

Developing an Implementation Model to Address Food Shortages in Matabeleland South
Province, Zimbabwe

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DECLARATION

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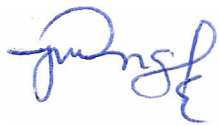
DECLARATION

I, Muzerengi Tapiwa, Registration Number 216075836, hereby declare that the

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Muzerengi Tapiwa

30/07/2019

DATE

DEDICATION

In Memory of the late Juliana Chamboko Muzerengi

my mother,

and

Mkululwa Muzerengi

my father

To Beauty Kondo my wife, and children Denzel Tapiwa and Dominic Tinodaishe

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ABBREVIATIONS/ACRONYMS

AGRITEX	Agricultural Technical and Extension Services
AIDS	Acquired Immune Deficiency Syndrome
ANIDP	Accelerated National Irrigation Development Programme
ARDA	Agricultural Rural Development Authority
ASPEF	Agricultural Sector Productivity Enhancement Facility
BNA	Basic Needs Approach
BSAP	British South African Police
CAADP	Comprehensive African Development Programme
CADU	Chilalo Agricultural Development Unit
CEO	Chief Executive Officer
CSIRO	Common Wealth Scientific and Industrial Research Organisation
COMESA	Common Market for Eastern and Southern Africa
DA	District Administrator
DBSA	Development Bank of South Africa
DFID	Department for International Development
DFNSC	District Food and Nutrition Security Committee
DRC	Democratic Republic of Congo
EPRDF	Ethiopian People's Revolutionary Democratic Front
ESAP	Economic and Structural Adjustment Programme
EWS	Early Warning Systems
FAD	Food Availability Decline
FAO	Food and Agriculture Organisation
FANTA	Food and Nutrition Technical Assistance
FDI	Foreign Direct Investment
FEWSNET	Famines and Early Warning Systems Network
FFYNDP	First Five Year National Development Plan
FGDS	Focus Group Discussions
FPL	Food Poverty Line
FTLRP	Fast Track Land Reform Programme
GDP	Gross Domestic Product
GMB	Grain Marketing Board
GoZ	Government of Zimbabwe
GWE	Growth with Equity
HIV	Human Immunodeficiency Virus
ICRISAT	International Crop Research Institute for the Semi-Arid Tropics
IFARD	International Federation of Agricultural Research Systems for Development
IMF	International Monetary Fund
IPCC	Inter-governmental Panel on Climate Change
IPCFS	International Planning Committee for Food Sovereignty
IRD	Integrated Rural Development
ITPGRFA	International Treaty on Plant Genetic Resources for Food and Agriculture
KIIs	Key Informant Interviews
KIPPRA	Kenyan Institute of Public Policy Research
LAA	Land Apportionment Act

LRRP	Land Reform and Resettlement Programme
MDC	Movement for Democratic Change
MDGs	Millennium Development Goals
MEPF	Macro Economic Policy Framework
MERP	Millennium Economic Recovery Programme
MPOI	Mass Public Opinion Institute
MTEP	Medium Term Plan
MZWP	Mtshabezi Zambezi Water Project
NCAR	National Centre for Atmosphere Research
NEDPP	National Economic Development Priority Programme
NERP	National Economic Recovery Programme
NGOs	Non-Governmental Organizations
NIB	National Indigenous Board
NOCZIM	National Oil Company of Zimbabwe
NR	Natural Region
OECD	Organisation for Economic Co-operation and Development
ORAP	Organization of Rural Associations for Progress
PA	Provincial Administrator
PFMS	Public Fund Management System
PFNSC	Provincial Food and Nutrition Security Committee
PRSPS	Poverty Reduction Strategy Papers
PSNP	Productive Safety Net Programme
RBM	Results Based Management
RDC	Rural District Council
RDDC	Rural District Development Committee
SADC	Southern African Development Community
SIRDC	Scientific and Industrial Research and Development Centre
SSA	Sub-Saharan Africa
STERP1	Short Term Emergency Recovery Programme 1
STERP11	Short Term Emergency Recovery Programme 11
TNC	Transnational Company
TNDP	Transnational National Development Plan
TPP	Ten Point Plan
TTLs	Tribal Trust Lands
UN	United Nations
UNDHR	United Nations Declaration of Human Rights
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNGAS	United Nation General Assembly
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
UNSDG	United Nations Sustainable Development Goals
USAID	United States Agency for International Development
VAM	Vulnerability Analysis and Mapping
VIDCO	Village Development Committee
WADCO	Ward Development Committee
WB	World Bank
WFP	World Food Programme
WFS	World Food Summit

