMEs' income is improving food security across the globe. This findings demonstrate that the development of the economy is critical in poverty reduction and improving livelihoods which is line with what several previous researchers has confirmed (ILemona, 2013; Maksimov, Wang & Luo, 2017; Sutter, Bruton & Chen, 2019).The World Bank (2015) also concluded that SMEs improve livelihoods and the SMEs in the agrarian sector have made significant contribution in improving the quality of life at household levels (Cant, Erdis & Sephapo, 2014). There are many examples to show that SMEs are significant in improving the economic, socio-cultural and political well-being of the people (Iyiola & Azu, 2014; OCED, 2015). Therefore, food security is reducing hunger and poverty in Zimbabwe (Bellemare & Novak, 2017; Castro, Orjuela & Jaime, 2017; FAO, 2017).

H4.2 was stated as follows:

H4.2: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and employment creation by the SMEs.

The other impact of the strategies aimed at re-engineering SMEs was that it resulted in employment creation as indicated in Table 6.54 (β 1.601, p=.0000), and in influencing the re-engineering process to stimulate the growth of SMEs. The p-value of 0.000 for re-engineering is less than (p<0.05) 0.0005, indicating that the result is significant, thereby supporting H4.2.

The study shows that employment creation is high in the agricultural sector and poverty is being reduced. The significant increase in jobs created has helped to transform lives and enhance the general welfare of the citizens on a large scale. There is empirical evidence confirming that SMEs are major job creation engines and are reducing unemployment (ILemona, 2013), especially where there is a lack of sufficient wage earning employment. According to Sukume et al (2015), empirical studies show that agricultural SMEs provide an average of 75% of Zimbabwe's employment. The potential of the agriculture sector to boost employment levels in the primary and secondary industries is seen to be very high.

The next hypothesis was stated as follows:

H4.3: There are significant relationships between re-engineering the growth and sustainability of agrarian SMEs and economic transformation.

The ultimate goal of every policy especially in agriculture is to lead to the transformation of the economy (ZimVac, 2013; Dzinotizei, 2019) and this is also relevant to a country like Zimbabwe which has an agricultural based economy. As indicated in Table 6.54 (β =1.700.0000) the p-value of 0.000 for economic growth is less than (p<0.05) 0.0005, indicating that the result is significant, thereby supporting H4.3. The results confirmed that a positive growth in the economy is as a result of re-engineering the SMEs in the agriculture sector. The underlying findings show that SMEs are influencing the economic growth in Zimbabwe. It is interpreted that there is a causal link between the strategies for re-engineering and the growth of SMEs and economic growth. As recently noted by

the Ministry of Finance, there is more money in circulation in the informal sector that that which is in the formal sector (Karadag, 2016).

The next hypothesis was formulated as:

H4.4: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and resource allocation.

As indicated in Table 6.55 ($\beta = 1.905$, p=.0000), the findings confirm that as a result of the strategies for re-engineering SMEs, there has been significant increases in resource allocation in influencing the growth of SMEs and productivity of agrarian produce and the growth of the agricultural sector. The p-value of 0.000 for food and security is less than ($p<0.05$) 0.0005, indicating that the result is significant (Morrison, 2016; Mhembwe, Chiunya & Dube, 2019), thereby supporting H4. The most positive contribution of the strategies to re-engineer SMEs was that it resulted in efficient resource utilization. It led to efficient allocation of economic resources and ultimately resulted in asset value increase and growth in the value of the business. Such were the results of the efficient resource allocation that was made possible through strategies for re-engineering SMEs. Through tax, government will be able to amass resources for the transformation of other supporting sectors such as food processing and that it is possible if the agrarian SMEs start operating more efficiently (Dlamini, 2017).

Hypothesis H4.5 was stated as: There are significant relationships between strategies for re-engineering the growth and sustainability of SMEs in the agricultural sector and market capitalization.

As indicated in Table 6.55 ($\beta = 1.701$, p=.0000), there was a significant growth in market capitalization for SMEs through the policy shift which followed strategies for re-engineering SMEs growth. The p-value of 0.000 for market capitalization is less than ($p<0.05$) 0.0005, indicating that the result is significant (Arunachalam et al., 2018), thereby, supporting H4.5. The SMEs were exposed to more local and international markets through synergies that were created between local and international buyers (ACET, 2015). Most notably, percentage market share of SMEs jumped as most retailers and wholesalers came to buy directly from the farms after exposure to the outside world (Chingwaru and Jarkata, 2015). This reduced the dominance of just a few monopolies who

were taking advantage of some information asymmetry in the market (Sukume et al., 2015; Arunachalam et al.,2018).This study has indicated that SME market share is positively growing as their revenue is improving and growing . The study by Khankaew, Ussahawanitichakit and Raksong (2015) asserts that the SME market share is closely monitored to determine SMEs' growth changes in the aggressive landscape.

Over and above the various secondary hypotheses, the fourth (primary) hypothesis consolidates the various secondary hypotheses as stated below:

H4: There are significant relationships between re-engineering the growth and sustainability of agrarian SMEs and economic transformation or wealth creation.

Table 6.55 reflects that strategies for re-engineering SMEs significantly are more effective in supporting economic transformation which includes food security, employment creation, economic growth, resource allocation and market capitalisation.

The fifth hypothesis is stated as follows:

H5: There are significant relationships between the existing SME techno-innovative strategies and re-engineering the growth and sustainability of SMEs in the agrarian sector.

The results from the regression analysis as indicated in Table 6.54 supported H5 since all the variables had $p=0.000$, which is less than 0.05. It can be concluded that the existing SME techno-innovative strategies have interrelationship with expediting the development of SMEs in the agrarian sector in Zimbabwe.

The sixth hypothesis was stated as follows:

H6: There are significant relationships between gender dynamics and strategies to re-engineer the growth and sustainability of SMEs in the agrarian sector.

As indicated in Table 6.53, the ANOVA test was conducted on the data using gender dynamics of SME owner-managers as the independent variable and re-engineering the growth and sustainability

of SMEs in the agrarian sector in Zimbabwe as the dependent variable. The results support the hypothesis (H6), since there was significant evidence as reflected in the test results, (F= 3.710, p=0.000), and the p-value is less than 0.05. In essence, the respondents indicated that gender dynamics influences the growth of SMEs. The most plausible explanation could be that gender mainstreaming has influence in the growth of SME activities in the agrarian sector (FAO, 2017).

The seventh hypothesis was framed as follows:

H7: There are significant relationships between effective management methods and strategies to re-engineer the growth and sustainability of SMEs in the agrarian sector.

The results in Table 6.52 indicate that respondents who have knowledge and understand SME management concepts indicate that their SMEs are more likely to grow (F= 4.217, p=0.041). As such, the test shows that effective SME management methods influence their growth. The p-value of 0.041 is less than 0.05, indicating that the result is significant, thereby supporting H7.

6.15. Reliability of the Policy –Makers and Agritex Field Marshals Questionnaire

Agritex Field Marshals and policy- makers also responded to the questionnaires that were sent to them. Their responses were important for this research as this was triangulated with the responses to the questionnaires administered to the agrarian SMEs. Table 6.56 reflects the reliability of the questionnaires administered to policy-makers (Field Marshalls and government officials). It is evident from Table 6.56 that with the exception of 'purpose and impact of agriculture'' all the Cronbach's alpha values exceed 0.7 and if 0.65 can be rounded off, it will also equate to 0.7 indicating acceptable reliability.Therefore, the measurement scales used in the study were considered to be both consistent and stable.

Table 6.56: Policy- Makers and Agrarian Field Marshals Questionnaire

Questions	Number of items	Cronbach's Alpha
Major Challenges faced by SMEs	9	0.874
Growth Indicators of SMEs and Economic Development	8	0.896
Agriculture Support initiatives	6	0.755
Purpose and Impact of Agriculture	10	0.651

6.16. Demographic Data for Policy Makers and Agrarian Field Marshals

6.16.1 Distribution of Key Informants

Figure 6.13: Distribution of Key Informants
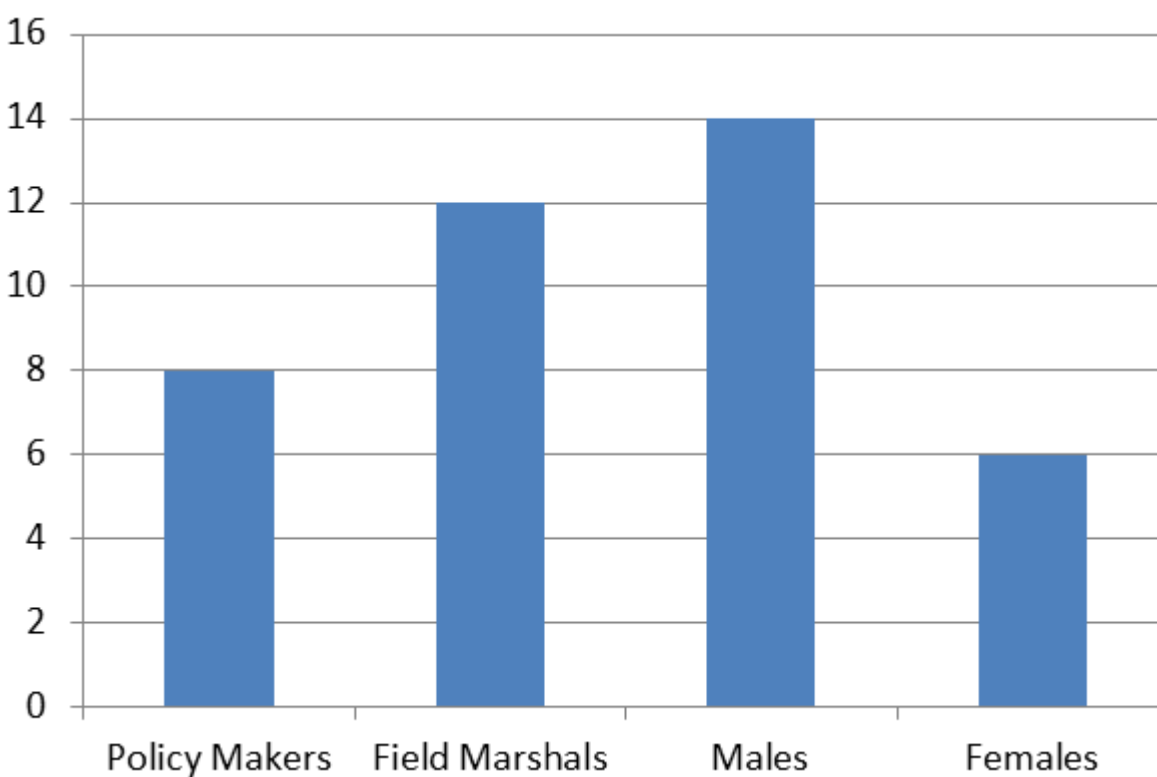
The study was dominated by males who contributed 14 participants out of the 20; whilst females made up the remaining 6.This composition of males was mainly driven up by the number of Agritex Field Marshals since this job is generally considered a masculine job. This partly explains why female participation was low.

6.16.2. Work Experience of the Respondents

Figure 6.16 shows the key informants who were policy- makers and Agritex Field Marshals.

Figure 6.14: Work Experience of Key Informants
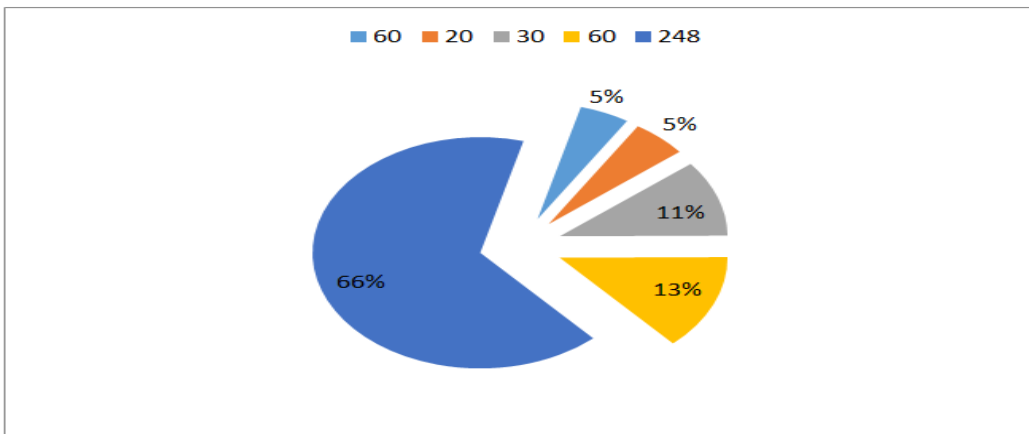
It was ascertained that 50% of the participant had 11-20 years in government, while 10% had 21-30 years and also 31-40 years. This gives the impression that responses are to some extent true as they are coming from experienced members of staff whose time working in government and SMEs gives them a better understanding of the SME owner-manager's perceptions of and attitudes towards the strategies for re-engineering the growth and sustainability of SMEs.

6.17. Government Policies and SME Challenges

Figure 6.15: SME Challenges and Policies
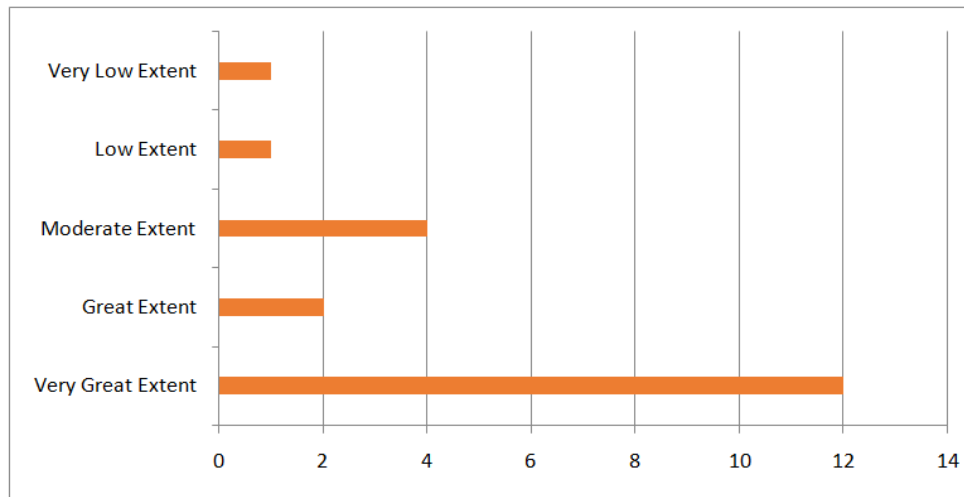
Figure 6.15 reflects that, to a great extent, the SME challenges influence policy- makers to re-design policies using the incremental model (Aremu et al., 2017) seeking to promote the growth of SMEs into Transnational Companies (Barkhatov, Pletnev & Campa, 2016).

6.18. SMEs Growth Indicators

The study was motivated by the desire to see how policy- makers are evaluating the growth trends of agrarian SMEs in the country. The variables used to measure whether SMEs are growing or declining were indicated in Figure 6.16. It also shows the scores of the rating given by the policy-makers on the performance of the SMEs on a number of fields as indicated below.

Figure 6.16: Growth Indicators of SMEs and Economic Development
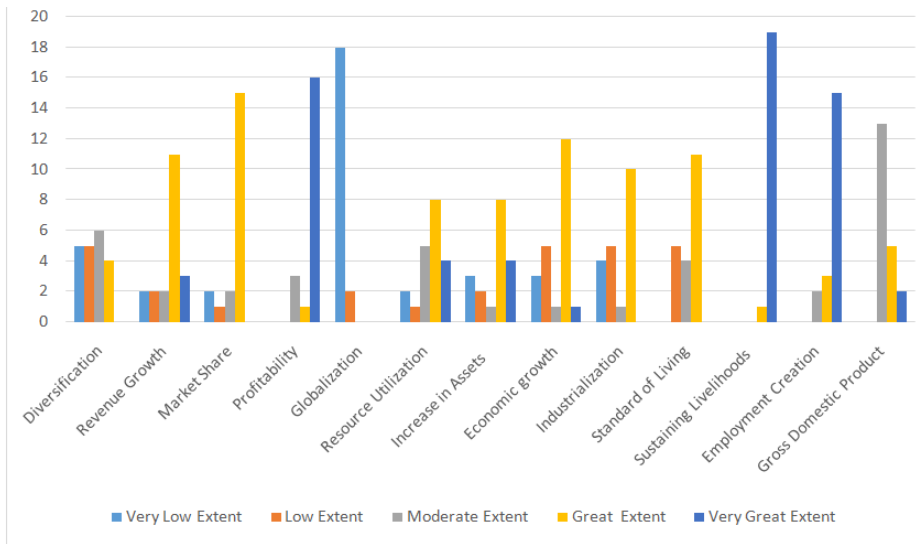
Figure 6.16 depicts the growth and decline on certain aspects which are related to the SMEs and the economy as a whole. Factors which measure the SMEs' performance were positive whilst the other factors which reflected on the performance of the economy confirmed negative performance. Up to 95% of the respondents indicated that sustenance of livelihoods was a key indicator of SMEs' growth.

6.19. Role of Government Policies in Promoting the Growth of SMEs.

Figure 6.17: Policies Promoting SMEs
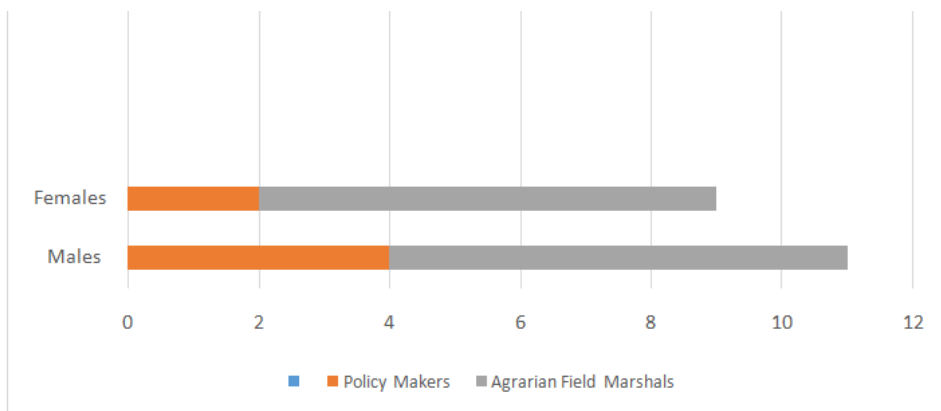
The majority of policy- makers who are working with SMEs seek to promote their growth. This has been done through various measures such as training of the SME farmers. From the data gathered, the respondents indicated that the rate of success could not be generalized as in certain circumstances, the government has scored highly whilst in certain areas, and a lot still needs to be done since the government policy is expected to stimulate growth of SMEs by solving the challenges being faced. The majority of respondents strongly concur that effective government policy implementation will assist to grow SMEs into Transnational Companies. While on the ground little has been done, especially by the government, organizations like Zimtrade have been trying to push SMEs into export promotion activities (Nyoni, 2017).

6.20. Influence of Agricultural Support on the Growth of SMEs

Figure 6.18: Influence of Agricultural Support on SMEs
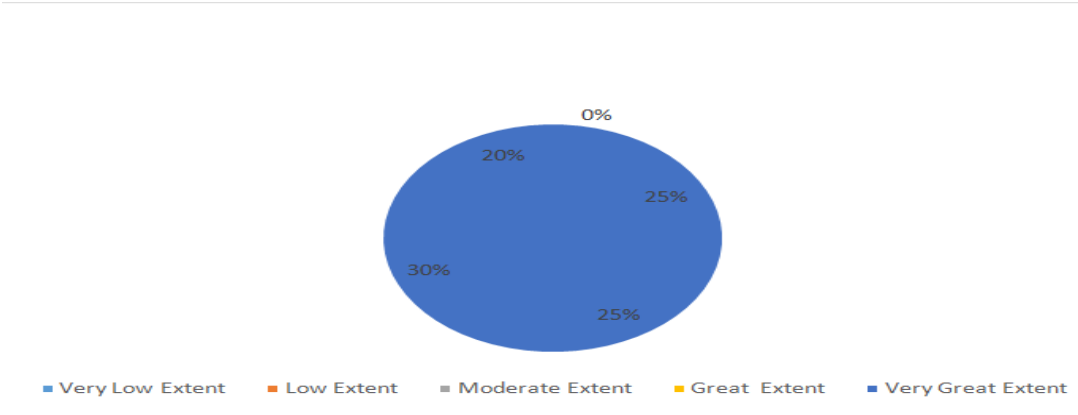
The results in figure6.18 show that a lot of efforts from the various government departments influence the growth of SMEs.