WHO	World Health Organisation
ZAMCOM	Zambezi Watercourse Commission
ZANU PF	Zimbabwe African National Union – Patriotic Front
ZAPF	Zimbabwe Agricultural Policy Framework
ZAPU	Zimbabwe African People’s Union
ZDF	Zimbabwe Defence Forces
ZEDS	Zimbabwe Economic Development Strategy
ZEFSA	Zimbabwe Emergency Food Security Assessment
ZFU	Zimbabwe Farmers Union
ZIMPREST	Zimbabwe Programme for Economic and Social Transformation
ZIMRA	Zimbabwe Revenue Authority
ZIMVAC	Zimbabwe Vulnerability Assessment Committee
ZUNDAF	Zimbabwe United Nations Development Assistance Framework

ABSTRACT

Matabeleland South Province has since 1980 to date been experiencing acute food shortages. Currently, it is the province with the highest number of food insecure people. The study recommends a bottom up approach, that is beyond ZimASSET, that addresses food shortages in Matabeleland South Province. The purpose of this study is to develop an Implementation Model to address food shortages in the Matabeleland South Province of Zimbabwe. The study employed the Grounded Theory approach utilizing a purely qualitative design. Purposive sampling of 200 stakeholders, that is expert and typical case sampling was the primary method of research. As the study was unfolding, a theoretical sampling was later employed. A confirmatory retrospective document review of food security documents from the Zimbabwe Vulnerability Assessment Committee and the Famine Early Warning systems Network was done. The Entitlement Theory by Sen Amartya, and the Systems Theory by Von Bertalanffy were utilised as the theoretical point of departure for the study. The study utilised Key Informant Interviews, Focus Group Discussion and Document Analysis to mine data. Data was analysed using the thematic approach. Major findings and results showed a disjuncture and dissonance within the Provincial Food and Nutrition Security Task Force approaches used to address the food insecurity situation in the province of Matabeleland South. The findings showed that, there is an implementation gap in need to be filled, and all stakeholders must apply a bottom up approach in addressing the problem of food shortages. The developed Implementation Model was validated by the stakeholders who participated in the data collection phase and endorsed the bottom up approach, which as intended, conveyed the community's views. The Food Security Implementation Model is forwarding the community development aspirations to a new level that leaves footprints on the development terrain with a pragmatist component of coming up with home grown solutions to the problem of food insecurity.

Key Words: Implementation Model, Vulnerability, Entitlement, Food insecurity, Matabeleland

Contents

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
ABBREVIATIONS/ACRONYMS	v
ABSTRACT	viii
CHAPTER ONE	8
1.0 INTRODUCTION	8
1.1 BACKGROUND TO THE RESEARCH PROBLEM	10
1.2. STATEMENT OF THE RESEARCH PROBLEM	14
1.3. RESEARCH OBJECTIVES	18
1.4. RESEARCH QUESTIONS	18
1.5. SIGNIFICANCE OF THE STUDY	19
1.6. OPERATIONALIZATION OF KEY CONCEPTS	20
1.6.1 FOOD SECURITY	20
1.6.2 FOOD INSECURITY	24
1.6.3 FOOD AVAILABILITY	26
1.6.4 FOOD ACCESSIBILITY	27
1.6.5 FOOD UTILIZATION	29
1.6.6 FOOD STABILITY	30
1.6.7 FOOD VULNERABILITY	30
1.6.8. RESILIENCE	33
1.6.9. FOOD SOVEREIGNTY	33
TABLE 1.1: CHRONOLOGY OF THE EMERGENCE OF THE FOOD SOVEREIGNTY FRAMEWORK	35
1.7 FOUNDATION OF THE STUDY	37
1.8 META-THEORETICAL GROUNDING THEORY	37
1.9 ASSUMPTIONS	38
1.10 DELIMITATIONS	39
1.11 LIMITATIONS	39
1.12 THEORETICAL MODEL	39
1.12.1 SEN ARMARTYA’S ENTITLEMENT THEORY	40
1.12.2 THE SYSTEMS THEORY	43
1.12.3 MAJOR CHARACTERISTICS OF THE ENTITLEMENT THEORY AND SYSTEMS THEORY	47
TABLE 1.2: MAJOR CHARACTERISTICS OF THE ENTITLEMENT THEORY AND SYSTEMS THEORY	47
1.12.4 THE SYNERGISTIC RELATIONSHIP BETWEEN ENTITLEMENT THEORY AND SYSTEMS THEORY	48

<i>TABLE 1.3: THEORIES USED BY THE STUDY AND CORRESPONDING RESEARCH OBJECTIVES.....</i>	49
1.12.5. CONCLUSION	49
1.13 CHAPTER SUMMARY	50
CHAPTER TWO	51
2.0 LITERATURE REVIEW	51
2.1 INTRODUCTION.....	51
2.2 APPLICATION OF LITERATURE IN THE STUDY	51
<i>FIGURE 2.1 USE OF LITERATURE REVIEW IN THIS STUDY.....</i>	53
2.3 THE CONCEPT OF FOOD SECURITY.....	53
2.4 CAUSES OF FOOD INSECURITY	55
2.4.1. NATURAL DISASTERS.....	56
2.4.6 UNDERDEVELOPED STATE OF AGRICULTURE	64
2.4.7 POVERTY	64
<i>FIGURE 2.2 CYCLIC RELATIONSHIP BETWEEN FOOD INSECURITY AND POVERTY</i>	65
2.4.8. SUSTAINABLE RURAL LIVELIHOODS.....	66
2.5 FOOD SECURITY IN THE WORLD.....	68
2.5.1 THE ROLE OF THE INTERNATIONAL COMMUNITY IN FOOD SECURITY	70
2.6 THE MYTH OF FOOD SECURITY: A WORLDWIDE PERSPECTIVE	71
2.7. MODELS FROM OTHER COUNTRIES.....	74
2.8 LAND OWNERSHIP IN COLONIAL ZIMBABWE.....	76
2.9THE FAST TRACK LAND REFORM PROGRAMME (FTLRP) AND FOOD (IN) SECURITY IN ZIMBABWE	78
2.10. THE LAND REFORM EXERCISE AND ITS IMPLICATION ON FOOD SECURITY	84
2.11. AGRICULTURAL RESEARCH AND FOOD SECURITY IN ZIMBABWE	86
2.12 GOVERNMENT EFFORTS TO ADDRESS FOOD INSECURITY	92
2.12.1 FOOD IMPLEMENTATION MODELS IN ZIMBABWE.....	93
2.12.2 FOOD SECURITY POLICY	95
2.12.3 AGRICULTURAL SCHEMES ADOPTED BY THE GoZ TO BOOST FOOD PRODUCTION (2000- 2011)	96
2.12.4 ERRORS IN THE IMPLEMENTATION MODEL STRATEGY FORMULATION	99
<i>TABLE 2.2: FOOD SECURITY INTERVENTION STRATEGY ADOPTED BY ZIMBABWE.....</i>	103
2.13. THE BLUE PRINT MODEL IN DEVELOPMENT PLANNING	104
2.14 ZIMBABWE’S ECONOMIC BLUE PRINTS SINCE 1980	113
<i>TABLE 2.3: ECONOMIC POLICIES TIMELINE (1980-2018).....</i>	113
2.14.1 GROWTH WITH EQUITY POLICY	114
2.14.2. TRANSITIONAL NATIONAL DEVELOPMENT PLAN (TNDP) 1982-1990	116