Table 6.57: Impact of Re-engineering Agrarian SMEs

Government Roles	Very Low Extent	Low Extent	Moderate Extent	Great Extent	Very Great Extent
Trade Promotion	5	5	6	4	-
Financial incentives	2	2	2	11	3
Technical Skills Development	2	15	2	1	
Lobbying for SMEs Associations	-	-	3	1	16
Mechanization Leasing	18	2	-	-	-
Workspace support	2	1	5	8	4
Investment Promotion	3	2	8	3	4
Tax Relief	3	5	12	-	-
Inputs Provision	-	-	1	5	14
Sub-Contracting SMEs	-	5	4	11	-
Quality Assurance	-	-		1	19
Monitoring and Evaluation	-	-	2	3	15

Table 6.57 reflects an interesting aspect in the development of SMEs through various government initiatives. Things like input support schemes have been lacking in terms of developing and growing the SMEs, whilst some aspects of government intervention such as tax relief have not played a very critical role in stimulating SMEs' growth.

6.21. Impact of Sustainable Agricultural Measures

The study looked further into the impact of agricultural support measures on the SMEs growth. This is captured in Figure 6.19. This included environmental sustainability of the SMEs to a great extent.

Figure 6.19: Sustainable Agricultural Measures
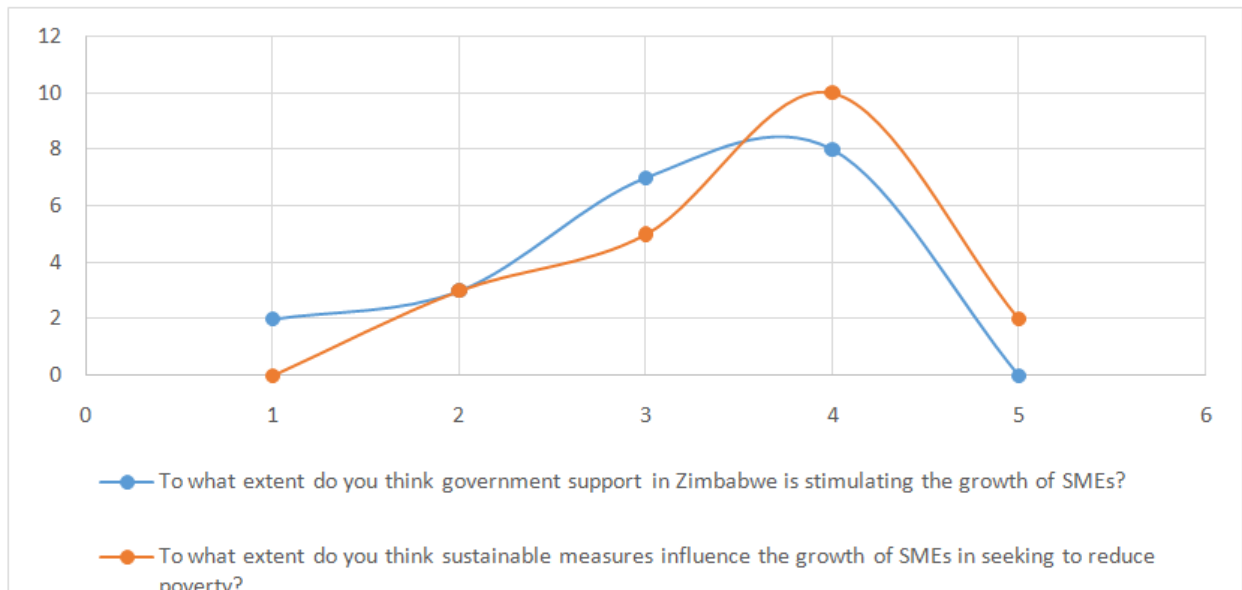
The issues raised by the policy-makers around lack of adequate SME engagement by relevant authorities (experts) and a lack of appropriate technical backstopping for complex operations such as post-harvest handling and food processing. It was noted that SMEs relied more on primitive and inadequate technologies that are incapable of sustaining local and international demand for agro-produce. As a result, SMEs expressed a lack of self-esteem and assertiveness as they enter into deals. Thus, participants engaged in SME initiatives needed to address the following aspects of their operations:

➤ Bi-directional information flow from farmer to market and from market to farmer;

➤ Technical backstopping and support;

➤ Access to new and emerging technologies (hydroponics, new and improved hybrid seeds that are climate change resilient, dealing with lack of access to packaging machines;

➤ Policies that sustain and incubate new and emerging entrepreneurs

The results show that government policies sustain the SMEs in the agriculture sector; there is still a lot to be done. Things like social responsibility of the SMEs have not been well- articulated and even issues around the care of the environment are still limited.

6.22. Existing SME Techno-Innovative Strategies and Agrarian SMEs

The impact of the current strategies for re-engineering the growth of SMEs was also evaluated and it produced varying results as shown in the table below.

Table 6.58: Influence of Existing SME Development Strategies on SMEs

Development Strategies	Very Low Extent	Low Extent	Moderate Extent	Great Extent	Very Great Extent
Existing strategies develop SMEs to become transnational companies?	2	15	2	1	-
From your experience as a government official working with SMEs, do you think uptake of technologies has an effect on reengineering the growth of SMEs?	2	1	5	8	4
Do you think existing strategies reengineer SMEs to improve food security and nutriment?	3	2	8	3	4

The general impact of re-engineering strategies has been confirmed by the majority of the policy-makers who took part in the study, as is evident by the results in Table 6.58. Key issues which emerged through analysing the findings point to the need to radically re-engineer SMEs. The community leaders such as Agritex Field Marshals in the research areas indicated that there was need to integrate certain key managerial strategies in the training of agricultural SME operators. This can be done through clustering them in terms of specialization areas in agriculture. Participants indicated that new technologies and emerging SME management practices ensure improved competencies and competitiveness among agriculture SMEs and are very critical for re-engineering the growth and sustainability of SMEs in order to provoke their sustainability.

6.23. Role of Gender Dynamics in Agrarian SMEs

The government has done a lot in promoting gender balance by ensuring that women are treated equally as a response to the Beijing Declaration of 2004 to which the government is a signatory (World Bank, 2013).

Table 6.59 Mainstreaming Gender

The inclusion of women in SMEs in the agrarian sector is reducing poverty in Zimbabwe?	1	2	3	4	5
		2	3	4	11

The policy-makers also confirmed that the inclusion of women in the agrarian projects which has an impact of transforming the society's living standards, as well as reducing poverty. This is what the data in Table 6.59 is confirming. Their male counterparts tended to take leadership roles and they also assumed positions of influence in key decision-making processes. It can be deduced that the social structure and the way women in SMEs are perceived does matter and, hence, they influence SMEs to grow.

6.24. Effects of SME Management Methods

The majority of the policy- makers and Agritex Field Marshals contend that management concepts stimulate the growth of SMEs. This was also confirmed by the farmer respondents themselves.

Figure 6.20: Effective Management Methods
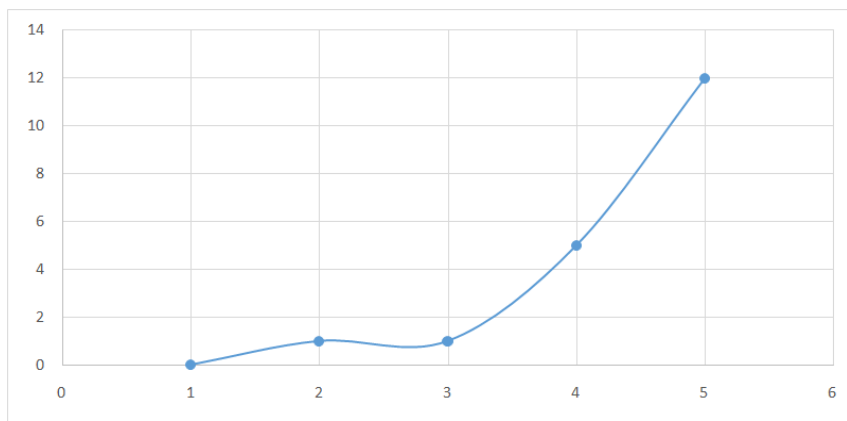
Participants were of the view that the knowledge one possesses cannot translate into increased productivity and that skills mattered more than theoretical knowledge. It is implied that indigenous

knowledge by some of the SMEs is critical in developing SMEs. The knowledge gaps among SMEs would require that the SME owners pass this on through oral tradition. The statements also strongly suggest that there are always managerial and proper accounting procedures which are inadequacies among SMEs that retard their growth from small scale to large scale entities. Thus, it can be inferred that SMEs rely mostly on Indigenous knowledge that is passed on from one generation to another from technical practices to management practices where social status is the key influence compared to technical knowhow of the trade in particular.

6.25. The Effect of an SME Spider-Web Re-engineering Framework

It was noted that for all the communities in the research area, there were no specific re-engineering frameworks/processes (Huang, Lee, Chiu & Yen, 2015; Mahjoor, 2016) that were being implemented for successfully running of SMEs (Barkhatov, 2016; Nowin´ski & Haddoud, 2019). Aspects such as Farmers -Field Schools and Master Farmer Schools were not evidently in use and there were no community collaborative cooperatives to foster SMEs either. Figure 6.21 shows responses concerning the effect(s) that a SME re-engineering framework will have on the growth of the sector.

Figure 6.21: The Impact of an SME Re-engineering Framework
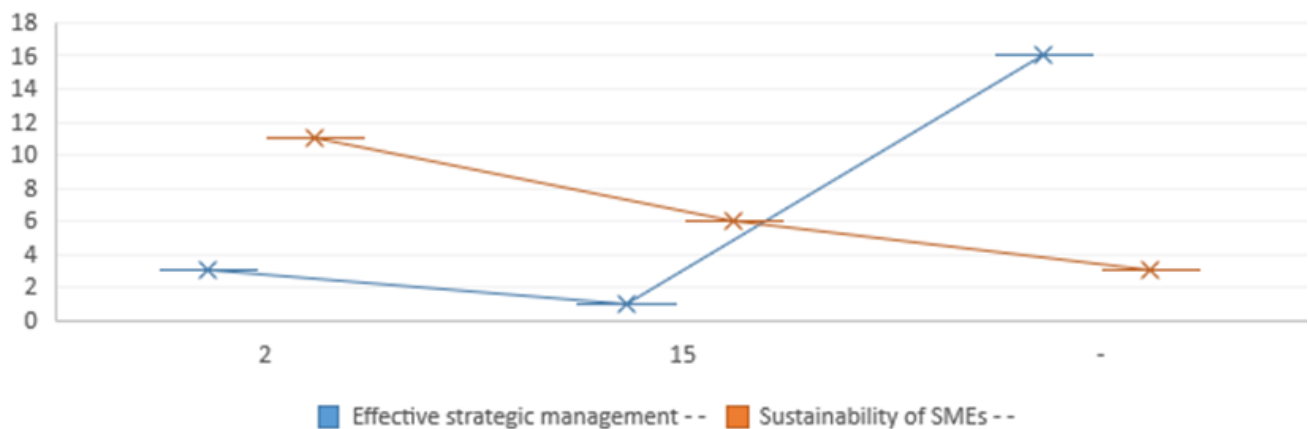
The findings indicate that use of effective management methods such as hiring skilled labor and training and development of SMEs in the agrarian sector would positively respond to the proposed

SME re-engineering framework resulting in their sustainable growth (Chikere, & Nwoka, 2015; Gunasekaran, 2015; Nowin´ski & Haddoud, 2019).

6.26. Summary of the Missing Data

The study had no missing data as shown in Figure 6.22, thus, it is a result of the proper screening of data that was carried out.

Figure 6.22: Summary of Missing Values.
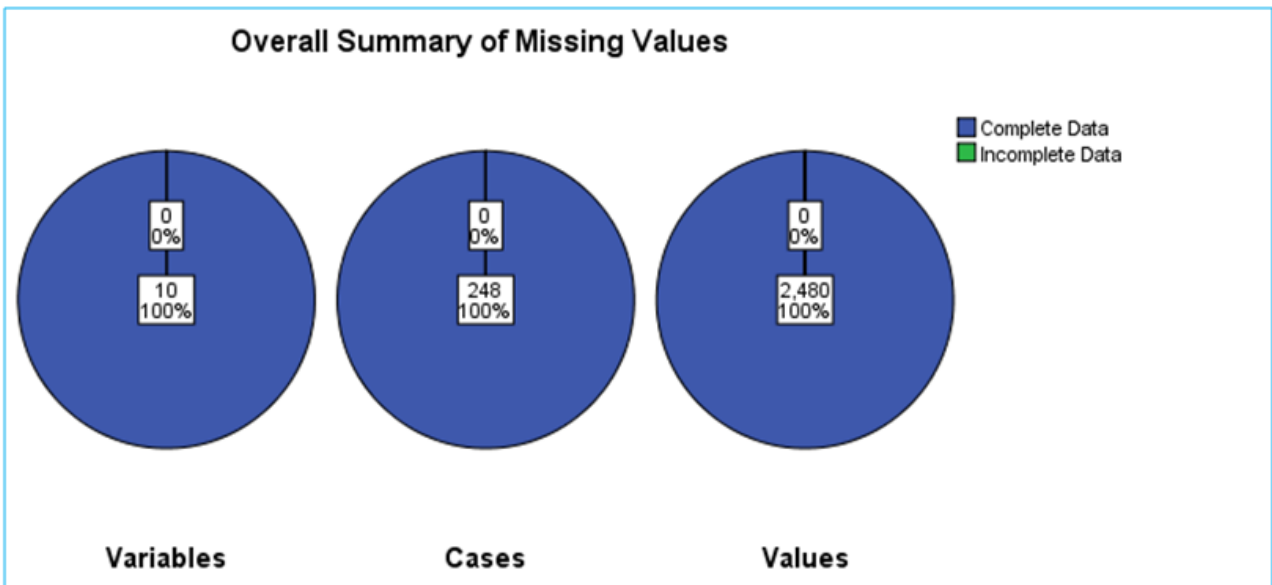
Source: Results (2019)

The presence of non-missing data failed to compromise the statistical power in this study, hence, the conclusions were valid (Apuke, 2017).The conclusions were drawn based on the assumption of a complete data set. As such bias was reduced and the representativeness of the samples from both respondents was not distorted (Creswell, 2013.), therefore, the assumption is that the data was collected carefully and the pilot study was well-done to identify the unexpected problems which were likely to occur during the study. From the integration of the data sets of the SMEs and government officials, there were no cases of missing values, meaning that the data from all respondents was 100% representation of the variables under the study. Hence, both policy- makers and SMEs concurred that strategies for re-engineering the growth and sustainability of SMEs have significant value in stimulating their growth to attain food security and economic growth.

6.27. Chapter Summary

The chapter presented the data analysis. The ensuing chapter is a discussion of data analysis. This study has two different datasets and the study managed to present and analyse findings that are similar while those that are different are presented separately. Demographic distribution is also discussed in the first section of the chapter. The study realized that for the SME dataset, females dominated the study. This was different for the policy- makers and Agritex Field Marshals dataset in which males dominated. In terms of the age of respondents, the SME dataset had more respondents in the two 18-35 and 36-55 age categories, whilst for the second survey the majority of the respondents were in the 18-35 years category. The results from both datasets confirmed that strategies for re-engineering could help SMEs to grow and stimulate economic development. The study also proved that there is a positive attitude by government to grow the economy from within through its support for SME activities and by coming up with effective SME- linked policies. Despite all these positives relating to strategies for re-engineering the growth of SMEs, the figures at hand have shown that the SMEs in Zimbabwe have made little inroads in effectively applying the re-engineering strategies. There is reluctance by the SMEs to employ these versatile strategies due to ignorance and their lack of understanding the importance of a re-engineering process.

CHAPTER 7:
DISCUSSION OF THE FINDINGS

7.1 Introduction

In this chapter, the findings reported in the previous chapter are discussed by making reference to the literature and related theory. This study was about strategies for re-engineering the agrarian SMEs in the Eastern Highlands in Zimbabwe. The study covered the following districts in the Eastern Highlands namely, Mutare, Vumba, Chimanimani, Nyanga, Honde Valley, Cashel Valley and Chipinge. The main research objective was to determine the major barriers faced by agrarian SMEs and how these challenges have been used to inform government policy on SMEs. Data was collected using two separate self-administered questionnaires, thus it was quantitative. The chapter begins by providing a general discussion of the results based on the study objectives before proceeding to the discussions based on hypotheses.

7.2. Major Findings

7.3.1 Influence of SME Challenges on Government Policies

The study observed an array of internal and external barriers being faced by the agrarian SMEs in the Eastern Highlands in Zimbabwe. These include, but are not limited to, financial woes, difficulty in accessing markets, lack of land tenure and security, lack of relevant skills, which have also been reported in previous studies in other similar contexts (Bindu & Chigusiwa, 2013; Cant, Erdis and Sephapo, 2014; Barkhatov, Pletnev & Campa, 2016). Abeh (2017) and Mutambara (2016) argue that these challenges hamper the sustainable growth of agrarian SMEs. Therefore, for SMEs to become successful, they are dependent on supportive policies (Taneja & Toombs, 2014; Eniola & Entebang, 2015).

While the Government of Zimbabwe has put in place measures to allow access to financial resources through initiatives such as the issuance of 99 year leases for farmers, these have not been entirely embraced due to lack of amendments to the Banking Act, which still does not recognize 99 year leases as collateral. It can, therefore, be noted from the challenges cited by respondents that government's broader policy is all encompassing as far as addressing challenges cited by ZimVac (2016) and AlBuraiki & Khan (2018).

The general findings with respect to the association between the SME challenges and government policies are supported by the incremental theory (Wong, 2015; Eniola & Entebang, 2015 and Aremu et al., 2017), which is seen to be relevant in transforming the policy landscape for SMEs. Feedback from the SMEs indicates that government often assesses factors relating to SMEs challenges and then finds ways to motivate SMEs to grow and become more productive.

However, most SMEs confirmed that policy support plays a very critical role in facilitating their sustainable growth. The general discourse from the study posits that issues relating to land tenure security, access to markets and agriculture support mechanisms have been playing a very critical role in the sustainability of SMEs. Of significance is that the challenges of SMEs are being addressed through the SME Act (2011) as more SMEs are being re-engineered to improve their growth. The SMEs Act (2011) is a very important piece of legislation which has been continuously used to meet the growth prospects of SMEs in the country. As such, the government needs to keep on re-aligning the laws to suit the ever-changing needs of the various SME sectors. Anicic, Vukotic and Krsticc (2016) conclude that SME challenges assist the government to design policy, effect simulation and allow the policies to benefit SMEs and ensure their sustainability.

The researcher went further to test the hypothesis which postulated the association between government SME policies and the agrarian SME challenges. Under normal circumstances, government policy on SMEs is expected to intervene and eliminate SME barriers in the agrarian sector. It became evident that there is an association between SMEs challenges with government policies to develop SMEs into Transnational Companies (Maunganidze, 2013; Eniola & Entebang, 2015). Thus, it was concluded that the challenges faced by the SMEs were significant in informing government SME policies.

However, the findings show that government has been failing to timeously and promptly review policies seeking to grow SMEs. With the knowledge that the respondents had on the SME challenges, one would expect that the policies are reviewed frequently to re-engineer the SMEs in the agrarian sector. The majority of respondents had acknowledged lack of land tenure and funding (Chamberlin, Jayne & Headey, 2014) as leading SME challenges, in particular Eastern Highlands SMEs. Such a limitation could explain why many SMEs in this sector have failed to grow into multinationals, despite overwhelming evidence of their potential to grow.