<i>TABLE 2.4: SELECTED ECONOMIC INDICATORS DURING TNDP</i>	117
2.14.3. THE FIRST FIVE YEAR NATIONAL DEVELOPMENT PLAN (FFYNDP) 1986-1990.....	117
<i>TABLE 2.5: ECONOMIC DEVELOPMENT FOR THE FIRST DECADE (1980-1990)</i>	119
2.14.4. ECONOMIC STRUCTURAL ADJUSTMENT PROGRAMS (ESAPs)	119
2.14.5 MODEL FOR ECONOMIC REFORM.....	121
2.14.6. ZIMBABWE PROGRAMME FOR ECONOMIC AND SOCIAL TRANSFORMATION (ZIMPREST)	122
2.14.7. MILLENNIUM ECONOMIC RECOVERY PROGRAM (MERP).....	124
2.14.8. THE TEN POINT PLAN.....	124
2.14.9. NATIONAL ECONOMIC REVIVAL PROGRAM (NERP)	125
2.14.10 THE MACRO ECONOMIC POLICY MODEL (2005-2006).....	127
2.14.11. NATIONAL ECONOMIC DEVELOPMENT PRIORITY PROGRAM (NEDPP) AND THE ZIMBABWE ECONOMIC DEVELOPMENT STRATEGY	129
2.14.12. SHORT TERM EMERGENCY RECOVERY PROGRAM (STERP)-2009.....	129
2.14.13 MEDIUM TERM PLAN (MTP).....	130
2.14.14 ZIMASSET	131
2.15. RURAL POVERTY AND A WEAK AFRICAN PEASANTRY: THE LEGACY OF DISCRIMINATION POLICIES IN SOUTH AFRICA	148
2.16. INDIGENOUS KNOWLEDGE AND FOOD SECURITY	149
2.17. FOOD SECURITY IN A NUTSHELL.....	151
2.17 SCHOLARLY DEBATE ON FOOD SECURITY IMPLEMENTATION MODELS.....	153
2.17.1 GAPS IDENTIFIED IN LITERATURE REVIEW	161
2.17.2 CHAPTER SUMMARY	162
CHAPTER THREE	163
3.0 RESEARCH METHODOLOGY.....	163
3.1 INTRODUCTION.....	163
3.2 RESEARCH DESIGN	163
3.3. STUDY AREA	164
3.4. ETHICAL CONSIDERATIONS.....	165
3.4.1. INFORMED CONSENT.....	167
3.4.2. PROTECTION OF THE VULNERABLE PARTICIPANTS.....	167
3.4.3. BENEFICENCE	167
3.4.4. JUSTICE	168
3.4.5. THE RIGHT TO FAIR TREATMENT.....	168
3.4.6. THE RIGHT TO PRIVACY.....	168
3.4.7. CONFIDENTIALITY.....	168
3.5 GROUNDED THEORY APPROACH.....	169

3.6. QUALITATIVE APPROACH.....	170
3.6.1 POPULATION AND SAMPLING.....	171
3.6.2 QUALITATIVE DATA COLLECTION	173
3.7 DATA ANALYSIS	179
3.7.1 QUALITATIVE DATA ANALYSIS	179
3.7.2 TRUSTWORTHINESS.....	181
3.8 CHAPTER SUMMARY.....	185
CHAPTER FOUR	187
4.0 INTRODUCTION	187
4.1 PRESENTATION OF RESEARCH FINDINGS.....	187
4.2 GENERAL TRENDS OF FOOD (IN) SECURITY ACROSS DISTRICTS IN MATABELELAND SOUTH PROVINCE	188
4.2.1 MATOPO DISTRICT.....	189
4.2.2 BEITBRIDGE DISTRICT	192
4.2.3 MANGWE DISTRICT.....	194
4.2.4 INSIZA DISTRICT.....	196
4.3 EFFECTS OF FOOD INSECURITY ON HOUSEHOLDS IN MATABELELAND SOUTH.....	198
4.3.1 LOSS OF LIVES	198
4.3.2 MALNUTRITION	199
4.3.3 ILLICIT BEHAVIOUR AND IMMORALITY.....	200
4.3.4 DESTRUCTION OF THE SOCIAL FABRIC.....	200
4.4 GENDER DIMENSIONS ON FOOD (IN) SECURITY IN MATABELELAND SOUTH.....	201
4.5 CHALLENGES TO FOOD SECURITY IN MATABELELAND SOUTH	202
4.5.1 UNAVAILABILITY OF CATTLE OR DRAUGHT POWER.....	203
4.5.2 LACK OF ADEQUATE RAINFALL	204
4.5.3 FLOODING	204
4.5.4 INFERTILE SOILS/ LACK OF PRIME LAND	205
4.5.5 WILD ANIMALS AND BIRDS DESTRUCTION.....	206
4.5.6 UNDER RESOURCING AND LACK OF POLITICAL WILL.....	207
4.5.7 DEPENDENCY SYNDROME.....	208
4.5.8 IGNORANCE	209
4.5.9 LACK OF PROPER MONITORING AND EVALUATION.....	209
4.5.10 TOP DOWN APPROACHES TO COMMUNITY DEVELOPMENT.....	210
4.5.11 ABSENCE OF DIVERSIFICATION	211
4.5.12 CORRUPTION	212
4.5.13 LACK OF PROPER MARKETING STRUCTURES OR PLATFORMS	213
4.5.14 TRANSPORT AND COMMUNICATION CHALLENGE.....	213