7.3.2 Influence of the Government Regulations on Sustaining Agrarian SMEs

The research revealed that government regulations encourage the development of SMEs. As noted by Nyamwanza et al. (2015), the government has been benefiting from the existence of the informal sector. This was also echoed by Bomani, Fields and Derera (2015) who pointed out that the informal sector employs a greater number of resources which have a bearing on overall economic tranformation(Fuglie & Rada,2013;Jiang et al.,2018). An overview of various government policies such as the Agricultural Policy, Land Policy, SME Policy, ZIMASSET, Indigenous Policy, Education Policy, among others, reveals that these policies are aimed at engendering SME growth. Thus, according to Eniola and Entebang (2015) and Bjornlunda and Pittock (2017), government policies have strong intention to command SMEs to become formal entities. In this case, the government has an interesting role in spearheading the adoption of SME-linked policies as a re-engineering strategy that is aimed at influencing output in the agriculture sector (Majoni, Mutunhu, & Chaderopa, 2016).

This reflects an intense need by government to assist SMEs to grow by fostering a stable and an enabling environment so as to develop agriculture as a means to attain food security. Various authorities strongly agreed that government policies are being implemented to transform informal SMEs into formal businesses whilst at the same time growing those formal SMEs into Transnational Companies (Bomani, Fields & Derera, 2015).ASMEC (2013) also weighed in to say that the transformation of SMEs into formal companies will help them build and maintain the goodwill of customers and this further propels their growth (Bahadur, Aziz & Zulfiqar, 2018).

Maunganidze (2013) found that governments that assist SMEs have experienced economic growth as most of the SMEs have become responsible corporate citizens who religiously pay their taxes to government (Dlamini, 2017). This has the effect of enabling government to accumulate capital for further financing of SMEs and other projects in the country. It is against this rational government regulations and policies (through re-engineering programs); have a strong correlation with the growth of SMEs. In this case; the government has an interesting role in adopting SMEs related policies and, a re-engineering strategy which will influence the agricultural sector in Zimbabwe to become sustainable.

The re-engineering process is critical to grow SMEs into Transnational Companies. As such, a policy review fits well with the incremental theory to direct government policy and control behavioural aspects to effectively assist government support measures and create a stable and viable operating environment for SMEs .This approach is appropriate for improving SME- linked policies to promote SME development (Aremu et al., 2017). The incremental model is more flexible and less costly; it makes small improvements, challenging the status- quo of the policy and its processes on an everyday basis as a continuous measure to improve on the policy (Bomani, Fields & Derera, 2015).

7.3.3 Influence of the Agricultural Support Mechanisms on Sustaining SMEs

The findings show that agricultural support mechanisms such as mechanization, extension systems, research, loans and credit facilities and input schemes are critical in increasing the productivity of SMEs and are a means to sustain food and nutriment (ZimVac, 2013; IFA,2013; WFP, 2017). The study shows that these mechanisms have been supported by sustainable measures such as preservation of agrarian produce, SMEDCO revolving fund (Nyoni, 2017); cooperative credit facilities and SME land tenure which all has some positive results on engendering the growth of SMEs to help to satisfy consumer needs and wants. This finding implies that agricultural support mechanisms in the Eastern Highlands of Zimbabwe have a great impact on sustaining SMEs**.** In their role to re-engineer the growth of SMEs, these support mechanisms have been implemented by Agritex Field Marshals. Government support mechanisms have a direct link with the agrarian SMEs and this has resulted in SMEs having high yields (Mangudya, 2016; Saberi & Hamdan, 2019).

The findings confirm the proposition by FAO (2017) that agricultural support be provided to promote the growth of SMEs. This view is also consistent with previous empirical studies by Mulet et al., (2017), to the effect that agricultural support programs sustain the growth of SMEs (Frumina, 2016). What makes this support unique is the fact that it nurtures highly productive SMEs to radically transform into large enterprises (USAID, 2012). Therefore, SMEs need access to agricultural support in order to reduce the burden of sourcing expensive inputs which are needed to be paid *ex-ante*, that is, prior to the actual realization of production.

Sustainable agricultural support initiatives bring about great positives in re-engineering the growth of SMEs as it significantly aids the businesses and their owners in the execution of their

responsibilities in the agrarian sector. With such support, it would be expected that almost everyone would find the zeal to re-engineer SMEs. Thus, the study shows that there is a link between agriculture support initiatives and the growth of agrarian SMEs. If more support is availed to SMEs, it is more likely that SMEs will grow. The consistent provision of sustainable agricultural support is viewed in the work of FAO (2017) and Zimvac (2013) as a long term (and lasting) solution to sustain the growth of SMEs through government support. The greatest lesson here is that sustainable agricultural support is a quick solution to the development of agriculture. The overall findings concluded that, where government support is involved; those SMEs located as a cluster get more support than those in dispersed areas (Kamoyo, Mavhima & Muranda, 2014; Saberi & Hamdan, 2019). According to Kamoyo, Mavhima and Muranda (2014) and Konstantynova and Lehmann (2017), effective government support mechanisms to stimulate the growth of SMEs fits well with the cluster theory. Agricultural clustering such as agro-industrial parks, agro-export zones and export consortia of food and agricultural products are examples of implementation of cluster theory. This builds value networks to address common SME challenges, since SME clusters are believed to enhance their competitiveness and innovation (Ehrenberger, Koudelkova & Strielkowski, 2015; Baporikar, 2017; Cai et al, 2017).

7.3.4 Influence of Re-engineering SMEs on Overall Economic Development

Through re-engineering SMEs, it was possible to create more employment, value added products and equitable income distribution (Fidrmuc & Gundacker, 2017). The ultimate goal of every policy, especially in agriculture, is to transform the economy and this is so relevant to a country like Zimbabwe with primarily an agro-based economy. The most positive contribution of re-engineering SMEs resulted in efficient resource utilization (Bagaber et al., 2014). It has also led to efficient allocation of economic resources and ultimately resulted in an increase in the asset value and net value of the business. There was a significant growth in the SME market share through the policy shift which followed strategies for re-engineering SMEs growth. The SMEs were exposed to more local and international markets through synergies that were created by government. This reduced the dominance of just a few monopolies who were taking advantage of some information asymmetry in the market. Thus, the realization of economic growth can only be stimulated through strategies for re-engineering SMEs (Bokor, 2017).As reflected in the previous chapter, the proper structuring of the strategies for re-engineering of SMEs has a huge effect on growing Zimbabwean agrarian SMEs. If left unattended, SMEs in the agriculture sector will be exposed to high risks and chances of them

collapsing will be high and that will negatively affect the growth prospects of the country. The findings revealed that there is still a big gap between the strategies for re-engineering SMEs and how these can then be seriously applied to stimulate economic growth. The results bring out the following issues:

i.   Food Security and Poverty Reduction

The study has confirmed that there has been a significant increase in food security as well as reduction in poverty amongst the local people. Various SMEs were using strategies for re-engineering to attain food security. In addition, it is evident that per-capita of SMEs' income is improving.

ii.   Employment Creation

The other impact of re-engineering SMEs was that it resulted in employment creation within the farm communities as well as throughout the distribution channels, which include food processing industries as well as retailers and wholesalers. This significant increase in jobs has helped to transform lives and enhance the general welfare of the citizens on a large scale (Mangudya, 2017; Eniola, 2013). The study shows that employment creation is high in the agricultural sector and poverty is being reduced (World Bank, 2015; Zimtrade, 2014; (Maksimov, Wang & Luo, 2017). There is empirical evidence which confirms that SMEs are major job creation engines which seek to reduce unemployment and improve livelihoods (ILemona, 2013; Hilson, 2016), especially where there is a lack of sufficient wage employment. According to Sukume et al. (2015), empirical studies show that agricultural SMEs account for as high as 75% of Zimbabwe's employment (Sukume et al., 2015).
.

iii. Economic Transformation /Wealth Creation

The results confirmed a positive growth in the economy due to effective strategies employed to re-engineer growth in the agricultural sector. The underlying finding shows that SMEs are influencing economic transformation in Zimbabwe. It is interpreted that there is a correlation between strategies and economic transformation (Karadag, 2016; AGRA, 2016). As more recently noted by the Ministry of Finance, there is more money in circulation in the informal sector than in the formal sector. This study revealed that the growth of SMEs is essential in achieving a reduction in absolute poverty (ILemona, 2013; (Maksimov, Wang & Luo, 2017).The SMEs in the agrarian sector have made significant improvements in improvements   of household quality of life. There are many

examples to show that agrarian SMEs are critical in improving the well-being of the people (Chinamasa, 2016). The OECD (2016) concluded that SMEs improve livelihoods.

Iv. Resource Allocation

The most positive contribution of re-engineering SMEs is efficient resource allocation to SMEs which ultimately resulted in asset value increase and growth in the value of the business (Mbizi, Hove, Tondlana & Kakava, 2013; ILemona, 2016). Efficient resource allocation and effective resource utilization was made possible through re-engineering SMEs (Bjornlunda & Pittock, 2017; Sims & Kienzle, 2017).

v. Market Capitalisation

Research revealed that there was considerable growth in market capitalization by SMEs (Arunachalam et al., 2018), through policy shift which followed strategies for re-engineering the growth of SME. The SMEs were exposed to more local and international markets through synergies that were created between local and international buyers. Most notably, the SME breakeven and realise profits because most retailers and wholesalers come to buy directly from their farms after exposure to the outside world (Sukume et al., 2015). This reduced the dominance of just a few monopolies who were taking advantage of some information asymmetry in the market. The SMEs were now empowered to bargain with the buyers (Chingwaru & Jarkata, 2015) as there is a linkage between them. The study by OECD (2016) asserts that the SME market share is closely monitored to determine SMEs' growth changes in the aggressive landscape. Therefore, the results of the analysis using the multivariate general linear model analysis noted that there was a strong optimistic association between strategies for re-engineering growth and economic development in Zimbabwe.

Various government support initiatives for farmers have an overall impact on economic development of the country as they lead to employment creation, food security and economic growth (WFP, 2014; Bouazza, 2015). No country will realize economic growth without an assured food security and employment for its citizens and these can only be achieved through re-engineering SMEs. As such re-engineering SMEs can change the management rules on how the SMEs are managed and operated. Hence, with the right strategies for re-engineering in place, SMEs will evolve, develop and grow. However, it was noted that it is not an easy concept as it involves making changes to the SME structure and systems, by abolishing old methods of management which SME owners were used to and they have to adapt to new methods in order to sustain the growth of their SMEs.

7.3.5. Influence of Techno Innovative- Strategies on Expediting the Growth of SMEs.

The study findings show that techno- innovative strategies open up new markets and supply sources leading to the development of SMEs. The techno -innovative strategies promote the growth of SMEs (FAO, 2014; Burch, 2017). Therefore, the uptakes of techno- innovation concepts such as value addition and bio-technology have been advancing the growth of SMEs (Kneafsey et al., 2013; Baporikar, 2017; Heikkilä, Bouwman & Heikkilä, 2018).

The general results with reference to the correlation between techno- innovative strategies and the growth of SMEs were supported by the SME growth model of Sulaiman, Sheihnaz and Samuel (2016) and the incremental model of Aremu et al. (2017). These results also concur with Serban (2015) and Burch (2017) who argued that techno- innovativeness radically grows SMEs from the existent stage into Transnational Companies. An impression of techno- innovations expedites the development of SMEs (Pierre & Fernandez, 2018).Thus; the study showed that strategies and the growth of SMEs have a relationship. Srivastava and Kaul (2014) and Heikkilä, Bouwman and Heikkilä (2018) found out that technological innovation offers a new growth dimension to SMEs (Mbizi, Hove, Tondlana and, Kakava, 2013; Kinyuira, 2014). The respondents also pointed out that innovation significantly influences the product quality of SMEs, which customer satisfaction encourages the SMEs to grow (Bahadur et al., 2018; Khajeh Nobar & Rostamzadeh, 2018). The findings concur with Fornahl, Hassink and Menzel (2015) who both concluded that SMEs' growth is influenced by effective development strategies.

It was ascertained in this study that existing SME innovations have potential benefits of re-engineering the growth of SMEs. The existing innovations contribute to SMEs growing into Transnational Companies and satisfy consumer needs and wants. Thus, finding new innovations will continuously re-engineer SMEs into large enterprises (Zhang, van Doorn & Leeflang, 2014; Ehrenberger, Koudelkova & Strielkowski, 2015; Bjornlunda & Pittock, 2017). The impact of the current strategies for re-engineering the growth of SMEs was confirmed by policy- makers who agreed to a great extent that strategies for re-engineering SMEs such as value addition will increase the market value of the products and add to the gains at each level in the value chain (ASMEC, 2013; Mahjoor, 2016; Arunachalam et al., 2018).

The popular respondents established that existing SME innovations promote competitiveness within the sector. The role of the SME re-engineering innovations is, thus, significant in the development of agrarian SMEs (Verboncu, 2013; Ehrenberger, Koudelkova & Strielkowski, 2015; Bokor, 2017), However, Cant, Erdis and Sephapo (2014) recommend that existing SME innovations should be regarded as an integral part of an SME's integrated growth strategy and should not be taken lightly since they improve SME productivity and enhance product appeal to satisfy consumers (UNCTAD, 2016). Due to the obsession to radically grow SMEs, the government is lobbying for the mass growth of SMEs through promoting SME innovations (Pierre & Fernandez, 2018). As in the case with Zimbabwe, existing innovations have been promoting the growth of SMEs through E-commerce (Chen & Zhang, 2015).Modern agricultural SME innovations allow SMEs to improve productivity (FAO, 2017). The study confirmed that respondents agreed that re-engineering SMEs stimulates income distribution and improves the standards of living and resources utilization (Jiang et al., 2018). This implies that growth in the SMEs sector was directly influenced by existing strategies being implemented over a period which include, but are not limited to contract farming and government input support schemes.

7.2.6. Influence of Gender Dynamics on the Growth of SMEs

The study has shown that gender equality requires enjoyment by women in all opportunity spheres that arise in SME- related activities (Agarwal, 2015; Chinomona & Maziriri, 2015).Mainstreaming gender addresses limitations of previous approaches as noted by the Gender and Development (GAD) School of Thought. This is in addition to the activities of Women in Entrepreneurship (WIE) and Women Employed in SMEs, which seek to improve the status of women in societies (UNCTAD, 2012; OECD, 2016). The results are in line with those of Cunningham et al., (2015) who suggested that gender mainstreaming weighs up the perceived benefits of growing SMEs. The study used shows that women inclusion is an SME re-engineering factor to radically change staffing and delegating SME functions. The findings indicate that government has done a lot in promoting gender balance by ensuring that women are treated equally as a response to the Beijing Declaration of 2004 in which the government is a signatory. Therefore, mainstreaming gender eliminates gender disparities in SMEs- related businesses and it seems that where women inclusion is stronger, the SMEs grow faster.

Agarwal (2015) and FAO (2017) also weighed in on the definition of gender dynamics by highlighting that it is inclusive of women and men that are running SMEs in the agrarian sector which helps to create equitable income distribution (Fidrmuc & Gundacker, 2017). What makes it more unique is the fact that gender seeks to reduce poverty and competition in societies and to create better livelihoods among communities (Sutter, Bruton & Chen, 2019).

The greatest lesson here is that gender should be viewed as a solution to re-engineering SMEs since it creates competition and increases productivity. It is, therefore, time to consider the critical contribution of women in agriculture in many parts of the world, including Zimbabwe. This must go beyond producing food subsistence into higher value; market-oriented initiatives (Agarwal 2015).This challenges the thinking that males are more out-going and bigger risk-takers than women who normally prefer formal employment.

7.3.7. Influence of SME Management Strategies in Re-engineering the Growth of SMEs

The field of SME management offers an understanding on how to control interrelated SME activities (Brooks, 2014; Meyer & Meyer, 2017). As such, in this study it was ascertained that management has a positive link on the growth of SME, knowledge and understanding how to manage SMEs effectively. Efforts to grow SMEs show that management strategies are associated with re-engineering their growth (Eijdenberg and Masurel, 2013; Karadag, 2015). Based on these arguments, it is true that management influences the growth of SMEs. These results imply that strategies are dynamic in influencing business growth. Despite tremendous success of management in re-engineering SMEs, most SMEs in Zimbabwe took long to embrace effective management strategies .The management approaches have changed greatly with the emergence of re-engineering; therefore, SMEs must learn how to use management concepts as a way that is consistent with modern business management (Chikere & Nwoka, 2015). The SME re-engineering framework fits well with the SME growth model as proposed by Ameyaw et al (2017) who discovered that this can persuade the sustainable growth of SMEs leading them to grow into Transnational Companies (Yeboah 2015; Srivastava & Kaul, 2014; Sulaiman, Sheihnaz & Samuel, 2016).This is especially true for SMEs striving to grow into Transnational Companies. Furthermore, Sukume et al (2015) established that an SME can benefit from management strategies to predict the likelihood of the operating environment. Based on this study, it can further be argued that SMEs that embrace management as a key factor are

guaranteed success. It may be concluded that management influences the growth of SMEs. This established that management stimulates the growth of agrarian SMEs. Clearly, in the absence of effective management, it would be difficult to realise growth in the SME (Meyer & Meyer, 2017). There is always a relationship between leadership positions and qualifications in large corporate and related- management practices associated with the enterprise (ASMEC, 2013). Thus, for the Government to achieve milestones, SMEs from the onset are set on a foundation of professional conduct, inclusive of the qualifications of the people that are engaged in various activities of the SMEs such as production, marketing and product development, value addition and branding Kneafsey et al., 2013).

7.3.8 Summary of decisions on the hypotheses

Table 7.1 reflects a summary of the findings with respect to the hypotheses postulated during conceptualization of the study.

Table 7.1 Summary of Results of Hypotheses Testing

Hypothesis	Model Used for Analysis	P Values	Verdict
H1: There are significant relationships between the major SME challenges and policies to reengineer the growth and sustainability of agrarian SMEs.	Pearson Correlation	0.832	Accept
H2: There are significant relationships between SME-related government policies and their value in reengineering the growth and sustainability of SMEs in the agrarian sector.	Paired t-Test	0.000	Accept
H3: There are significant relationships between agricultural support mechanisms and strategies to reengineer the growth and sustainability of agrarian SMEs.	Regression Analysis	0.000	Accept
H4: There are significant relationships between reengineering the growth and sustainability of agrarian SMEs and economic transformation/wealth creation.	Regression Analysis	0.000	Accept
H5: There are significant relationships between the existing SME development strategies and reengineering the growth and sustainability of SMEs in the agrarian sector.	Linear Regression Model	0.000	Accept
H6: There are significant relationships between gender dynamics and strategies to reengineer the growth and sustainability of SMEs in the agrarian sector.	ANOVA	0.000	Accept
H7: There are significant relationships between effective management methods and strategies to reengineer the growth and sustainability of SMEs in the agrarian sector.	ANOVA	0.041	Accept

7.4 The Proposed Re-engineering Framework

The SME spider web re-engineering framework is a twinned (defensive and offensive) re-engineering process which utilizes internal and external re-engineering approaches to turnaround the growth and sustainability of agrarian SMEs.