4.5.15 CHALLENGE OF THE CASH ECONOMY.....	214
4.5.16 UNAVAILABILITY OF FOOD RESERVES IN THE LOCAL COMMUNITY OR VICINITY.....	214
4.5.17 PERSONAL AMBITIONS VERSUS PUBLIC INTERESTS.....	215
4.5.18 UNDER UTILIZATION OF LAND AND WATER RESOURCES.....	216
4.5.19 GOVERNMENT STRINGENT CONTROLS.....	217
4.5.20 CONCEPTIONS AND UNDERSTANDING OF GOVERNMENT POLICIES.....	217
4.5.21 RELATIONS AMONGST LOCAL PEOPLE	218
4.5.22 RELATIONS BETWEEN LOCAL LEADERSHIP AND GENERAL PEOPLE.....	219
4.6 COPING STRATEGIES TO ARREST FOOD INSECURITY AT HOUSEHOLD LEVEL.....	220
4.6.1 REMITTANCES FROM DIASPORA	220
4.6.2 COMMUNAL ASSISTANCE	221
4.6.3 MARKET GARDENING	222
4.6.4 CASUAL LABOUR.....	223
4.6.5 ARTISANAL MINING/ GOLD PANNING	224
4.6.6 ANIMAL REARING	224
4.6.7 CONSERVATION FARMING	225
4.6.8 TECHNICAL SKILLS	226
4.7 GOVERNMENT AND OTHER DEVELOPMENT AGENCIES FOOD SECURITY INTERVENTIONS OR SUPPORT	227
4.7.1 PROMOTION OF ADAPTIVE CROP VARIETIES	227
4.7.2 RESEARCH	228
4.7.3 FOOD SECURITY ASSESSMENTS.....	229
4.7.4 AGRICULTURAL INPUTS	230
4.7.5 FOOD HANDOUTS.....	230
4.7.6 IRRIGATION DEVELOPMENT	231
4.7.7 DEVELOPMENT COMMITTEES.....	232
4.8 PROSPECTS OF A MORE SUSTAINABLE FOOD SECURITY MODEL AS ENVISIONED BY THE MATABELELAND SOUTH COMMUNITY	233
4.8.1 NON POLITICIZATION OF AGRICULTURAL PROGRAMMES AND TIMELINESS IN INPUTS DISTRIBUTION	233
4.8.2 STAMPING OUT CORRUPTION	234
4.8.3 PROPER COORDINATION OF FOOD SECURITY PROGRAMMES.....	235
4.8.4 WATER RESOURCE DEVELOPMENT AND AFFORDABILITY.....	236
4.8.5. LAND ALLOCATION.....	237
4.8.6 AGRICULTURAL DIVERSIFICATION.....	238
4.8.7 CONSERVATION FARMING	239
4.8.8 SKILLS DEVELOPMENT THROUGH VOCATIONAL TRAINING	239
4.8.9 FINANCING OF FARMERS AGRICULTURAL ACTIVITIES.....	240

4.8.10 INSTITUTIONAL CAPACITATION OF LOCAL SCHOOLS.....	241
4.8.11 PROMOTION OF HOME GROWN SOLUTIONS TO FOOD SECURITY	241
4.8.12 REVIVAL OF COMMUNITY DEVELOPMENT STRUCTURES	242
4.8.13. DEALING WITH THE BIRDS SCARE.....	244
4.8.14 CREATION OF MARKET LINKAGES	245
4.8.15 EXPLOITATION OF AVAILABLE RESOURCES	245
4.8.16 PROMOTION AND DEVELOPMENT OF WATER HARVESTING TECHNOLOGY.....	246
4.8.17 PREVENTION OF VANDALISM AND STEALING.....	247
4.9 SUMMARY ON INTERVIEWS DATA ANALYSIS	248
CHAPTER FIVE	249
5. 1 DOCUMENT ANALYSIS.....	249
5.2 FOOD SECURITY STATUS - HISTORICAL AND CURRENT TRENDS.....	249
5.2.1 CROP AND ANIMAL PRODUCTION OUTLOOK ACROSS DISTRICTS	249
5.2.2 DIVERGENT VIEWS ON SUFFICIENCY LEVELS.....	250
5.2.3 DIVERGENT VIEWS ON AVAILABILITY	251
5.2.4 ACCESSIBILITY.....	251
5.2.5 EFFECTS OF FOOD INSECURITY	252
5.2.5.1 MALNUTRITION	252
5.2.5.2 DEATH OF LIVESTOCK	252
5.2.5.3 EMERGENCY OF UNFAIR PRICING REGIMES	253
5.2.6 GENDER DIMENSIONS TO THE FOOD SECURITY SITUATION IN MATABELELAND SOUTH	254
5.2.7 CHALLENGES TO FOOD SECURITY IN MATABELELAND SOUTH PROVINCE.....	255
5.2.7.1 LACK OF DRAUGHT POWER	255
5.2.8.4 NON-AGRICULTURAL SKILLS UTILIZATION	260
5.2.8.5 EMPLOYMENT IN THE AGRO PASTORAL ZONE ACROSS BORDERS AND DIASPORA REMITTANCES	260
5.2.8.6 AGRICULTURAL DIVERSIFICATION.....	260
5.3.1 INTERVIEWS AND FOCUS GROUP DISCUSSIONS VERSUS DOCUMENT ANALYSIS - POINTS OF CONCURRENCE AND DIFFERENCE	265
5.3.2 CONCLUSION	267
CHAPTER SIX.....	268
6.2 IMPLEMENTATION PROCEDURES.....	269
FIGURE 6.1 PROPOSED FOOD SECURITY IMPLEMENTATION MODEL FOR MATABELELAND SOUTH PROVINCE	269
6.2.1 THE PROPOSED FOOD SECURITY IMPLEMENTATION MODEL FOR MATABELELAND SOUTH PROVINCE IN A NUTSHELL	270
6.2.2 FORMATION OF COMMITTEES.....	276
6.2.3 IDENTIFICATION OF SKILLS GAP	277