In the field of management, the proposed SME spider web re-engineering methodology is a strategic fit considered as a critical valuable in stimulating the growth and sustainability of agrarian SMEs and is abridged as follows: It's an effective technique of re-engineering that ensures effective management of SMEs so that they improve their growth (Bhaskar, 2016;Bokor,2017).It comprises an initial re-engineering-hood preparatory stage where re-engineering vision is born to stimulate the growth of SMEs that a moot is drawn to create a re-engineering department. Once set up a re-engineering taskforce (team) draws (timelines, budgets, and meetings) designing, implementing and communicating the re-engineering strategy which must be applied through coordination and support of the entire re-engineering program(Bagaber et al., 2014).The taskforce simultaneously runs the re-engineering process using two distinctive re-engineering processes which are defensive and offensive methodologies. The defensive re-engineering process requires the scanning of the environment to establish threats and turn them into SME opportunities. This is done by creating missions brands, visions and plans launched in the re-engineering department in tandem with the prevailing operating environment (government policies, climate changes, banks, regulating authorities, consumers and SME challenges. This strategy is insulated with the offensive re-engineering process (an internal process of re-engineering) which helps to identify a re-engineering segment in the SME by analysing workflows and operating systems (inputs, production, marketing, human skills, structure and culture) to improve the growth of SMEs. Further to this, the SME re-engineering integration stage is important in capturing and recording information and other key activities done during each phase of re-engineering. Key to this, it is important to make critical observations of changes that might take place during re-engineering phases in order to assist in the crafting of agrarian SME re-engineering software, which is suitable for implementing the re-engineering process successfully. However, in the post SME re-engineering assessment stage, the department measures the impact of re-engineering on the growth and sustainability of SMEs .This is done by evaluating and monitoring whether the SME re-engineering twined processes were successful or not(Razalli et al., 2015;Ndangoh, Thomas & Deedam, 2018).All this is done to determine the completeness and effectiveness of the re-engineering process .From this assessment

stage, if any positive changes are identified, it is ,therefore, critical to maintain a continuous improvement system to further grow ,sustain and develop SMEs into TNCs. In contrast to this noble approach, if there are negative or no changes realised during the re-engineering process, it is highly advised that the re-engineering taskforce identifies errors that occurred during the re-engineering phases, it is recommended that the department goes back to the pre-stage and re-designs and re-launches the re-engineering process until growth and sustainability of an SME is realised (Razalli et al., 2015).

In conclusion, this proposed re-engineering framework is recommended for use since it is conceived with a variety of answers to SME challenges, and it is simple and easily adopted and it's applicable in radicalising the growth and sustainability of any organisation besides agrarian SMEs in the Eastern Highlands. Therefore the proposed SME re-engineering framework is depicted in Figure 7.1 below:

Figure 7.1: The Proposed SME Spider Web Re-engineering Process Flow
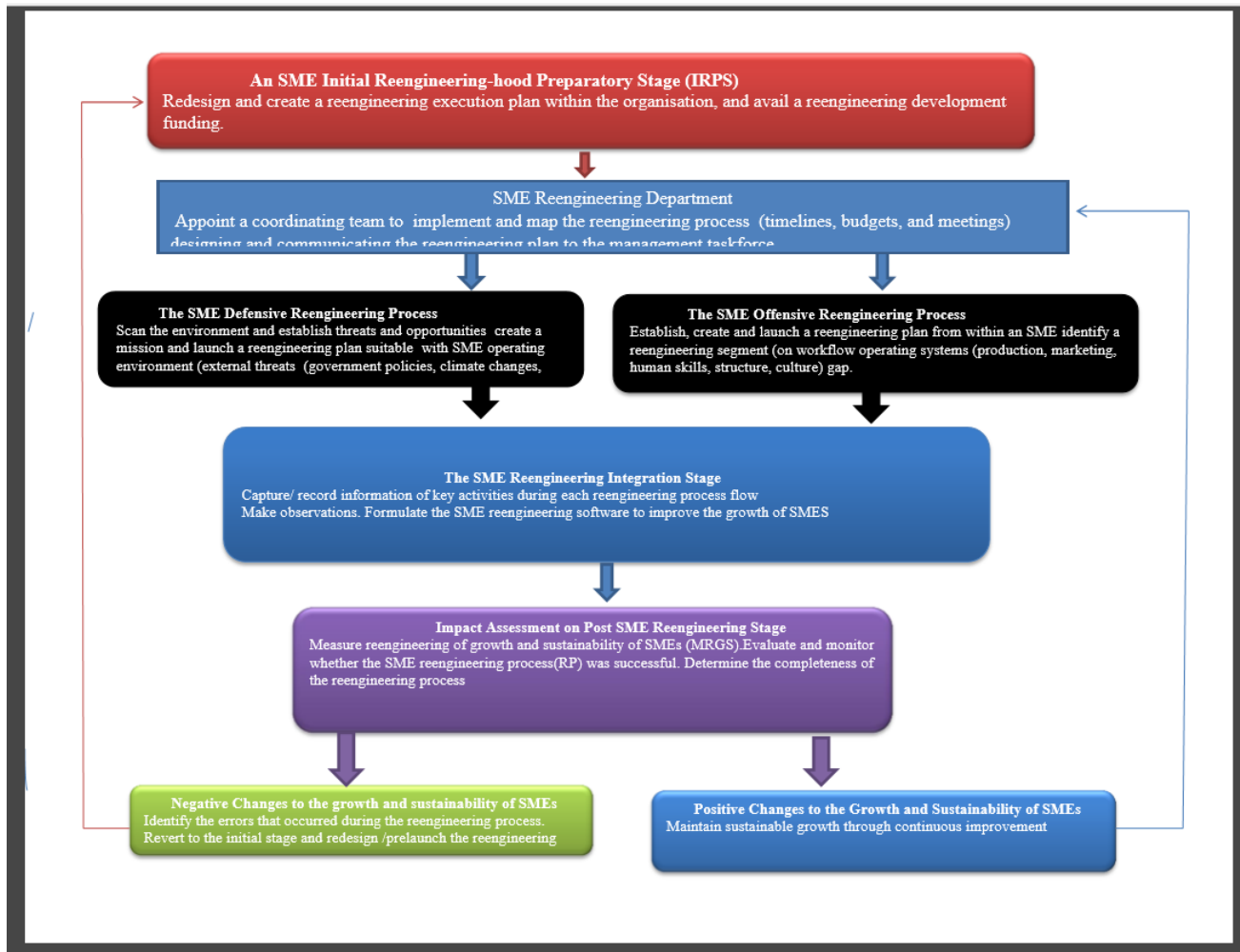
Source: The Researcher's Development

7.4. Chapter Summary

The appropriateness of the results was important for the success of the study. Therefore, strategies for re-engineering SMEs in the agrarian sector were the basis upon which the findings were explored to interpret the results. The last chapter will capture the conclusion and suggestions which radiate from the discussions and elucidations of the findings. The findings revealed that government supports agrarian SMES through SME- linked policies to grow its economy from within. Despite all these positives strategies for re-engineering the growth of SMEs, the figures at hand have shown that the SMEs in Zimbabwe have made little inroads in effectively applying the re-engineering strategies. There is reluctance by the SMEs to employ these versatile strategies although they seem to know and understand the benefits of the re-engineering process.

CHAPTER 8:
CONCLUSIONS AND RECOMMENDATIONS

8.1. Introduction

This chapter highlights certain conclusions and corresponding recommendations derived from results of quantitative data analysis and decisions on the hypotheses which are linked back to the objectives of the study which are summarised as follows; to identifying challenges faced by SMEs which can be used to inform policy development, establishing the potential impact of government policies in reengineering SMEs and investigating the role of agricultural support mechanisms which stimulate the growth of SMEs. Furthermore the study sought to review the existing SME techno-innovative strategies which expedite the growth and sustainability of SMEs.The study further sought to assess the role of gender dynamics and implications of management methods which stimulate the growth of SMEs. Lastly the study sought to develop a reengineering framework which is vital in stimulating the radical growth and sustainability of SMEs.

8.2.1 Objective 1

To identify the major challenges faced by SMEs in the agricultural sector which can be used to inform SME policy development for re-engineering the growth and sustainability of SMEs?

It became apparent that there is an association between the SME challenges and government policies. The study confirmed that SME challenges are associated with informing government policy review using the incremental theory. The development of government policies is expected to resolve problems being encountered by agrarian SMEs .It is suggested that properly redesigning of SME policies would create an enabling environment for SME growth and development. It became evident that the Zimbabwean government has been failing to timeously and promptly review policies which would grow SMEs.

It is thus necessary ensure constant and/or periodic revies of polices aimed at promoting SMEs, especially those in the agrarian sector so that their challenges are addressed and they can aspire to become Transnational Companies and improve food security in communities.

8.2.2 Objective 2

- To establish the potential impact of SME-related government policies in re-engineering (stimulating) the growth and sustainability agrarian SMEs.

The literature showed that the Zimbabwean policies are skewed more towards benefiting large enterprises rather than SMEs. However, the government is providing training and development for SMEs, which implies that some government policies are positively related to re-engineering the agrarian SMEs. It was also apparent that the SMEs are truly dependent on policies to be able to develop and reduce poverty. Government policies have always been at the core of developing businesses in the world and the SME Policy has stimulated the growth of SMEs. The greatest effort by government is in promoting an enabling operating environment and then developing a framework for SMEs to engender their growth. The government policies currently in place, if well-implemented, are capable of stimulating the growth and sustainability of SMEs.

8.2.3 Objective 3:

- To investigate the role of government agricultural support mechanisms in stimulating the sustainable growth of agrarian SMEs.

The study showed that complementary agriculture support mechanisms in the form of infrastructure, inputs, machinery, incubation centers, technology, training and development initiatives among others, stimulates the growth and sustainability of agrarian SMEs. Therefore, the association between agricultural support mechanisms and stimulating the intensification of SMEs was significant. Thus, the Zimbabwean government should provide inclusive support in line with SME requirements. After tapping into government support, SMEs would generate more revenue and meet their target. Hence this is a vibrant re-engineering initiative which catalyses the growth of SMEs into large companies.

8.2.4 Objective 4

- To critically review the existing SME strategies and revise where necessary, so as to expedite the growth and sustainability of the agrarian SMEs.

The research showed that researchers agree that the fastest growing SMEs appear to have taken advantage of existing SME techno innovative strategies such as e-commerce, value chain, biotechnology and mergers as effective approaches in the transformation of SMEs. This implies that successful SMEs depend on these strategies for development and to become more competitive. Therefore, with respect to the association between existing SME techno-innovative strategies and SMEs, the study explored the role that these strategies play in influencing their sustainability. Thus, finding innovative strategies will continuously re-engineer SMEs into large enterprises.

8.2.5 Objective 5

- To assess the role of gender dynamics in influencing the growth and sustainability of SMEs in the agricultural sector.

In the study, it was ascertained that there is a relationship between gender and the growth of agrarian SMEs. Since gender mainstreaming is a core part of government's role in trying to address limitations of previous approaches and in seeking to improve the status of women in business, it is noted that mainstreaming gender eliminates gender gaps in SMEs. Thus, the gender bias could be overturned by local leaders such as chiefs, NGOs and SME participation in gender awareness programs in conjunction with government authorities by dispelling myths about women. The gender commission should form coalitions among female entrepreneurs, where they develop mutually supportive networks with each other to stimulate agriculture development.

8.2.6 Objective 6

- To examine the implications of knowledge and understanding of effective management methods on the growth and sustainability of agrarian SMEs.

The study showed that without management strategies such as delegating, training and development, customer satisfaction, employee motivation and succession planning in place, SMEs are bound to go into extinction. Even though, it was noted that traditional management is still being used by the informal sector, the majority of respondents agreed that the use of modern management methods has an optimistic result on stimulating the growth of SMEs. Thus, strategic management plays an integral role in re-engineering SMEs in the agrarian sector in the country. The findings revealed that

there is still a large gap between the knowledge and its application in real SME growth effort. The management approaches have changed greatly with the emergence of re-engineering; therefore, SMEs must learn how to use effective management concepts in a way that is trustworthy with their business plan. This is especially true for SMEs striving to grow into Transnational Companies. Furthermore, the research established that an SME can benefit from management strategies which help it to predict the operating environment.

8.2.7 Objective 7

To develop a framework to re-engineer (/stimulate) the growth and sustainability of agrarian SMEs

After a careful assessment of the findings, it is suggested that Zimbabwean agrarian SMEs should apply the spider-web re-engineering framework to grow their businesses. This is derived from the fact that the framework is a double-edged approach that effectively deals with both offensive and defensive tactics which are ideal in re-engineering SMEs in a contracting or expanding economy.

The SME re-engineering framework shows that policy-makers believe that the adoption of the proposed SME re-engineering framework has the effect of stimulating the growth of SMEs. Moreso, it will sustain SMEs through effective strategic management that seeks to increase productivity and ensure that food security is attained in Zimbabwe. The results indicate that SMEs in the agrarian sector must positively respond to the SME re-engineering framework resulting in their growth. This SME re-engineering framework relies on the ambitions and strengths of the policy- makers and SME owner-managers to effect business growth. The re-engineering framework offers agricultural SMEs in the Eastern Highlands the opportunity to restructure and catalyse their growth prospects so that Zimbabwe can attain food security.

8.3. Recommendations

Based on research findings and discussions in the preceding chapters, the following recommendations were proposed for SMEs, policy- makers and Agritex Field Marshals in Zimbabwe.

8.3.1. Recommendations on SME Challenges

In various sections of this thesis, it was emphasized that SME challenges affect the growth of SMEs which may lead to food insecurity and poor economic growth. Therefore, entrepreneurs need to critically inform government on issues affecting their businesses so that policy- makers rectify and develop policies seeking to grow SMEs. The relevant ministry needs to direct, promote and explain to SMEs how policies can engineer their growth and resolve their challenges. It is, consequently, suggested that authorities carry out constant policy designs for SMEs so that they develop into international companies. It is further recommended that SMEs' formalisation is crucial as it will allow them to get necessary support to stimulate their growth. This will provide a monitoring system over how SMEs can overcome their challenges over time.

8.3.2. Recommendations on Government Policies /Regulations

It is recommended that government should promote a stable environment for SMEs to operate from since SME growth expectations are based on the incremental model which promotes stage by stage policy management to effective deliver its mandate. It is up to policy- makers to effectively implement strategies which stimulate the development of SMEs. It is, therefore, recommended that the SMEs must first and foremost know and understand how policies positively affect their growth so that they adjust their own management methods to fit in with policy trends. If they find their establishments to be overrated, they need to adjust appropriately in order to meet policy expectations on moving forward. Effective management conveys a grandiose method of re-engineering the agrarian SMEs, but the process requires skilled labor to do the re-engineering mapping process, so that SMEs realise their growth.

8.3.3. Recommendations on Agricultural Support Mechanisms

The very essence of the agricultural support mechanisms such as mechanization, cooperatives, revolving fund, contract farming, input schemes, access to markets and capital injection help SMEs develop agriculture. The findings from the (preceding chapters) identified lack of these mechanisms deter the growth of SMEs .However promoting agrarian clusters and incubation hubs engineer SMEs since this approach helps them increase output and achieve food security and nutriment in communities. It is therefore recommended that government increases these support mechanisms to engender the growth and performance of SMEs. Thus, the increased agricultural training programs for SME improve productivity and these skills development stimulates their growth prospects.

8.3.4. Recommendations on Re-engineering SMEs

In relation to the development of agrarian SMEs, re-engineering strategies need to be employed to improve the economy; it is recommended that focus be on improving the growth of SMEs through an effective re-engineering process to establish a performing economy.

8.3.5. Recommendations on SME Techno- Innovative Strategies

The prerequisite is for SMEs to refocus on adopting SME techno- innovative strategies such as biotechnology, mergers, e-commerce and value addition to stimulate their growth and sustain communities through provision of food and employment. In practical terms, integrating high uptake of technology workflow systems affects expansionary growth and protects weaker SMEs from closing down operations. Once again, it is recommended that SME techno- innovative strategies should be widely adopted and used by SMEs in order to breakeven and meets customer satisfaction expectations, since meeting or exceeding service expectations will ensure sustainable growth of SMEs. While customer retention depends on how a product tastes and how a customer is served, SMEs must apply techno-innovative strategies consistently for them to expand and diversify in an ever changing operating environment.

8.3.6. Recommendation on Gender Dynamics

Since the equality between women and men remains a challenge, government should mobilize inclusive SME programs for both males and females to have equal access to economic opportunity, education, employment and entrepreneurship. It was emphasized that gender main streaming promotes SMEs to become more competitive. The Ministry of Women's Affairs and SMEs in collaboration with Gender Commission and policy makers should spear head gender awareness programs in communities and SMEs structures as a measure to close gender bias so that SMEs grow into Transnational Companies. This awareness should cascade to family units as a baseline in playing a leading role in closing gender gaps.

8.3.7. Recommendation on SMEs Management Methods

The SMEs are encouraged to use structures to invigorate their growth since modern SME management methods are critical in developing skills as a measure to increase their growth and produce eye catching products which satisfy their consumers. It is noted that effective management has influence on re-engineering SMEs; hence owners must hire managers with expertise and train and develop employee skills to grow their SMEs. If the informal sector applies management

concepts appropriately, then SMEs will meet or even exceed their growth prospects to become Transnational Companies.

8.3.8. Recommendation on SME Re-engineering Framework

According to the SME growth model, it is encouraged that SMEs use the proposed SME re-engineering framework to improve their performance and productivity leading to their radical growth. This is because frameworks positively affect business growth. As such, it is recommended that the framework be used by the Zimbabwean authorities in championing the internal and external restructuring of SMEs poising them to positively grow. Each SME should create a re-engineering department within its structures to easily implement and influence the growth and sustainability of SMEs in the modern era.

8.4. Implications of the Study

Empirical evidence shows that SMEs contribute greatly to economic growth. This explains why economists have reopened the debate on whether strategies for re-engineering SMEs proportionately affect their growth trends or not. The study contributed to the development of agriculture and economic growth of Zimbabwe. SME managers in the agrarian sector understood the effect of management in disentangling the main problems that hamper the growth of agrarian SMEs. For this reason, the adoption of an SME re-engineering framework increases Zimbabwe's agricultural output and the SME sector is poised to grow. The results will be used by government and policy- makers to re-look at the existing policies so that they engender the growth agrarian SMEs. This stance will improve the food security in Zimbabwe and engender the growth of agricultural SMEs. The study will have regional and international implications on SMEs to reduce hunger and poverty. In addition, the study highlighted the importance of strategies for re-engineering agrarian SMEs seeking to improve the standards of living.

The study has furthermore contributed to the field of research by developing an SME re-engineering framework to stimulate the growth and sustainability of agrarian SMEs. The main characteristics of the proposed framework ensure that there is an effective internal and external re-engineering process by preparing SME management team and policy- makers to establish a focal point to coordinate and support agricultural development initiatives. Since the focus is to ensure food security (is a key factor) is attained and the success of any agrarian SME is driven by effective government policy implementation and provision of inputs. The study encourages continuous improvement of SME

policies to ensure radical agricultural transformation. Finally, this research has contributed a lot to the call for re-engineering the growth and sustainability of SMEs within Zimbabwe. This research provides some contributions to the literature in the area of entrepreneurship, agricultural sector and strategic management for SMEs in general. Firstly, it improves understanding of the role or importance of strategies for re-engineering the growth and sustainability of SMEs, and the importance of effective government policy implementation to stimulate SME growth. The legislators/policy-makers will be supported and guided on what needs to be highlighted in the policy to improve the growth and sustainability of SMEs. The findings could aid public policy- makers to identify programs that best foster agriculture development and further strengthen regulatory support for SMEs.

8.5. Further Research

For the purpose of advancing the current research on strategies for re-engineering the growth and sustainability of agrarian SMEs, there is need to create agrarian SME re-engineering framework software to support and facilitate effective re-engineering of SMEs. Further work on this subject is needed to maximize the growth of SMEs and development of agriculture. The integration of strategies for re-engineering SMEs and government policies is important and new vital information is needed to radically provoke the growth of SMEs and the Zimbabwean economy to grow from within. It is further suggested that all SMEs be integrated in the study of Zimbabwean agriculture as this will provide a bigger and more representative sample and allow one to establish if the findings of this research can be done again. Such bigger sample ranges may further allow the justification of the study on strategies for re-engineering the growth and sustainability of SMEs in agriculture, which could then be used for studies of SMEs in general and not only in Zimbabwe. To get a wider span, it is better to carry an inclusive research across Zimbabwe and SADC using quantitative investigation to establish the outcome of strategies for re-engineering the growth of SMEs in the region to reconfirm conclusions reached in this study. Future researches may possibly look at other factors that influence SMEs and provide more comprehensive feedback to the agricultural sector. Though a highlight of the relationship between strategies for re-engineering and SME growth was attempted in this study, more elaborate additional research needs to be conducted on agrarian SMEs, by studying their impact on food security and nutriment in communities. This is geared towards poverty reduction and to achieve this, a comparative study of different aspects on economic development is highly recommended. Ultimately, it is suggested that future investigation includes

SME re-engineering among other strategies in the context of discovering and dealing with gaps in insights across their activities. This study was limited to the country of Zimbabwe. This study is more suitable for other developed and under-developing countries. Future research is recommended to further refine the theoretical bases of each of the variables and to improve the measurement of skeptic elements and factors in order to clarify the conceptual model for better empirical examination.