6.2.4 IMPLEMENTATION STAGE OF THE DEVELOPMENT OF A MODEL.....	278
CHAPTER SEVEN	282
SUMMARY, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS	282
7.1 INTRODUCTION.....	282
7.2 SUMMARY	283
7.2.1 FLOW OF THE STUDY.....	285
7.2.2 PROCESS OF DEVELOPING THE FOOD SECURITY MODEL FOR MATABELELAND SOUTH PROVINCE	286
7.3 CONCLUSION.....	286
7.4 LIMITATIONS OF THE STUDY.....	288
7.5 RECOMMENDATIONS	288
7.5.1 BODY OF KNOWLEDGE.....	289
7.5.2 POLICY	289
7.5.3 COMMUNITY DEVELOPMENT	290
7.5.4 SPECIFIC POINTS OF ACTION SUMMARIZED	291
7.6 CHAPTER SUMMARY	292
7.7 CONCLUDING REMARKS	293

CHAPTER ONE

1.0 INTRODUCTION

“I have no special talent. I am only passionately curious.” (Albert Einstein 1952)

Grappling with hunger and food insecurity remains a pressing priority of immense significance throughout global communities, particularly in the developing countries. Zimbabwe, as part of the developing countries although once regarded as the major food producer of Southern Africa, is not an exception to recurrent and periodic hunger and food insecurity due to natural factors like failure of rainfall, and man-made factors like lack of budgetary commitment for provision of sufficient agricultural inputs. The discourse on food (in) security issues emerged in a parallel modus with the meaning of food security itself being a shifting target often signaled by new unfolding food (in) security pressure. A few years ago, the sudden rise in prices of food, the excrescent shortage of inputs such as water and land, uncoordinated implementation of economic blue prints coupled with lack of political will and the sprouting of new food-associated catastrophes such as fatness, need a thorough and comprehensive re-examination of the strategies to achieve food security. In view of the above background, the present research has developed an Implementation Model that fully addresses food shortages in line with the prospects of the Zimbabwe Agenda for Sustainable Socioeconomic Transformation (ZimASSET), which has promotion of sustainable food security and nutrition as one of its pillars in Matabeleland South of Zimbabwe. However, it should be acknowledged that, the life span of the ZimAsset blue print expires in September 2018, but the implementation model derived from this specific study will be generally replicated on future blue prints to address food security in Zimbabwe and Matabeleland South in particular.

The United Nations Food and Agricultural Organisation (FAO, 2012) indicates that in 2010, the assessment of the state of food insecurity was pathetic approximately 1 billion people were not food secure, this number translates into almost 20% of the combined population of developing countries. Although tremendous efforts have been made by international institutions and development agencies to cut in half the figures of undernourishment within the year 2015, the efforts were far from satisfactory as hunger and food insecurity continue to permeate a bigger part of the humankind.

Food security and food insecurity are elusive terms, they have one picture that denotes and derives complex meanings across various platforms in the development field. Several indices

keeping on track the advancement in eradicating famine, as well as data giving aims for nationwide and global political exploit help understanding the issue (Ed. Clay, 2002). Nevertheless, not even one of these variables is adequate to address all issues of food (in) security. The failure to have a frequently acknowledged, detailed gauge to measure food security at global level was singled out among others as the chief impediment on the way on how to arrest malnutrition and starvation (Heidhues & Braun 2004). However, food availability, access, utilization and stability were identified as common themes to appreciate the subject matter.

The estimated quantity of food produced in the world is 2,720 kilo calories per day (FAO, 2003). This amount of food is adequate to feed everyone around the world. Even though the FAO recommended a minimum of 2,250 kilo calories per day (*i.e.* less than the estimated daily production), food insecurity remains stubbornly high and therefore a topical global issue (FAO, 2006). A clear example of this situation is Zimbabwe, particularly the Matabeleland South Province, where acute food shortage has nested. Matabeleland South Province was chosen as the study area due the increasing number of people who are food insecure. This is supported by WFP (2017) , which asserts that, 61% of the people in Matabeleland South province rely on government social protection fund and food aid.

In the year 2003, the FAO estimated that there were eight hundred and forty two million people undernourished worldwide (viewed by FAO 2003b saying that it is a state of acute food shortage). Seven hundred and ninety eight million out of the eight hundred and forty two million in the developing countries, ten million in the developed countries and thirty four million in those countries that are going through the transition phase. Sadly, the quantity of undernourished population Southern Africa is rising tremendously, from one hundred and sixty nine million in the year 1992 to two hundred and six million in the year 2003. This resulted in a remarkable 18% increase of undernourishment. Unexpectedly, the FAO (2006) estimated that by the year 2015, the region would be food sufficient since there was an estimated decrease in the number of people who are food insecure in the developing world (in comparison to 21% in the year 1992).

The most vulnerable population to experience food insecurity and hunger are those living in rural areas, those displaced by conflicts, those who earn their living from farming, and also where rainfall is very erratic such that production of crops becomes a major problem (FAO, 2003; 2006). The major problem areas comprise the Southern, Eastern and Central parts of

the African region, *i.e.* nations such as Ethiopia, Zimbabwe, Burundi and Malawi (FAO, 2006). The on-going and unceasing nature of the food insecurity in Southern Africa contrasts with the aims World Food Summit commitment held in 1996, revisited in the year 2002 to decrease worldwide hunger by fifty percent by 2015 (FAO, 2006). The unfriendly trend of hunger and food insecurity calls for raft measures to arrest the situation. This state of affairs needs collaborative effort from all food security players. Communities should come up with a home-grown solution to food (in) security supported by locally available resources. It is rather prudent to look at the crisis of food shortages not homogeneously but in the context of a particular province. In Zimbabwe, the major objective is to reduce the number of people who are food shortages by 700, 000 yearly (Dlamini 2003). This was argued by WFP (2017) when it posits that, government of Zimbabwe's main objective was no-longer based on reducing significant numbers of people who are food insecure but rather to deliver zero hunger by 2030. One of the methods for attaining the aim is the proper implementation of the food security implementation models. Nevertheless, there is still a pending multi-million-dollar question on how this implementation of the blue print can be done. The aim of this thesis is to respond to this pertinent question. The present work proposes an implementation model that seeks to bring Matabeleland South Province to its former glory of food security.

1.1 BACKGROUND TO THE RESEARCH PROBLEM

The Universal Declaration of Human Rights (UDHR) clearly spells out, the right to adequate food. In most countries across the world, agriculture has become the pillar of various economies where human life is hinged on. In Zimbabwe, the majority of the populace regard agriculture as the major in communal areas and accounts for between 15 and 20% of the gross domestic product (FAO 2006, World Food Program 2006). Agriculture has a lion share in foreign exchange though it has declined significantly from 40% in 2000 to 20% in 2006. The drastic fall was as a result of severe dry spells, shortage of vital inputs, and erratic rains the cropping period of 2005 to 2006, overwhelming effects of the unparalleled decade-long economic failure (FAO, 2007).