8.6. Conclusion

The focal parameter in this chapter was to investigate the association linking challenges of SMEs, government policies, agricultural support mechanisms, existing SME techno- innovation, re-engineering strategies, gender dynamics, and management of SMEs and development of an SME re-engineering framework to re-engineer the growth of Zimbabwean agrarian SMEs. The chapter presented a summary of the key findings in addition to recommendations to SMEs, policy formulators, Agritex Field Marshals and government officials in Zimbabwe.

9.0. References

Anseeuw, W. Kapuya, T. & Saruchera, D. 2012. Zimbabwe's agricultural reconstruction: Present state, ongoing projects and prospects for reinvestment. Development Bank of Africa, Development Planning Division, Working Paper Series No. 32, South Africa.

Agarwal.S.2015."Study on Work-Life Balance of Women Entrepreneurs – Review and Research Agenda", *Industrial and Commercial Training*, Vol. 47 (7):356-363.

Apuke.O. D.2017. Quantitative Research Methods a Synopsis Approach, *Arabian Journal of Business and Management Review (Kuwait Chapter)*, and Vol. 6 (10):40-47.

Al-Matari. E.M, Abdullah. O. Y. & BtFadzil. F. H.2014.The Measurements of Firm Performance's Dimensions.*Macrothink Institute Asian Journal of Finance and Accounting*, Vol. 6(1):24-49.

AGRA.2016. *Africa Agriculture Status Report*: Progress towards Agricultural Transformation (Nairobi), Kenya.

Abeh.O.2017. The Problems and Prospects of Small and Medium Scale Enterprises (SMEs) Growth and Development in Nigeria: A Study of Selected SMEs in Delta State. *International Journal of Scientific Research in Education*, Vol.10 (3):278294.

ACET.2015.*Promoting Sustainable Rural Development and Transformation in Africa – Synthesis Report Lessons Learned Across 5 Countries*. African Center for Economic Transformation Cantonments, PMB CT 4, Ghana. Accra.

Aggarwal.R. & Ranganathan. P. 2016.Common Pitfalls in Statistical Analysis: The Use of Correlation Techniques.*Perspect Clin Res*, Vol .7:187-90.

Ameyaw. B, Korang. J, Twum. E .& Asante. I. 2017. Tax Policy, SMEs Compliance, Perception and Growth Relationship in Ghana: An Empirical Analysis. *British Journal of Economics, Management and Trade,* Vol .11(2): 1-11.

Arudchelvan.M. & Wignaraja.G. 2015. *SME Internationalization through Global Value Chains and Free Trade Agreements:* Malaysian Evidence", Working Paper No. 515, Tokyo: Asian Development Bank Institute.

Aremu.Y.S, Salako. M. A, Adedina. L. O, Ogunbayo. T. O .& Adebisi. O. K. 2017. Erratic Policy Making, Implementation and Adoption of Incremental Model: Nigeria Experience. Published by European Center for Research Training and Development, UK.*Global Journal of Arts, Humanities and Social Sciences,* Vol.5 (1):1-11.

AFDB.2013. *Agricultural Value Chain Financing (AVCF) and Development for Enhanced Export Competitiveness*. Ghana: African Development Bank Paper.

American Small to Medium Enterprise Council.2013: USA: SMEs Facts and Data.

Abdulsaleh. A. M. & Worthington. A. C. 2013. Small and Medium-sized Enterprises Financing: A Review of Literature. *International Journal of Business and Management*, Vol .8(14): 36-54.

Arunagiri. S, Kalaippiriya. K, Lenggesh Krishna. R, MahaVithya. J. & Kalaivani. K. 2015.A Study on Small and Medium Enterprises (SME'S) Growth Domestic Product (GDP) Contribution from Malaysian Economic Perspective. *Journal of Business and Management*, Vol .17(6): 62-69.

Aybar-Arias. C, Casino-Martinez. A. & Lopez-Gracia. J. 2012.On the Adjustment Speed of SMEs to their Optimal Capital Structure. *Small Business Economics,* Vol .39(4): 977-996.

Anicic. J, Vukotic. S. & Krstic. S. 2016: The Results Achieved and the Strategic Aspects of Agriculture Development in Serbia in the Period of Transition. *Ekonomika Poljoprivrede*, Vol. 63(1):175-189.

Anyamga. S. O. & Nyamita. M. O. 2016. The Major Growth Strategies Adopted by Small and Medium Enterprises in Kenya: A Case of Kisumu County. *International Journal of Advanced and Multidisciplinary Social Science,* Vol. 2:11-26.doi:10.5923/j.jamss.20160201.02 80.

Arafeh. L. 2016. An Entrepreneurial Key Competencies' model. *Journal of Innovation and Entrepreneurship,* Vol .5(1):1-26. doi:10.1186/s13731-016-0048-6.

Akinboade. O.A. 2015. 'Determinants of SMEs Growth and Performance in Cameroon's Central and Littoral Provinces' Manufacturing and Retail Sectors', *African Journal of Economic and Management Studie*s 6(2):183–196. http:// dx.doi.org/10.1108/AJEMS-03-2013-0033.

AlBuraiki.A & Khan. F. 2018. Finance and Technology: Key Challenges Faced by Small and Medium Enterprises in Oman. *International Journal of Management, Innovation and Entrepreneurial Research*, Vol .4(2):1-12.

Arunachalam. S, Ramaswami. S.N, Herrmann. P. & Walker. D.2018. "*Innovation Pathway to Profitability: The Role of Entrepreneurial Orientation and Marketing Capabilities", Journal of the Academy of Marketing Scienc*e, Vol. 46(4): 744-766.

Bahadur. W, Aziz. S .& Zulfiqar. S. 2018. Effect of Employee Empathy on Customer Satisfaction and Loyalty during Employee–Customer Interactions: The Mediating Role of Customer Affective Commitment and Perceived Service Quality. *Cogent Business & Management,* Vol.5 (1):1-21.oi:10.1080/23311975.2018.1491780.

Bhaskar.H.L.2016. 'A Critical Analysis of Information Technology and Business Process Re-engineering'*, Int. J. Productivity and Quality Management*, Vol. 19(1):98–115.

Bacon-Shone. J.2020. *Introduction to Quantitative Research Methods*. : A Guide to Research Postgraduate Students at the University Of Hong Kong. Graduate School, China: The University of Hong Kong.

Bass, H. (2012). SMEs Development in the 21st Century. Routledge: New York. USA.

Brooks, S. (2014). 'Strategic, future proof succession planning connects Telefonica with success: How HR was able to move the process on'. Human Resource Management International Digest, Vol. 22(2) 28-30.

Baporikar. N. 2017. Strategies for Successful Implementation of Innovation. *International Journal of Innovation in the Digital Economy,* Vol. 8:16-28.

Bilal. A. R, Naveed. M. & Anwar. F. 2017. Linking Distinctive Management Competencies to SMEs' Growth Decisions. *Studies in Economics and Finance*, Vol 34:302-330.

Berg. M, Mrrewijk, C.H .& Tamminen. S. 2018. Trade, Productivity and Profitability. On Profit Levels and Profit Margins. World Economy, Vol.41 (1):52–64.

Bello. S.M. 2017. "Personality Trait and Innovation Performance of Micro And Small Enterprises", Leadership, *Innovation and Entrepreneurship as Driving Forces of the Global Economy. Springer Berlin*, 663-669.

Bliemel. M. J, McCarthy. I. P. & Maine. E. M. 2016. Levels of Multiplicity in Entrepreneur's Networks: Implications for Dynamism and Value Creation. *Entrepreneurship Research Journal*, Vol .6:242-272. doi:10.1515/erj-20150001.

Bebber. D.P, Holmes. T. & Gurr. S.J. 2014. The Global Spread of Crop Pests and Pathogens. *Global Ecology and Biogeography*, Vol.23 (12): 1398–1407.

Bubou. G. M, Siyanbola. W. O, Ekperiware. M. C & Gumus. S. 2014. Science and Technology Entrepreneurship for Economic Development in Africa (SEEDA). *International Journal of Scientific and Engineering Research*, Vol.5 (3): 921–927.

Barkhatov. V. 2016. Business Success of Small and Medium Sized Enterprises in Russia and Social Responsibility of Managers. *Procedia Social and Behavioral Sciences*, Vol.221:185-193. doi: 10.1016/j.sbspro.2016.05.105

Barkhatov. V, Pletnev. D. & Campa. A. 2016. Key Success Factors and Barriers for Small Businesses: Comparative Analysis. *Procedia Social and Behavioral Sciences*, Vol. 221, 29-38. doi: 10.1016/j.sbspro.2016.05.087.

Bouazza. A. B. 2015 "Small and Medium Enterprises as an Effective Sector for Economic Development and Employment Creation in Algeria," *International Journal of Economics, Commerce and Management,* Vol. 3(2):1-16.

Bellemare. M. F. &. Novak.L. 2017. Contract Farming and Food Security. *American Journal of Agricultural Economics,* Vol 99(2): 357–378.

Bahramnejad. P, Sharafi. S .M. & Nabiollahi. A. 2015. A Method for Business Process Re-engineering Based on Enterprise. *Ontology International Journal of Software Engineering and Applications*, Vol.6 (1): 25-39.

Bjornlunda.H. & Pittock.J. 2017. Exploring the Productivity and Profitability of Small-Scale Communal Irrigation Systems in Sub-Saharan Africa. *International Journal of Water Resources Development*, Vol. 33(5): 685–689.

Bomani. M. Fields. Z. & Derera. E. 2015. Historical Overview of Small and Medium Enterprises in Zimbabwe. *Journal of Social Science*, Vol. 45 (2): 113–29.

Bryman. A. & Bell. E. 2015.*Business Research Methods*. USA: Oxford University Press.

Bokor. C. V. 2017. The Third Re-engineering Curve .To Reengineer How We Manage Knowledge Workers. PM World Journal. Vol. 5(I); 1-9.

Batani .J, Denhere .P.T.& Mawere. T.2015. *The Role of e- commerce in Resuscitating the Economy of Zimbabwe* .https://www.researchgate.net/publication/280529713.accessed 4. 04.2019.

Bagaber. A, Syed. N. H, Syed. A, Suraya. M. Z. & Mohammed. D. 2014.Comparison of Business Process Re-engineering Methodologies for Small Medium Enterprises, Proceedings of the IRICT 2014 , 12th -14th September. Johor, Malaysia: Computing Faculty, University Technology.

Bindu .S. & Chigusiwa. L. 2013.Examining the Sources of SMEs Horticultural Farmers, Exclusion from Formal Urban Markets in Zimbabwe: The Case of Chihota Communal Areas. *Journal Development Agriculture Economic*s, Vol 4(6):1-12.

Bakar. K. A. & Senin. A. A. 2016.Modeling Sustainability of SMEs Business in the New Economic Transition. International *Journal of Business, Economics and Law*, Vol.11 (2):31-37.

Berisha. G, Justina.K. & Pula. S. 2015. Defining Small and Medium Enterprises: a Critical Review University of Prishtina, Academic *Journal of Business, Administration, Law and Social Sciences,* Vol. 1(1):17-28.

Burch.S. 2017. Sustainability Innovation in Canadian Small Businesses: What We Need to Know. Center for International Governance Innovation. Policy Brief No. 96.CIGI Masthead. Canada.

Brooks. S. 2014. 'Strategic, Future Proof Succession Planning Connects Telefonica with Success: How HR was Able to Move the Process On'. *Human Resource Management International Digest*, Vol. 22(2) 28-30.

Broegaard. R.B. 2013. Land Administration, Gender Equality and Development Cooperation: Strengthening Women's Rights to and Control over Land in Nicaragua. *DIIS Working* Paper 2013:18. Copenhagen: Danish Institute for International Studies. https://www.files.ethz.ch/isn/175078/RP-2013-30.

Benhassine. N, McKenzie. D, Pouliquen, V.& Santini. M. 2018. 'Does Inducing Informal Firms to Formalize Make Sense? Experimental Evidence from Benin' *Journal of Public Economics* 157: 1–14.

Cai. J Hu. R, Huang.J. & Wang. X. 2017. Innovations in Genetically Modified Agricultural Technologies in China's public Sector: Successes and Challenges. *China Agric. Econ. Rev*, Vol. 9:317–330.

Cloete. P.C. 2013.Institutions and Agricultural Development: the Case of the North West Province in South Africa. Africa *Journal of Agriculture Res*, Vol 8(27):3495-3504.

Castro .J. Orjuela. A. & Jaime.W.A.2017.Dynamic Impact of the Structure of the Supply Chain of Perishable Foods on Logistics Performance and Food Security. *Journal of Industrial Engineering and Management*, Vol. 10 (4): 687-710.

Chinamasa. P.2016. Zimbabwe Interim Poverty Reduction Strategy Paper (2016-2018) Zimbabwe: Ministry of Finance and Economic Development.

Chivasa. S. 2014. Entrepreneurship Culture among SMEs in Zimbabwe: A Case of Bulawayo SMEs. *International Journal of Economic, Commerce and Management*, Vol.11 (9): 1-13.

Chowa. T. & Mukuvare. M. 2013. An Analysis of Zimbabwe's Indigenization and Economic Empowerment Programme (IEEP) As an Economic Development Approach. *Research Journal's Journal of Economics,* Vol. 1(2): 1-18.

Chingwaru. T. & Jarkata. O. 2015.Factors Restraining Small to Medium Enterprises (SMEs) From Engaging In Export Market. The Case of the Manufacturing Sector in Harare, Zimbabwe. *International Journal of Science and Research*, Vol 2: 643-647.

Creswell. J.W.2013.Qualitative *Inquiry and Research Design: Choosing among Five Approaches, 3rd. ed Singapore: Sage Publications Inc.*

Chamberlin. J, Jayne. T.S. & Headey. D. .2014. "Scarcity amid Abundance? Reassessing the Potential for Cropland Expansion in Africa." *Food Policy*, Vol. 48: 51-65.

Cant. M. C, Erdis. C. & Sephapo. C. M. 2014. Business Survival: The Constraints Experienced by South African SMEs in the Financial Sector. *International Journal of Academic Research in Business and Social Sciences,* Vol. 4(10), 565-579.

Chinomona. E. & Maziriri. E.T. 2015. 'Women in Action: Challenges Facing Women Entrepreneurs in the Gauteng Province of South Africa'. *International Business & Economics Research Journal,* Vol 14(6):835–850. http://dx.doi.org/10.19030/iber. v14i6.9487.

Cunningham. K., Ploubidis. G.B, Menon, P, Ruel. M, Kadiyala. S, Uauy. R. & Fergusson. E. 2015. Women's Empowerment in Agriculture and Child Nutritional Status in Rural Nepal. *Public Health Nutrition,* Vol.18 (17): 3133–45.

Christiaensen. L. & Todo. Y. 2013. Poverty Reduction during the Rural-Urban Transformation: The Role of the Missing Middle. Policy Research Working Paper Series 644. Washington, DC: World Bank.

Cant. M. C, & Wiid. J. A. 2016. The Use of Traditional Marketing Tools by SMEs in an Emerging Economy: *A South African perspective. Problems and Perspectives in Management,* Vol 14:64-70. doi:10.21511/ppm.14(1).2016.07.

Cho. Y.H. & Lee. J.H. 2018. "Entrepreneurial Orientation, Entrepreneurial Education and Performance", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 12 (No. 2):124-134.

Chen. Q, & Zhang. N. 2015. Does E-Commerce Provide a Sustained Competitive Advantage? An Investigation of Survival and Sustainability in Growth-Oriented Enterprises. *Sustainability*, Vol.7: 1411-1428. doi:10.3390/su7021411.

Chikere. C. C, & Nwoka. J. 2015. The Systems Theory of Management in Modern Day Organizations: A Study of Aldgate Congress Resort Limited Port Harcourt. *International Journal of Scientific and Research Publications*, Vol. 5(9): 1-7.Retrieved from http://www.ijsrp.org.

Dlamini. B. 2017. Determinants of Tax Non-Compliance among Small and Medium Enterprises in Zimbabwe. *Journal of Economics and Behavioral Studies*, Vol.9 (85):242-250. doi:10.22610/jebs.v9i4.1837.

Durendez. A, Ruiz-Palomo. D, Garcia-Perez-de-Lema. D. & Dieguez-Soto. J. 2016. Management Control Systems and Performance in Small and Medium Family Firms. *European Journal of Family Business,* Vol. 6:10-20. doi:10.1016/j.ejfb.2016.05.001.

Dolgih. I.N, Zhdanova. A.B. & Bannova K.A. 2015. The Influence of Taxation on Small Enterprise Development in Russia. *Procedia Social and Behavioral Sciences*, 166, 216-221. doi: 10.1016/j.sbspro.2014.12.513.

Dominguez. S. & Hollstein. B. 2014. Mixed Methods Social Networks Research: Design and applications. New York: Cambridge University Press.

Dzinotizei. M.2019. *Zimbabwe Smallholder Agricultural Productivity Survey 2017 Report*.Zimstat.

De Oliveira. J.A.P, & Jabbour. C.J.C. 2017. "Environmental Management, Climate Change, Social Responsibility, and Governance in Clusters of Small Firms in Developing Countries: Toward an Integrated Analytical Framework", *Business and Society*, Vol .56(1):130-151.

De Vries .G, Terwel .B.W, Ellemers. N. & Daamen .D.D.L. 2015. Sustainability or Profitability? How Communicated Motives for Environmental Policy Affect Public Perceptions of Corporate Green Washing. *Corporate Social Responsibility and Environmental Management,* Vol 22: 142–154.

Dossou-Yovo. A. 2015. Entrepreneurial Growth Aspirations and Familiarity with Economic Development Organizations; Evidence from Canadian SMEs.*Journal of Entrepreneurship, Management and Innovation,* Vol 11(4): 161-184.

Doss. C, Kovarik .C, Peterman .A, Quisumbing .A. & Van Den Bold. M. 2015. Gender Inequalities in Ownership and Control of Land in Zimbabwe (2015*): Myth and Reality. Agricultural Economics.*Vol.46 (3):403–34.

Dar. M. S, Ahmed. S. & Raziq. A.2017. "Small and Medium-Size Enterprises in Pakistan: Definition and Critical Issues," *Pakistan Business Review*, Vol. 19(1): 46-70.

Delgado. M, Porter. M.E. & Stern. S. 2014. Defining Clusters of Related Industries.U.S. Cluster Mapping Project. A New Tool for Regional Economic Development, ISC Scott Stern, MIT Sloan and Minneapolis NBER U.S. Cluster Mapping Launch Event: University of Minnesota, Minneapolis, MN September 29[th.]

Eniola. A. A. 2014. The Role of SME Firm Performance in Nigeria.*ArabianJournal of Business and Management Review*, Vol. 3(12):33-47.

Eijdenberg. E.L. & Masurel. E. 2013. Entrepreneurial Motivation in a Least Developed Country: Push Factors and Pull Factors among SMEs in Uganda. *Journal of Enterprising Culture,* Vol 21(1): 19-43.

Etikan. I. & Bala. K. 2017.Combinations of Probability Random Sampling Method with Non Probability Random Sampling Method (Sampling Versus Sampling Methods). *BiomBiostat Int. Journal*, Vol 5(6):1-5.

Eniola. A.A. & Entebang. H. 2015. Government policy and Performance of Small and Medium Business Management. *International Journal of Academic Research in Business and Social Sciences,* Vol.5 (2): 237-248.

Ehrenberger. M, Koudelkova. P. & Strielkowski. W. 2015. Factors Influencing Innovation in Small and Medium Enterprises in the Czech Republic. *PeriodicaPolytechnica. Social and Management Sciences,* Vol.23 (2):73-83. doi: 10.3311/PPso.7737.

Eklof. J, Podkorytova. O. & Malova. A. 2018. Linking Customer Satisfaction with Financial Performance: an Empirical Study of Scandinavian Banks. *Total Quality Management& Business Excellence,* Vol.3 (7):1-19.doi:10.1080/14783363.2018.1504621.

Evans. O. 2018. *Improved Financial Performance without improved Operational Efficiency: the case Of Nigerian Firms. Forum Scientiae Oeconomia,* Vol. *6(3):25–39.*

English. L. 2016. Development of Standard Procedures for Contribution Analysis of Agriculture and Forestry. *NARSC 2016 Pre-Conference Workshop Proceedings*. Minneapolis, MN. November, 2016.

Faloye. O.D, & Akinkoye. Y.E. 2013.E-Commerce Adoption and Internationalization of Small and Medium Scale Enterprises in South Western Nigeria. *The Business and Management Review*, Vol.4 (2): 178-190.

Finmark Trust .2012. *Finscop*e. Zimbabwe: MSME Survey.

FAO. 2017. *The Future of Food and Agriculture, Trends and Challenges; Food and Agriculture Organization of the United Nations:* Rome: Italy.

FAO. 2014. The State of Food and Agriculture Innovation in Family Farming. United Nations: Rome.

Frank. B, & Schvaneveldt. S. J. 2016.Understanding Consumer Reactions to Product Contamination Risks after National Disasters: The Roles of Knowledge, Experience, and Information Sources. *Journal of Retailing and Consumer Services*, Vol. 28:199–208.

Fornahl. D, Hassink. R. & Menzel. M. P. 2015. Broadening our Knowledge on Cluster Evolution, *European Planning Studies*, Vol. 23(10):1921–1931.

 Fuglie. K. & Rada. N.2013. "Resources, Policies, and *Agricultural Productivity in Sub-Saharan Africa*", Economic Research Report, N°145, US Department of Agriculture Economic Research Service, Washington, DC.

Food and Nutrition Council.2014.*Zimbabwe National Nutrition Strategy.* Harare.

Fatoki. O. 2014.The Impact of Managerial Competencies on the Performance of Immigrant- Owned Enterprises in South Africa. *Mediterranean Journal of Social Sciences*, Vol 5 (6):141-144.

Fidrmuc. J, & Gundacker. L. 2017. Income Inequality and Oligarchs in Russian Regions: A Note. *European Journal of Political Economy*, Vol.50:196-207. doi: 10.1016/j.ejpoleco.2017.09.005

Frumina. S.V. 2016. About the State Programs Stimulating Development of Small and Average Business in the Russian Federation. *Economics: Yesterday, Today, Tomorrow*, 7, 98-107.

Grabowski. P.P, Kerr. J.M, Haggblade. S. & Kabwe. S. 2016. Determinants of Adoption and Disadoption of Minimum Tillage by Cotton Farmers in Eastern Zambia. *Agriculture, Ecosystems & Environment,* 231: 54–67.

Gorevaya. E. & Khayrullina. M. 2015. Evolution of Business Models: Past and Present Trends. Procedia - *Economics and Finance,* 27, 344-350. doi: 10.1016/S2212-5671(15)01005-9.

Gunasekaran. P. 2015.A *Study of Management Models in Small and Cottage Industries*. India: The Gandhigram Rural Institute.

Gancarczyk. M. 2015.Enterprise- and Industry-Level Drivers of Cluster Evolution and Outcomes for Clusters in Developed and Less Developed Countries. *Journal of European Planning Studies,* Vol .11(4):3-24.

Gebrehiwot. N.T, Mesfin. K.A. & Nyseen. J, 2015. 'Small-Scale Irrigation: The Driver for Promoting Agricultural Production and Food Security, the Case of Tigray Region State, Northern Ethiopia', *Irrigation and Drainage System Engineering*, Vol. 4(2), 141–150.

Government of Zimbabwe and AFDB. 2013. *Country Programme Framework* 2012–2015. Zimbabwe: Harare.

Government of Zimbabwe.2014.Ministry of Agriculture, *Mechanization and Irrigation Developme*nt. Second Round Crop and Livestock Assessment Report (2013/14 Season), April 2014.Harare.

Government of Zimbabwe .2015.*Ministry of Industry and Commerce: Industrial Development Policies .2012-2016*, National Trade.

Hamann. R, Smith. J, Tashman. P. & Marshall. R.S. 2017. Why Do SMEs Go Green? An Analysis of Wine Firms in South Africa", *Business and Society*, Vol. 56(1):23-56.

Harris.D.2019.Intensification Benefit Index: How much can Rural Households Benefit from Agricultural Intensification? *Experimental Agriculture,* Vol. 55(2): 273–287.

Hossain. M, Momin. M, Rowe. A. & Quaddus. M. 2017. Corporate Social and Environmental Reporting Practices: A Case of Listed Companies in Bangladesh. *Sustainability Accounting, Management and Policy Journal*, Vol 8. (2): 138–165.

Hussain. S. 2018. "Towards Nurturing the Entrepreneurial Intentions of Neglected Female Business Students of Pakistan Through Proactive Personality, Self-Efficacy and University Support Factors*",* *Asia Pacific Journal of Innovation and Entrepreneurship,* Vol. 12(3):363-378.

Huang. S.Y, Lee. C.H, Chiu. A.A. & Yen. D.C. 2015. 'How Business Process Re-Engineering affects Information Technology Investment and Employee Performance under Different Performance Measurement', *Information Systems Frontiers*, Vol. 17(5):1133-1144.

Huang. P.C.C.2014. Is the Family Farm the Approach for Agricultural Development in China? *Open Times*, Vol. 2, 176–194.

Hejazi. M. & Marchant. M. A. (2017), China's Evolving Agricultural Support Policies, Choice 32: 1–7.

Hilson. G. 2016, Farming Small-Scale Mining and Rural Livelihoods in Sub-Saharan Africa: A Critical Overview. *The Extractive Industries and Society*, Vol.3 (2):547-563.

Heikkilä. M, Bouwman. H, & Heikkilä. J. 2018. From Strategic Goals to Business Model Innovation Paths: An Exploratory Study. *Journal of Small Business and Enterprise Development*, Vol. 25:107-128. doi:10.1108/jsbed-03-2017-0097

Iyiola. O. & Azu. D. 2014. Women Entrepreneur as Small and Medium Enterprise (SME) Operators and Their Roles in Socio Economic Development in Ota Nigeria, International Economic *Journal of Business and Finance*, Vol.2 (1):   14-23.

Ighiebembe. A. 2016. Organizational Change Management: A Strategic Approach for Organizational Effectiveness. *Business, Management and Accounting International Journal*, Vol. 2:1-17.

IFAD. 2013. "*Rural Livelihoods Improvement and Sustainable Agriculture Management within an Enabling Policy Environment.*" Report: Working Paper in Economics 0415, Cambridge University, Cambridge.

Irungu. A. & Arasa. R. 2017. Factors Influencing the Competitiveness of Small and Medium Enterprises (SMEs) in Nairobi County, Kenya. *Journal of Economics and Behavioral Studies,* Vol.9:161-173. doi:10.22610/jebs.v9i2.1658 .

Ifekwem. N. & Adedamola. O .2016.Survival Strategies and Sustainability of Small and Medium Enterprises in the Oshodi-Isolo Local Government Area of Lagos State .ActA Univ. Sapientiae, *Economics and Business*, Vol.4: 103–118.

ILemona. A. 2013. Alleviating Poverty through the Use of Entrepreneurship Skills Acquisition in Kogi State, Nigeria. *International Open Journal of Economics*, Vol.1 (2):14-23.

JayneT.S. & Rashid. S.2013. "Input Subsidy Programs in Sub-Saharan Africa: A Synthesis of Recent Evidence." Agricultural Economics, Vol.44 (6), pp. 1-16.

Jayne. T.S,Yeboah. K, Chamberlin. J, Traub. L, Muyanga. M, Sitko. N, Chapoto. A, Nkonde. C, Anseeuw. W. & Kachule. R. 2015)."*Africa's Changing Farmland Ownership*: Causes and Consequences", Plenary Paper Presented at the 29th International Conference of Agricultural Economists, Milan, Italy, August.

Johannisson. B. 2017. "*Networking and entrepreneurial growth*", The Blackwell Handbook of Entrepreneurship. Oxford:

Jaramillo. F, Ortiz. R, Ramankutty. N, Sayer. J.A, Shindell. D. 2017. Agriculture Production as a Major Driver of the Earth System Exceeding Planetary Boundaries (online). *Ecology and Society,* Vol. 22(4):11.

Jouzi. Z, Azadi. H, Taheri. F, Zarafshani. K, Gebrehiwot. K, Passel. S. Lebailly. P. 2017. Organic Farming and Small-Scale Farmers: Main Opportunities and Challenges. *Ecol. Econ, Vol*. 132 (2017), 144–154

Jiang. X. G, Liu. H, Fey. C. & Jiang. F. 2018. Entrepreneurial Orientation, Network Resource Acquisition, and Firm Performance: *A Network Approach. Journal of Business Research,* Vol.87:46-57. doi:10.1016/j.jbusres.2018.02.021

Jayne. T.S,Headey. D. & Chamberlin. J. 2014, "Land Pressures, the Evolution of Farming Systems, and Development Strategies in Africa: *A Synthesis", Food Policy*, Vol. 48:1-17.

Karadag. H.2016.The Role of SMEs and Entrepreneurship on Economic Growth in Emerging Economies within the Post-Crisis Era: an Analysis from Turkey .*Journal of Small Business and Entrepreneurship Developmen*t Vol. 4(1): 22-31

Katua .N. T. 2014 .The Role of SMEs in Employment Creation and Economic Growth in Selected Countries. *International Journal of Education and Research* Vol. 2 (12): 461-472.

Kertiyasa. N. N, Sukaatmadja. P. G, Jawas. A,Budhi M. K.S. & Marhaeni. A.A. I. 2013.SME Performance Improvement and Its Effect on the Poverty Reduction in Bali *International Journal of Business and Management Invention,* Vol .2(4):1-12.

Kazunga.O.2019.*SMEs Formalize Operations*. The Chronicle. Bulawayo,.www.chronicle.co.zw

Kinyuira. D. 2014. Effects of Porters Generic Competitive Strategies on the Pof Savings and Credit Cooperatives (Saccos) in Murang'a County, Kenya.*Journal of Business and Management*, Vol. 16(6): 93-105.

Koranteng. E. O, Osei-Bonsu. E, Ameyaw. F, Ameyaw .B, Agyeman. J. K. & Dankwa. R. A. 2017.The Effects of Compliance and Growth Opinions on SMEs Compliance Decisions: An Empirical Evidence from Ghana. *Open Journal of Business and Management*, Vol. 5:230-243.

Khankaew. C, Ussahawanitichakit. P. & Raksong. S. (2015). A Conceptual Framework of Alternative Marketing Strategy and Marketing Outcomes. Proceedings of Allied Academies *International Conference. Academy of Marketing Studies*, Vol. 20 (2): 1-6.

Kumar. R. 2014. *Research Methodology*: A Step by Step Guide for Beginners. 3rd Edition. Singapore: SAGE Publications.

KhajehNobar. H. B. & Rostamzadeh. R. 2018. The Impact of Customer Satisfaction, Customer Experience and Customer Loyalty on Brand Power: Empirical Evidence from Hotel Industry.

Journal of Business Economics and Management, Vol.19 (92):417-430. doi:10.3846/jbem.2018.5678

Kneafsey. M, Venn. L, Schmutz, U, Balázs. B, Trenchard. L, Eyden-Wood. T, Bos. E, Sutton. G. & Blackett. M. 2013. *Short Food Supply Chains and Local Food Systems in the EU*. A State of Play of their Socio-Economic Characteristics. European Commission: Joint Research Centre.

Konstantynova. A. & Lehmann. T. 2017. Cluster Activities in Different Institutional Environments. Case Studies of ICT-Clusters from Austria, Germany, Ukraine and Serbia, *Journal of Administrative Sciences*: 1-15.

Kamoyo. M, Mavhima. F. & Muranda. Z. 2014. Cluster Approach to Microenterprise Development: A Comparative Study of Clustered and Isolated Wooden Furniture Enterprise in *Zimbabwe Journal of Sustainable Development in Africa,* Vol 16(5):14-32 http://www.jsd-africa.com.

Kolstad. I. & Wiig. A. 2015. Education and Entrepreneurial Success. *Small Business Economics,* Vol.44 (4):783-796.

Kiseľáková. D, Šofranková. B, Čabinová. V. & Šoltésová. J. 2018. Analysis of Enterprise Performance and Competitiveness to Streamline Managerial Decisions. Polish Journal of Management Studies, Vol.17 (2):101–111.

Li. C, Ur Rehman. H. & Asim. S. 2019. Induction of Business Incubation Centers in Educational Institutions: *An Effective Approach to Foster Entrepreneurship*. J. Entrep. Educ, Vol. 22:1–12.

Leedy. P.D. & Ormrod. J.E. 2013.Practical *Research: Planning and Design*. 5th Ed. New Jersey: Pearson Merrill Prentice Hall.

Lin .H, Zeng. S, Wang. L, Zou. H, & Ma. H. 2016. How does Environmental Irresponsibility Impair Corporate Reputation? *A Multi-Method Investigation. Corporate Social Responsibility and Environmental Management*, Vol 23: 413–423.

Mulet. E, Royo. M, Chulvi. V. & Galá. G .2017.Relationship between the Degree of Creativity and the Quality of Design Outcomes. *DYNA* 84(200): 38-45.

Makhdoom. H.u.R, Li. C. & Asim. S. 2019. "Diffusion of Innovation through Individual and Collective Entrepreneurship: An Empirical Investigation in SMEs", *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 13 (1): 89-107. https://doi.org/10.1108/APJIE-06-2018-0040

Meyer. D.F. & Meyer. N. 2017. Management of Small and Medium Enterprise (SME) Development: An Analysis of Stumbling Blocks in a Developing Region .*Polish Journal of Management Studies.* 2017 Vol.16 (1): 127-141.

Masuka. A. 2019.*Inaugural Zimbabwe Agricultural Survey. Harare.*

Majoni. T, Mutunhu. J. & Chaderopa. B. 2016. SME's Policies and Challenges: A comparative analysis of Zimbabwe and South Korea. *International Journal of Scientific and Research Publications,* Vol. 6:377-384.

Maksimov. V, Wang. S. L. & Luo. Y. 2017. Reducing Poverty in the Least Developed Countries: The Role of Small and Medium Enterprises. *Journal of World Business*, Vol.52:244-257.

Margaretha. F. & Supartika. N. 2016. Factors Affecting Profitability of Small Medium Enterprises (SMEs) Firm Listed in Indonesia Stock Exchange. *Journal of Economics, Business and Management,* Vol.4:132-137. doi:10.7763/joebm.2016.v4.379.

Martinsons. M. G, Davison. R. M. & Huang. Q. 2017. Strategic Knowledge Management Failures in Small Professional Service Firms in China. *International Journal of Information Management,* Vol.37:327-338. doi:10.1016/j.ijinfomgt.2017.04.003

Moyo. B. & Mandizwidza-Moyo. E. 2017. SMEs Management Practices in a Hostile Business Environment in Zimbabwe. *Journal of Entrepreneurship and Business Innovation*, Vol.4: 14-26. doi:10.5296/jebi.v4i1.10722 98

Mutalemwa. D. K. 2015.Does Globalization Impact SME Development in Africa? *African Journal of Economic and Management Studies,* Vol.6:164-182.

Mugozhi. F. D. & Hlabiso. G. 2017. Determinants of Small to Medium Enterprises" Success or Failure: An Ex-Post Appraisal of Start-up Business by Young Entrepreneurs in Zimbabwe, *International Journal of Humanities and Social Studies*, Vol. 5 (3):30-46.

Mahjoor. A. 2016. A Descriptive Study on Business Process Re-engineering Methods for Small and Medium Sized Companies. *Journal of Current Research in Science*, Vol. 5 (1): 946-949.

Mutambara. S. 2016.Agricultural Input Supply Challenges of SMEs Irrigation Schemes in Zimbabwe. *Journal of Development and Agricultural Economics*, Vol. 8(12); 260-271.

Matutu. V. 2014. Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIM ASSET 20132018). A Pipeline Dream or Reality. A Reflective Analysis of the Prospects of the Economic Blue Print. *Journal of Public Policy*, Vol.1 (1): 1-10.

Mangudya. J. P. 2016. *Monetary Policy Statement*. Retrieved March 25, 2019, from Reserve Bank of Zimbabwe: http://www.rbz.co.zw/2015-monetary-policy.html.

Mitaritonna. C. & Traoré. F. 2017. *Existing Data to Measure African Trade*. IFPRI Discussion Paper 01618. Washington, DC, International Food Policy Research Institute.

Morrison. J. 2016. *Managing Food Security Risks and Intra-Regional Trade in Africa.* Rome, FAO.

Maunganidze .F. 2013. The Role of Government in the Establishment and Development of SMEs in Zimbabwe: Virtues and Vices. *Journal of Business Administration and Education*, Vol.4 (1): 1-16.

Mbizi.R, Hove. L, Tondlana. A. & Kakava. N .2013. Innovation in SME: A Review of Its Role to Organisational Performance and SMEs Operations Sustainability. *Interdisciplinary Journal of Contemporary Research in Business,* Vol.4 (11): 370-389.

Mangudya. J. P. 2017. *Stimulating Economic Growth and Bolstering Confidence*. Monetary Policy Statement January 2017. Harare: Reserve Bank of Zimbabwe.

Mhembwe. S, Chiunya. N. & Dube. E. 2019. 'The Contribution of Small-Scale Rural Irrigation Schemes towards Food Security of Smallholder Farmers in Zimbabwe', *Jàmbá Journal of Disaster Risk Studies,* Vol. 11(1):1-11

Magwa. S. & Magwa. W. 2015.A Guide to Conducting Research: A Student Handbook, *Strategic Book Publishing and Rights Co.*, Singapore.

Makate. C, Makate.M,Mango.N, Siziba. S. 2018. Increasing Resilience of Smallholder Farmers to Climate Change through Multiple Adoption of Proven Climate-Smart Agriculture Innovations. Lessons from Southern Africa. *J. Environ. Manag,* 231, 858–868.

Muzerengi. T. & Mapuranga. D. 2017. 'Impact of Small-Scale Irrigation Schemes in Addressing Food Shortages in Semi-Arid Areas: A Case of Ingwizi Irrigation scheme in Mangwe District, Zimbabwe', *International Journal of Humanities and Social Studies.*Vol. 5(7): 298–312.

Mavimbela. R. & Dube. E. 2016. Can an Internet Adoption Framework be Developed for SMEs in South Africa. Journal of Entrepreneurship and Innovation in Emerging Economies.Vol.2 (2): 120-135.

Mausch .K, Orr. A.& Miller. B.P .2017. Targeting Resilience and Profitability in African Smallholder Agriculture: Insights from ICRISAT's Research Programs. FACETS 2: 545–558.

 Nyoni .T, Bonga .W.G.2018. Anatomy of the small & medium enterprises (SMEs) critical success factors (CSFs) in Zimbabwe: Introducing the 3E model. *Journal of Business and Management* (DRJ-JBM). 2018, Vol.1 (2):1-18

Nyoni.S.2018. *Ministry of Women Affairs, Community, Small and Medium Enterprises (MWACSME),* Zimbabwe. Retrieved on 20/05/2019.Available at: www.smecd.gov.zw .

Ndangoh .K, Thomas .E. & Deedam. F. B.2018.Applying Business Process Re-engineering To Small And Medium Scale Enterprises (SMEs) In The Developing World. *European Journal of Computer Science and Information Technology* Vol.6 (1):10-22.

Nwodo. S, Okolo. V. O, Nebo. G, EzeEgodi .M, Enyi. F.E, Obikeze. C. & Ohanagorom. M.2017. Managing Small and Medium Scale Enterprises in A Competitive Marketing Economy .*IOSR Journal of Business and Management* ,Vol.19(6): 124-140.

Nyanga. T. 2018. Examining the Usefulness of Job Satisfaction Theories in Armed Conflict Society. *Amity Global Human Resource Management Review*, Vol.8 (2): 40-48.

Nyanga. T, Zirima. H, Mupani. H, Mashavira. N. & Chifamba. E. 2013. Survival of the Vulnerable: Strategies Employed by Small to Medium Enterprises in Zimbabwe to Survive an Economic Crisis. *Journal of Sustainable Development in Africa*, Vol.15 (6):39-71.

Nowin´ski. W. & Haddoud. M.Y.2019. The Role of Inspiring Role Models in Enhancing Entrepreneurial Intention. *J. Bus. Res,* Vol. 96:183–193.

Nordgvist. M., Wennberg. K, Bau. M. & Hellerstedt. K. 2013.An Entrepreneurial Perspective on Succession in Family Firms. *Journal of Small Business Economics*, Vol. 40(4):1087- 1122.

Nyoni.S. 2017.MSME Infrastructure Provision in Zimbabwe. SME Magazine, Name Media. Zimbabwe: Sable Press.

Ndiaye. N, Abdul Razak. L, Nagayev. R. & Ng. A. 2018. Demystifying Small and Medium Enterprises' (SMEs) Performance in Emerging and Developing Economies. *Borsa Istanbul Review*, Vol.18:269-281. doi:10.1016/j.bir.2018.04.003

Nyamutowa. C, Masunda. S. & Mupaso.N. 2014. Assessing the Readiness of Zimbabwe in Adoption of an Agricultural Commodity and Derivatives Market. A Review Paper. Midlands State University *Journal of Science, Agriculture and Technology*, Vol. 5(1): 95–110.

Nyamwanza. L, Paketh. L, Mhaka. C, Makaza. F. & Moyo .N. 2015. An Evaluation of the Policies Instituted by the Government of Zimbabwe in Promoting Survival and Growth of SMEs: The Case of Glenview Area 8 SMEs. *International Journal of Novel Research in Marketing Management and Economics,* Vol 2: 35-44.

OECD. 2016. Sustainable Productivity Growth in Agriculture: Trends and Policy Performance. Better Policies for Better Lives. *Meeting of Agriculture Ministers*, 7-8 April, Paris. www.oced.org/agricultural/ministerial.

Olayinka. O. M, Wynn., & K. Bechkoum. G.2016. "E-business Adoption in Nigerian Small Business Enterprises*," International Journal on Advances in Systems and Measurements*, Vol. 9(3/4):230-241.

Pierre. A. K. & Fernandez. A.2018. Going Deeper into SMEs' Innovation Capacity: An Empirical Exploration of Innovation Capacity Factors. *Journal of Innovation Economics, Vol*. 25:39-181. doi:10.3917/jie.pr1.0019.

Piperopoulos. P. G. 2016 .*Entrepreneurship, Innovation and Business Cluster*s.USA: Routledge.

Quisumbing. A.R, Meinzen-Dick. R, Raney. T.L, Croppenstedt. A, Behrman. J.A. &Peterman. A. 2014. *Gender and Agriculture: Closing the Knowledge Gap*. Springer Science & Business.

Rurinda. J, Mapfumo, P, van Wijk. M. T, Mtambanengwe. F, Rufino. M. C,Chikowo. R. & Giller. K. E. 2014.Sources of Vulnerability to a Variable and Changing Climate among Smallholder Households In Zimbabwe: *A Participatory Analysis. Climate Risk Management*. Vol 3: 65-78.

Runganga. R.,& Mishi, S. 2020, Modelling Electric Power Consumption, Energy Consumption and Economic Growth in Zimbabwe: Cointegration and Causality Analysis. American Journal of Economics, Vol.10(5):267-276.

Rahi.S.2020.Research Design and Methods: A Systematic Review of Research Paradigms, Sampling Issues and Instruments Development. *International Journal of Economics and Management Sciences, Vol6* (2):2-5.

Razalli. M.R, Ringim. K.J, Hasnan. N, & Hassan. M.G. 2015. 'A Framework of Best Practices in Managing Business Re-engineering for Islamic', *Journal of Advanced Management Science*, Vol. 3(1):.22–25.

Rosegrant. M.W, Koo. J, Cenacchi. N, Ringler. C, Robertson. R, Fisher. M, Cox. C, Garrett. K, Perez. N.D. & Sabbagh. P. 2014. *Food Security in a World of Natural Resource Scarcity. The Role of Agricultural Technologies.* Washington, DC, International Food Policy Research Institute.

Rahayu. R. A. & Day. J. 2016. E-commerce Adoption by SMEs in Developing Countries: Evidence from Indonesia. Eurasian Business Review, Vol.7:25-41. doi:10.1007/s40821-016-0044-6

Strielkowski. W, Tcukanova. O. & Zarubina. Z. 2017. Globalization and Economic Integration: the Role of Modern Management. *Polish Journal of Management Studies*, Vol. 15(1):255-281.

Sanyal. S. & Hisam. M. 2018. The Role of Business Incubators in Creating an Entrepreneurial Ecosystem: A Study of the Sultanate of Oman. *International Journal of Contemporary Research in Humanities and Social Sciences,* Vol.7 (1):60-77.

Silverman. D. 2013. *Doing Qualitative Research*: A Practical Handbook, 4th Edition. New York: Sage Publications.

Simalenga .T. E. 2013. Agricultural Mechanization in Southern African countries. Silverton, Pretoria, South Africa: Institute for Agricultural Engineering.

SMEAZ .2017. Manufacturing and Engineering Conference Paper; http://www.smeaz.org.zw/ business-directory/71-accessed 23/03/18.

Sujová. E. & Čierna. H. 2018. Optimization and Improvement of Test Processes on a Production Line. *Management Systems in Production Engineering*, Vol.26:88–92.

Sulaiman .S. Sheihnaz. T. & Samuel .A.O .2016.A Conceptual Framework of the Impact of Entrepreneurial Competencies on Small and Medium Enterprises Business Performance in the Malaysian Hospitality and Tourism Industry. Curtin University, Sarawak, *Malaysia. Review of Integrative Business and Economics Research Journal*. Vol.5 (2):47-61.

Slavchevska. V, Kaaria. S. & Taivalmaa, S.L. 2016. *Feminization of Agriculture in the Context of Rural Transformations: What is the Evidence? Working paper,* July 2016. Washington, DC, World Bank.

Saberi. M. & Hamdan. A. 2019. the Moderating Role of Governmental Support in the Relationship between Entrepreneurship and Economic Growth: *A Study on the GCC Countries. J. Entrep. Emerg. Econ,* Vol. 11:200–216.

Sutter. C, Bruton. G. D. & Chen. J. 2019. Entrepreneurship as a Solution to Extreme Poverty: A Review and Future Research Directions. *Journal of Business Venturing*, Vol.34 (1):197–214.

Sims. B. & Kienzle. J. 2017. Sustainable Agricultural Mechanization for Smallholders: What Is It and How Can We Implement It? MDPI.*Journal of Agriculture*, Vol. 7(50):1-21.

SMEAZ.2019
SMEAZ.2015

Şerban. A. I. 2015.*Management Academic Worldwide Conference, 5th to 6th November, and Innovation for Competitive Advantage. Proceedings of the 9th International Management*. Bucharest: Romania.

Srivastava. M. & Kaul. D. 2014. Social Interaction, Convenience and Customer Satisfaction: The Mediating Effect of Customer Experience. *Journal of Retailing and Consumer Services*, Vol .21(6):1028–1037.

Saunders. M, Lewis. P. & Thornhill. A. 2013.*Research Methods for Business Students.* 7th Ed. Harlow: Prentice Hall.

Sukume. C,Mavedzenge. B, Murimbarima. F. & Scoones. I. 2015. Space, Markets and Employment in Agricultural Productivity: Zimbabwe Country Report. Research Report 46. Cape Town: *University of the Western Cape, Institute for Policy, Land and Agriculture Studies (PLAAS)*.https://assets.publishing.service.gov.uk

Tadele. Z. 2017. *Raising Crop Productivity in Africa through Intensification Institute of Plant Sciences*. Switzerland Center for Development and Environment (CDE), Switzerland.

Taneja. S. & Toombs. L. 2014.Putting a Face on Small Businesses: Visibility, Viability, and Sustainability the Impact of Social Media on Small Business Marketing. *Academy of Marketing Studies Journal,* Vol. 18(1):249-261.

Teece. D.J. 2014. A Dynamic Capabilities-Based Entrepreneurial Theory of the Multinational Enterprise. *Journal of International Business Studies*, Vol. 45(1):8-37.

 Tang.J. Tang. Z. & Cowden. B.J.2017.Exploring the Relationship between Entrepreneurial Orientation, CEO Dual Values, and SME Performance in State-Owned vs. Non state-Owned Enterprises in China. *Entrepreneurship Theory and Practice*, Vol. 41(6):883-908.

UNCTAD. 2012. *Integrating Developing Countries" SMEs into Global Value Chains*. United Nations: New York.

USAID/Zimbabwe.2012. Zimbabwe Agricultural and Rural Livelihood Financial Market Assessment, Volume II, Weidemann Associates, Harare.

USSBA. 2013. U.S. Small Business Administration: *Small Business Size Standards*. Issued on: 10/09/2013 by: http://www.sba.gov/content/table-small-business-size-standards.retrieved 31/05/18.

UNFPA Zimbabwe .2020.*Q & A Ministry of Women Affairs, Community, Small and Medium Enterprises Development*. *Spotlight Initiative Bi-Weekly Newsletter.*

Verboncu. I. 2013. *Redesigning the Organization's Management*. Bucharest: Print Tech Publishing House.

Vineles. P.M. G. 2017. *Towards A Sustainable Integrated Economy*. ASEAN Small and Medium Enterprises, Policy Brief, RSiS, Nanyang University of Technology. Singapore

Witlox. F. 2015. Genetically Modified Crops and Small-Scale Farmers: Main Opportunities and Challenges. *Crit. Rev. Biotechnol*. (0), 1–13

World Bank. 2015. Financin*g the End of Poverty*. Washington D.C.: World Bank.

Wangombe. D. 2013. *The Philosophy. Ontology*, Epistemology and Methodology of Research in Corporate Environmental Reporting Behavior, the Clute Institute International Academic Conference. Paris: France.

Wymenga. P, Spanikova. V, Barker. A, Konings. J. & Canton. E. 2015. EU SMEs in 2012: at the Crossroads: Annual Report on Small and Medium-Sized Enterprises in the EU. European Commission. *International Journal of Academic Research in Business and Social Sciences*. Vol. 4(2): 303–311.

Wang. X, Huang. J. & Rozelle.S.2017. Off-Farm Employment and Agricultural Specialization in *China, China Economic Review,* Vol 42: 155–65. doi.org/10.1016/ j.chieco.2016.09.004.

Wang. X, Yamauchi. F. & Huang. J. 2016. Rising Wages, Mechanization, and the Substitution between Capital and Labor: Evidence from Small Scale Farm System in China, *Agricultural Economics* 47: 309–17. doi.org/10.1111/agec.12231.

Wadesango. O. V. 2015. The Importance of Record Keeping to the Growth of Small And Medium Scale Enterprises (SMEs) in Zimbabwe. *Corporate Ownership and Control*, Vol.12:744-754. doi:10.22495/cocv12i4c7p5.

Wong. G. 2015. *SMEs Productivity, Measurement and Analysis*, Handbook. Tokyo, Japan: Asian Productivity Organization.

WFP.2014. *Results of Exploratory Food and Nutrition Security Analysis*. Harare. Policy Brief, RSiS, Nanyang University of Technology. Singapore

World Food Summit .2017. *Better Food for More People Conference*. Denmark: Ministry of Environment and Food, Copenhagen.

Wolfe. D. A. & Gertler. *M. S. 2016. Clusters from the Inside and Out: Local Dynamics and Global Linkages. Urban Studies,* Vol.41 *(5-6): 1071-1093.doi:10.1080/00420980410001675832.*

Xiaochen, W., Phiri, A., Tahseen, S., & Dube, F. N. M.2018. Working Knacks and Impact of Emotion Display on Job Satisfaction. International Journal of Advanced Multidisciplinary Scientific Research. Vol, 1:66-70.

Yeboah. M.A. 2015. Determinants of SME Growth: An Empirical Perspective of SMEs in The Cape Coast Metropolis, Ghana, *The Journal of Business in Developing Nations*,Vol.14 (1):2-31.

Yang J, Huang. Z, Zhang. X. & Reardon. T.2013. "The Rapid Rise of Cross-Regional Agricultural Mechanization Services in China." *American Journal of Agricultural Economics, forthcoming.*

ZimVac.2013. *Rural Livelihoods Assessment Draft Report*. Harare, Zimbabwe.

ZimVac .2016. *Rural Livelihoods Assessment*. Zimbabwe Vulnerability Assessment Committee.Harare.Zimbabwe.

Zimbabwe Revenue Authority.(2019).ZIMRA Revenues Review First Quarter, Harare: ZIMRA.

Zhang. S.S, van Doorn. J. & Leeflang P.S. 2014. Does The Importance of Value, Brand and Relationship Equity for Customer Loyalty Differ Between Eastern and Western Cultures? *International Business Review*, Vol.23 (1):284-292.

Zimstats .2017. Agricultural Statics, National Production Report. Harare: Zimbabwe.

Zimstats. 2014. Publications, ZIMDAT downloads, Statistics, http://www.zimstat.co.zw.

Zimtrade. 2014. Links to *Government Policie.* Trade Agreements, Export Sector and Market Brief; Focus on the Netherlands Markets, Standard Association of Zimbabwe.

Zikmund. W.G, Babin. B.J, Carr. J.C. & Griffin. M. 2013.Business *Research Methods*.
9th Ed. South Western: Cengage Learning.

Zreen. A,Farrukh. M, Nazar. N. & Khalid. R. 2019. The Role of Internship and Business Incubation Programs in Forming Entrepreneurial Intentions: *An Empirical Analysis from Pakistan*. J. Manag. Bus. Adm. Cent. Eur, Vol. 27:97–113.

Appendix A: Questionnaire for SMEs

Instructions:

> ➢ **Declaration By Respondent**

I hereby agree to voluntarily participate in the completion of this questionnaire.

Respondent Signature …………………………………

> ➢ Answer all questions 1-22; please place an X/tick where applicable.

Section A: Respondent Background

1. Indicate your Gender

Male		Female	

2. In which Age category do you belong?

Age Category	
18-35	
36-55	
56-65	
66-85	

3. Please indicate your position within the SME?

Owner   ☐

Co-Owner   ☐

Partner   ☐

Manager   ☐

Employee   ☐

Other (Specify)..........................

4. Tick/X your highest farming-related qualifications

Non-Qualified ☐

Certificate ☐

Diploma ☐

Degree ☐

Section B: Current Status and Challenges Encountered by SMEs in the Agricultural Sector

5. Please indicate in which part of the Eastern Highlands your SME is located

Nyanga   ☐

Vumba   ☐

Mutare   ☐
                 ☐

Honde Valley
                 ☐

Chipinge
                 ☐

Chimanimani
                 ☐

Cashel Valley   ☐

6. In which of the following categories does your SME belong?

Micro   ☐ Small   ☐ Medium   ☐

7. Please indicate if there has been any significant change in the number of personnel employed since the inception of the SME.

Rise   Decline ☐   ☐No Variation

8. Indicate the ownerships structure of your SME
                 ☐
Limited company

Sole proprietorship   ☐

Partnership   ☐

Joint ventures   ☐

Family owned   ☐

Others specify..

9. How long has your SME been in existence?

Period in Existence	
Below 4 years	
5 Years -9 Years	
10 and above years	

10. Please indicate the source of funding for your SME activities?

Self   ☐

Government   ☐

Bank loan   ☐

☐

Social Capital

11. Use the following percentage ranges to indicate the productivity sequence of your SME.

Less than 10%   ☐

Not more than 40%   ☐

Not more than 60%   ☐

Not more than 80%   ☐

100% plus   ☐

12. Identify (by crossing X/ticking the relevant box), the major challenges you are facing as an SME.

Challenges	Place an X/tick

Lack of inputs (seeds, equipment and fertilizer)	
Lack of training and development of skills	
Lack of finance	
Lack of land ownership	
Lack of transport	
Lack of access to international markets	

SECTION C: Government Regulations /Policies Promote SMES

13. Respond using a scale of 1-5, where 5= Very great extent; 4= Great extent; 3=Moderate extent; 2= Low extent and 1= Very low extent. From the challenges mentioned above. To what extent have the following government policies sought to address the challenges being faced by SMEs in the agrarian sector?

Government Policies	1	2	3	4	5
The SME Policy	☐	☐	☐	☐	☐
ZIMASSET	☐	☐	☐	☐	☐
Education Policy	☐	☐	☐	☐	☐
Indigenization Economic Empowerment Policy	☐	☐	☐	☐	☐
The Agriculture Policy	☐	☐	☐	☐	☐
ICT Policy	☐	☐	☐	☐	☐
National Investment Policy	☐	☐	☐	☐	☐
National Gender Policy	☐	☐	☐	☐	☐
Infrastructure Development Policy	☐	☐	☐	☐	☐
Land Policy	☐	☐	☐	☐	☐

Look East Policy	☐	☐	☐	☐	☐

14. Using scale of 1-5, where 5= strongly agree; 4= Agree; 3=Neutral; 2= Disagree and 1= strongly disagree; indicate your agreement with the statement below:

Government SMEs policies have been very effective in growing SMEs in the agrarian sector.	1	2	3	4	5
	☐	☐	☐	☐	☐

The following questions 17-18, respond using scale of 1-5, where 5= strongly agree; 4= Agree; 3=Neutral; 2= Disagree and 1= strongly disagree; indicate your agreement with the statement below:

15:

Government regulations/policy and SME Compliance	1	2	3	4	5
Government policies have been successful in re-engineering the growth of the agrarian sector	☐	☐	☐	☐	☐
Government policies are structured to transform SMEs in the agrarian sector into transnational companies.	☐	☐	☐	☐	☐
Registration and licensing by SMEs increases compliance, competitiveness and corporate governance.	☐	☐	☐	☐	☐

Stability in the macro-economic environment promotes the growth and competitiveness of SMEs in the agrarian sector.	☐	☐	☐	☐	☐
Tax relief for SMEs in the agrarian sector promotes capital accumulation and resource mobilization.	☐	☐	☐	☐	☐
Sustainable environmental management by SMEs promotes	☐	☐	☐	☐	☐

green economy and SMEs global competitiveness.					
Land tenure policy / entitlement (title deeds)promote borrowing capital from banks	☐	☐	☐	☐	☐

Section D: Impact of Agricultural Support on SMEs

From question 19-20, respond using a scale of 1-5, where 5= Very great extent; 4= Great extent; 3=Moderate extent; 2= Low extent and 1= Very low extent.

16. The following agricultural support mechanisms influence the growth and sustainability of SMEs in the agricultural sector?

Agricultural Support Mechanisms	1	2	3	4	5
Agricultural Mechanisation (tractors, ploughs, pumps, etc.)	☐	☐	☐	☐	☐
Agricultural Extension System(training, field shows)	☐	☐	☐	☐	☐
Agriculture Loans And Credit Facilities(Agribank and micr-ofinance)	☐	☐	☐	☐	☐
Agricultural Input Schemes(government subsidies	☐	☐	☐	☐	☐
Command Agriculture(government credit facility)	☐	☐	☐	☐	☐
Infrastructure Development	☐	☐	☐	☐	☐
Agricultural Research and SME product development	☐	☐	☐	☐	☐

17.   The following sustainable measures influence the growth and sustainability of SMEs in seeking to improve livelihoods and reduce poverty?

Agricultural SMEs Sustainable Measures	1	2	3	4	5
Agrarian Indigenous Knowledge and Information Systems	☐	☐	☐	☐	☐
Land tenure or ownership	☐	☐	☐	☐	☐

Cooperative credit facility	☐	☐	☐	☐	☐
Resource utilization	☐	☐	☐	☐	☐
Trade Promotion	☐	☐	☐	☐	☐
Value Addition Involvement	☐	☐	☐	☐	☐
Consumer Participation	☐	☐	☐	☐	☐
SMEDCO Revolving Fund	☐	☐	☐	☐	☐

Section E: How Existing SME Innovative Strategies Influence their Growth

Answer questions23-24, using a scale of 1-5, where 5= Very great extent; 4=Great extent; 3=Moderate extent; 2= Low extent and 1= Very low extent, respond to the following question:

18. The following existing SME development strategies enhance/stimulate the growth and sustainability of your SME?

Type of Strategies	1	2	3	4	5
Product branding and niche marketing by SMEs improves product differentiation, focus and cost leadership to safeguard consumer loyalty and product quality	☐	☐	☐	☐	☐
Acquisitions and mergers increase the competitiveness of SMEs	☐	☐	☐	☐	☐
Agricultural incubators and clusters radically develop skills and grow SMEs into Transnational Companies	☐	☐	☐	☐	☐
Agricultural Credit Guarantee Schemes improve the working capital of SMEs	☐	☐	☐	☐	☐
Contract farming engenders the growth of SMEs and improves their productivity	☐	☐	☐	☐	☐
AIKIS	☐	☐	☐	☐	☐

E- marketing using E-commerce to enhance competitiveness	☐	☐	☐	☐	☐

19

Uptake of Technological Strategies	1	2	3	4	5
Agriculture Indigenous knowledge systems	☐	☐	☐	☐	☐
Bio-technology	☐	☐	☐	☐	☐
Uptake of techno- innovative technologies	☐	☐	☐	☐	☐
E- marketing using E-commerce to enhance competitiveness	☐	☐	☐	☐	☐

20.

The Impact of Re-engineering SMEs	1	2	3	4	5
To what extent does the re-engineering of SMEs influence food security in Zimbabwe to reduce poverty?	☐	☐	☐	☐	☐
To what extent does the re-engineering of SMEs influence income- generation and employment creation in Zimbabwe?	☐	☐	☐	☐	☐
To what extent does the re-engineering of SMEs influence economic growth in Zimbabwe?	☐	☐	☐	☐	☐
To what extent does the re-engineering of SMEs influence resources utilization?	☐	☐	☐	☐	☐
To what extent does the re-engineering of SMEs influence efficient income distribution and influences standard of living?	☐	☐	☐	☐	☐
To what extent does the re-engineering of SMEs influence SME market capitalization?	☐	☐	☐	☐	☐

Section F: Role of Gender Dynamics on SME Growth

Respond using scale of 1-5, where 5= Strongly Agree; 4= Agree; 3=Neutral; 2= Disagree and 1= Strongly Disagree; indicate your agreement with the statement below:

21.

To what extent does gender mainstreaming influence the growth of SMEs in the agrarian sector?	☐	☐	☐	☐	☐
To what extent do you think the inclusion of women promotes food security and nutriment?	☐	☐	☐	☐	☐

Section   G: Knowledge and Understanding SME Management Methods

22. To what extent do the following strategies for knowing and understanding the impact of effectively managing SMEs influence their growth and sustainability in Zimbabwe? Use a scale of 1-5, Where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

Management Strategies	1	2	3	4	5
Delegating Duties	☐	☐	☐	☐	☐
Consumer Involvement	☐	☐	☐	☐	☐
Skills Competency	☐	☐	☐	☐	☐
Consumer Satisfaction	☐	☐	☐	☐	☐
Training and Development	☐	☐	☐	☐	☐
Entrepreneurial Growth	☐	☐	☐	☐	☐
Networking and Information Dissemination	☐	☐	☐	☐	☐
Employee Motivation	☐	☐	☐	☐	☐

Social Responsibility	☐	☐	☐	☐	☐
SME Structure	☐	☐	☐	☐	☐
Strategic Management Development	☐	☐	☐	☐	☐

The End of Questionnaire

Appendix B: Questionnaire for Policy Makers and Agritex Field Marshals

Section A: Respondent Background

1. Gender………….

2. Are you a policy- maker or agrarian field marshal?

3. Indicate your experience below to show your competitiveness in stimulating the growth of SMEs?

Above 40years   ☐

31-39years   ☐

21-30 years   ☐

11-20years   ☐

1-10 years   ☐

Section B: Current Status and Challenges Encountered by SMEs in the Agricultural Sector

4. Using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

To what extent do SMEs help to inform policy review?	1	2	3	4	5
	☐	☐	☐	☐	☐

5. Use the following growth indicators to indicate the growth extent of SMEs in Eastern Highlands.

Growth Indicators	Growth or Decline				
Indicators	1	2	3	4	5
Diversification	☐	☐	☐	☐	☐
Revenue Growth	☐	☐	☐	☐	☐
Market Share	☐	☐	☐	☐	☐
Profitability	☐	☐	☐	☐	☐
Globalization	☐	☐	☐	☐	☐
Resource Utilization	☐	☐	☐	☐	☐
Increase in Assets	☐	☐	☐	☐	☐
Economic growth	☐	☐	☐	☐	☐
Industrialization	☐	☐	☐	☐	☐

Standards of Living	☐	☐	☐	☐	☐
Sustaining Livelihoods	☐	☐	☐	☐	☐
Employment Creation	☐	☐	☐	☐	☐
Gross Domestic Product	☐	☐	☐	☐	☐

Section C: Government Regulations /Policies Promote SMEs

6.

To what extent do government policies promote the growth of SMEs?	1	2	3	4	5
	☐	☐	☐	☐	☐

Answer questions 8-10, using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent. To what extent do the following government roles play a pivotal role in developing SMEs?

7.

Do you think government policies in Zimbabwe are addressing economic disparities in the context of SMEs in the agrarian sector to improve the equitable income distribution?	1	2	3	4	5

8.

To what extent are government policies being implemented in seeking to re-engineer the growth of SMEs?	1	2	3	4	5
	☐	☐	☐	☐	☐

Section D: Impact of Agricultural Support on SMEs Growth

Answer questions 11-13using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

9

To what extent do you think agricultural support by government is stimulating the growth of SMEs?	1	2	3	4	5
	☐	☐	☐	☐	☐

10.

To what extent do you think sustainable measures influence the growth of SMEs in seeking to reduce poverty?	1	2	3	4	5
	☐	☐	☐	☐	☐

11. Using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent. To what extent do the following environmental factors influence the growth and sustainability of SMEs in the agrarian sector?

12. Using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent. To what extent do the following government roles are playing a pivotal role in the development of SMEs in the agrarian sector within your area?

Government Roles	1	2	3	4	5
Trade Promotion					
Financial incentives					
Technical Skills Development					
Lobbying for SMEs Associations					
Mechanization Leasing					
Workspace support					
Investment Promotion					
Tax Relief					
Inputs Provision					
Sub-Contracting SMEs					
Quality Assurance					
Monitoring and Evaluation of SMEs Growth					

Section E: How Existing SME Techno- Innovative Strategies Influence their Growth

Answer questions 16-18 using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

13.

Existing Strategies	1	2	3	4	5
To what extent do you think that existing strategies develop	☐	☐	☐	☐	☐

SMEs to become Transnational Companies?					

14.

From your experience as a government official working with SMEs, do you think uptake of technologies re-engineer SMEs?	1	2	3	4	5

15.

Do you think existing SMEs re-engineering strategies improve food security and nutriment?	1	2	3	4	5
	☐	☐	☐	☐	☐

Section F: Role of Gender Dynamics on SME Growth

16. Using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

To what extent do you think the inclusion of women in SMEs in the agrarian sector is promoting the growth of SMEs in Zimbabwe?	1	2	3	4	5
	☐	☐	☐	☐	☐

Section G: Knowledge and Understanding SME Management Methods

Answer questions using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

17.

To what extent do you think effective management of SMEs increases their growth, development and sustainability in the agricultural sector in Zimbabwe?	1	2	3	4	5
	☐	☐	☐	☐	☐

Section H: The Impact of SME Re-engineering Framework

Below is the proposed SME re-engineering management framework that was designed to improve the growth and sustainability of SMEs.

Spider Web SME Re-engineering Framework

Defensive Reengineering (External) Offensive Reengineering (Internal)

Government Policies

Growth
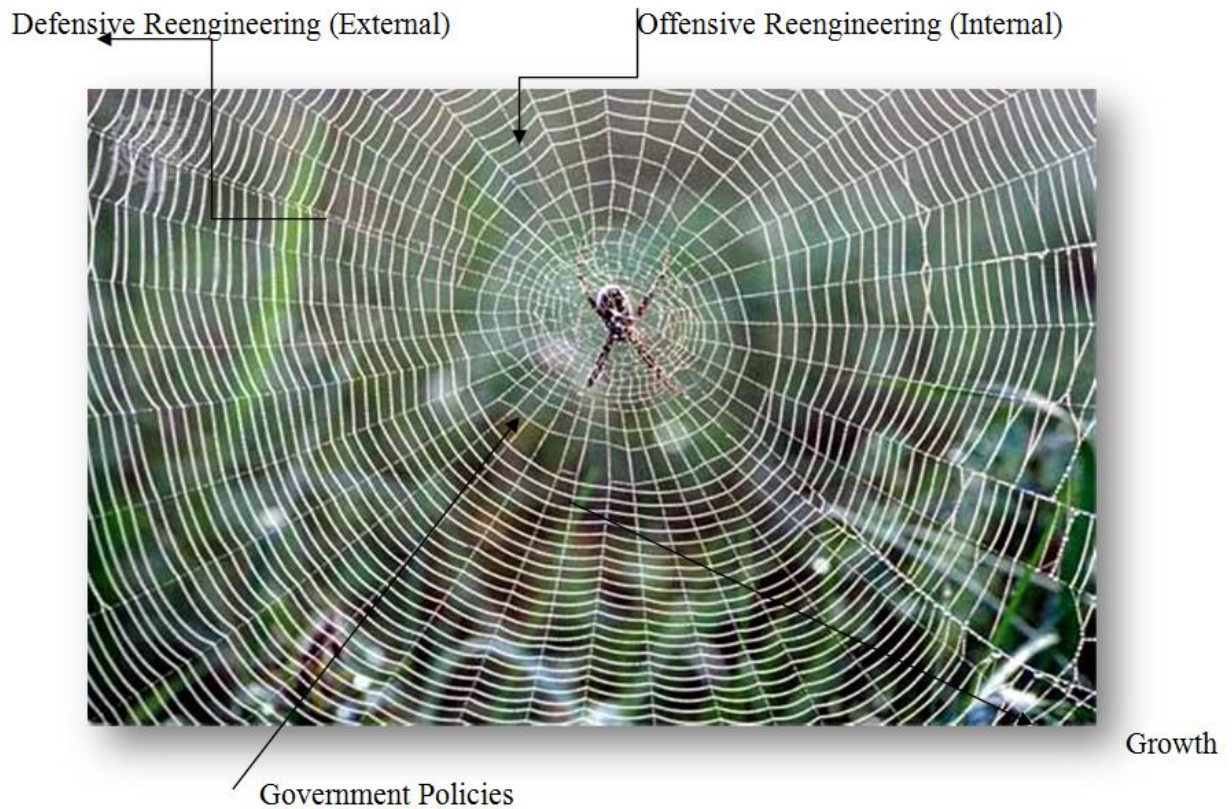
Answer using a scale of 1- 5 where 5= Very great extent; 4 Great extent; 3= Moderate extent; 2= Low extent and 1= Very low extent.

21. From your understanding of the framework presented above, to what extent does the proposed SME re-engineering framework influence the following factors in seeking to grow SMEs?

Effects of a re-engineering Framework	1	2	3	4	5
Productivity	☐	☐	☐	☐	☐
Effective strategic management	☐	☐	☐	☐	☐
Sustainable growth of SMEs	☐	☐	☐	☐	☐

23. Please feel free to make any other comment on the research topic …………………

Appendix C: Study Schedule

S/N	MONTH/YEAR	ACTIVITY	OUTCOME
1.	Feb to June 2018	Proposal Prep, Review, Submission and Approval	Approved Review
2.	July -Sept 2018	Proposal Revision (if Necessary) and Literature Review	Chapter 2
3.	Sept -Dec 2018	Research Methodology	Chapter3
4.	Jan –June 2018	Data Collection	Chapter 3
5.	July –Aug 2018	Data Analysis	Chapter 4
6.	Sept 2019	Conclusion and Recommendations	Chapter 5 -6
7.	Oct 2019	Compilation of First Draft	First Draft
8.	Nov 2019	Revision of Draft and Compiling Second Draft	Second Draft
9.	Nov 2020	Final Draft	Submit Thesis for Examination

Appendix D: Permission Letters to carry out the Study

All correspondence should be addressed to the Director
Department of Agricultural Technical and Extension Services

CLPD
MINISTRY OF LANDS, AGRICULTURE AND RURAL RESETTLEMENT

Head office
No. 1 Borrowdale Road
Ngungunyana Building
Harare

P.O. Box CY 2505, Harare, Zimbabwe Tel: (+263) 04-794381/2

Reference:

7 August, 2018

The Provincial Crop and Livestock Production Officer
Manicaland Province

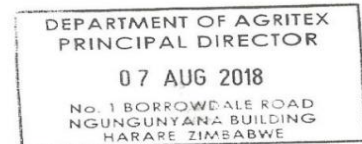**REQUEST FOR SUPPORT TO CARRY OUT PhD RESEARCH STUDY**

This serves to inform you that Ngoni Munyawarara has approached this office seeking support to carry out research study towards his PhD programme with University of Kwazulu, Natal. The Study is entitled "Strategies for Re-engineering the Growth and Sustainability of Small to Medium Enterprises (SMEs) in The Agrarian Sector." The study area will be the Eastern Highlands.

Please provide him with the necessary support, information and linkages with the stakeholders in the agricultural sector.

Advise your staff at district level and also province accordingly so that they offer the needed support.

Principal Director
Crop and Livestock Production Department

DEPARTMENT OF AGRITEX
PRINCIPAL DIRECTOR

0 7 AUG 2018

No. 1 BORROWDALE ROAD
NGUNGUNYANA BUILDING
HARARE ZIMBABWE

All correspondence should be addressed to

"THE SECRETARY"

Telephone: 730081/7; 791823/7 702731
Fascimile: 704116/723765/729311
E-mail: miit@indandcom.co.zw
Telegrams: "TRADEMIN", Harare
Private Bag CY 7708, Causeway,
Zimbabwe

ZIMBABWE

Reference: N P 33 / 449

**MINISTRY OF INDUSTRY,
COMMERCE AND
ENTERPRISE DEVELOPMENT**
Mukwati Building
4th Street/Livingstone Avenue
Harare
Zimbabwe

21 August 2018

Mr. Ngoni Munyawarara
1501 Mainway Meadows
Waterfalls
Harare

**RESEARCH ON STRATEGIES FOR RE-ENGINEERING THE GROWTH
AND SUSTAINABILITY OF SMALL TO MEDIUM ENTERPRISES (SMEs)
IN THE AGRARIAN SECTOR IN ZIMBABWE**

Reference is made to your letter dated 08 August 2018 requesting to collect research data on **"Strategies for Re-Engineering the Growth and Sustainability of Small to Medium Enterprises (Smes) in the Agrarian Sector in Zimbabwe"**.

Please be advised that, the Secretary for Industry, Commerce and Enterprise Development has granted you the permission to conduct your research. Please note that you are required to submit a copy of your final thesis to this Ministry for record keeping.

P. Rukato
FOR: SECRETARY FOR INDUSTRY, COMMERCE AND ENTERPRISE DEVELOPMENT

cc.   Human Resources Department Float

MIN. OF INDUSTRY & COMMERCE
HUMAN RESOURCES OFFICE

2 1 AUG 2018

P. BAG CY 7708, CAUSEWAY
ZIMBABWE

298

Appendix E: CONSENT

UNIVERSITY OF KWAZULU-NATAL

School of Management, IT and Governance

STRATEGIES FOR RE-ENGINEERING THE GROWTH AND SUSTAINABILITY OF SMES IN THE AGRARIAN SECTOR IN ZIMBABWE

Research Project

Researcher: Ngoni Munyawarara Cell: +263772811560/263 732811560/0718811560.Emailngonimunyawarara70@gmail.com **Supervisor**: Prof Krishna Govender, Telephone number: +277813333712Email: govenderk13 @ukzn.ac.za

Research Office: Humanities and Social Sciences Research Ethics Administration, Govan Mbeki Building, Westville Campus, Tel: + 27 (0)31 260 8350, Email: hssreclms@ukzn.ac.za

CONSENT

I Ngoni Munyawarara hereby confirm that I understand the contents of this document and the nature of the research project, and I consent to participating in the research project. I understand that I am at liberty to withdraw from the project at any time, should I so desire.

Additional consent, where applicable

█████████████████████

Signature of Participant   Date   1-10-18

Appendix F: Information Sheet to Participate in Research

UKZN HUMANITIES ANS SOCIAL SCIENCES RESERCH ETHICS COMMITTEEE (HSSREC)

APPLICATION FOR ETHICS APPROVAL

For research with human participants

01-10-18

Dear Respondent,

My name is Ngoni Munyawarara, a PHD student in the School of Management, IT and Governance at the University of KwaZulu Natal. My contact number is +263772811560/263 732811560/0718811560.Emailngonimunyawarara70@gmail.com.
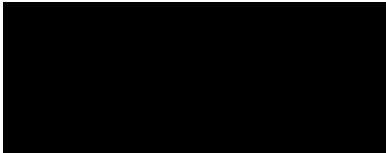
I am researching the following topic: Strategies for Re-engineering the Growth and Sustainability of Small to Medium Enterprises (SMEs) in the Agrarian Sector in Zimbabwe. The primary aim of this study is to: determine the strategies for re-engineering the growth of SMEs in the Eastern Highlands, Zimbabwe. The study would include 410 participants, which comprises SMEs owners, employees, policy- makers and Agritex Field Marshals in the Eastern Highlands. The duration of your participation if you choose to participate in the study is expected to be at most one hour. The study is funded by the researcher. I hope that the study will provide information which will be useful in improving the growth and sustainability of agricultural SMEs in Zimbabwe.

This study has been ethically reviewed and approved by UKZN and Social Sciences Research Ethics Committee (approval number_____). In the event of any problems or concerns/ questions you may contact the researcher using contact number +263772811560/263 732811560/ 263718811560. Email: ngonimunyawarara70@gmail.com and Social Sciences Ethics Committees, contact details as follows; Humanities and Social Sciences Research Ethics Administration, Govan Mbeki Building, Westville Campus, Tel: + 27 (0)31 260 8350, Email: hssreclms@ukzn.ac.za.Your participation in this project is voluntary. You may refuse to participate or withdraw from the project at any time with no negative implications, and there will be no monetary gain from participating in

this research project. Confidentiality and anonymity of records will be maintained by the researcher and School of Humanities and Social Sciences, UKZN. All collected data will be used solely for research purposes and will be destroyed after 5 years.

Thank you for your time.

Yours sincerely

Ngoni Munyawarara

Appendix G: Ethical Clearance

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

25 June 2019

Mr Ngoni Munyawarara (217081888)
School of Management, IT & Governance
Westville Campus

Dear Mr Munyawarara,

Protocol reference number: HSS/2028/018D
Project title: Strategies for Re-Engineering the growth and sustainability of Small to Medium Enterprises (SMEs) in the Agrarian Sector in Zimbabwe

Approval Notification – Expedited Application

In response to your application received on 05 November 2018, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 1 year from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

Dr Shamila Naidoo (Deputy Chair)

/ms

Cc Supervisor: Professor K Govender
cc Academic Leader Research: Professor Isabel Martins
cc School Administrator: Ms Angela Pearce

Humanities & Social Sciences Research Ethics Committee
Dr Rosemary Sibanda (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0)31 260 3587/8350/4557 Facsimile: +27 (0)31 260 4609 Email: ximbap@ukzn.ac.za / snymamn@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

1910 – 2010
100 YEARS OF ACADEMIC EXCELLENCE

Founding Campuses: ■ Edgewood ■ Howard College ■ Medical School ■ Pietermaritzburg ■ Westville