Zimbabwe Vulnerability Assessment Committee (Zim VAC) (2015) indicated that Zimbabwe experienced several crop failures in 1987, 1992, 2002 and 2005 to 2015. This was due to mainly drought caused by erratic rainfall on the specified years. Zim VAC (2017) posits that, the others reasons for crop in Zimbabwe are mainly poor farming methods, pests and

diseases. The Food and Agriculture Organisation (2007) further espoused that, the crop failures had been a result of the rains which terminate early or scarce rains in the country. This was a pathetic situation culminating in human suffrage in both rural and urban areas putting the country in an intensive care with regards to food security. In 2002 Zimbabwe had a major deficit in its manufacture since 1980, which ended in a humanitarian disaster and famine. Zimbabwe Vulnerability Assessment Committee (2004) posits that, the cereal deficit from March 2002 to April 2003 marketing year was approximate at 1.65 million tonnes. The Zimbabwe Emergency Food Security Assessment (2002), resonates that 486 000 tons of food aid was needed to meet food security requirements of 6 700 000 people, which translates into 49% of the population over the period stretching from September 2002 to April 2003. Based on the statistics from the above sources, it can be justified that, food insecurity around the globe should be called a melting pot which should be addressed immediately before the situation goes out of hand. World Food Program (2002), points out that, of the 6.7 million requiring food assistance, 5,9 consisted of the rural folk and eight hundred thousand in towns.

The major causes of food insecurity and vulnerability in Zimbabwe were also closely linked to policy implementation. Mandaza (2014) postulates that policy making was inconsistent, a resurrection of dreaded colonial version, it lacked implementation, it was a new wine in old bottle, and it was characterised by what he explained as put into practice first, formulate and adopt later. Mandaza (2014) further elaborated that policies were context specific; a true melange of desperate components drawn from everywhere yet amounts to nowhere, generally enforced and implemented on the basis of political sloganeering. The above picture indicates that policy making was highly unpredictable, disjointed, peace-meal, exclusive, temperamental, short range in focus and top down. Mudimu (1991) argued that although the parliamentary portfolio committee on agriculture was developed to scrutinize the functions, policy development and implementation by the Ministry, it had very limited influence outside parliament to manipulate and institute policy changes. The dismal performance in policy implementation by the agricultural sector and other stakeholders, has led to an economic and social meltdown and acute food shortages in communal areas of Zimbabwe, especially in Matabeleland South Province. This resulted in the haphazard implementation of food agriculture policies which later resulted yielding no results (FAO, 2016). This in turn plunged Zimbabwe into the food insecurity trap. Hence this study borrows lessons from the previous experiences so that, it cannot be repeated in the current food security implementation model propounded by the study.

The lack or scarcity of water resources and irrigation development as well as improper, insufficient and unsustainable food security interventions have been found a major impediment exacerbating to household food (in) security through abridged agricultural manufacture in Zimbabwe. Manzungu (2003) points out that, food shortages has been caused by a multiple of factors, among the main ones is the deficiency of water to produce crops and animal husbandry in several places in Zimbabwe. Manzungu (2003) further asserts that, water scarcity in Matabeleland Province and an inadequate implementing strategy have been identified and regarded as the most militating factors to agricultural production. Soil type and climatic conditions are the major determinants of agricultural production in any region. Agriculture is the mother sector that contributes significantly to the welfare of people, and thus water is an important input to food production in Zimbabwe. The land in Zimbabwe is divided into five distinct natural regions based on temperature, rainfall pattern and topography. Thus, Zimbabwe is classified into natural region one, two, three, four and five. Matabeleland South Province falls under region five. Regions four and five are characterized by continuous dry spells and the areas are very dry for dependable crop cultivation. It is imperative for communities in these areas to come together in the problem identification process and solution because without a proper implementation model of the ZimASSET blue print efforts will be uncoordinated and rendered unproductive. This simultaneously fails to address the problem of food insecurity in these regions.

The Food and Agriculture Organization (2007) has it that, farmers in rural areas occupy 50% of the area in region four, and in natural region five only 46% of the area is occupied. To address this problem of aridity, the Government of Zimbabwe tried to adopt the economic blue prints such as the the Growth with Equity, Economic Structural Adjustment Programme, Fast Track Land Reform Programme just to mention but only a few, so that food insecurity is addressed through effective policy implementation and this study focused on the period during the implementation of the ZimASSET programme. AGRITEX (2015), argues that, the area under irrigation in Zimbabwe is estimated at 120 000 hectares for both large scale and smallholder farms of which two per cent is out-grower schemes and 9% is smallholder irrigation schemes. Still, irrigation played a very integral position in the success of smallholder agriculture in Zimbabwe and other parts of Southern Africa. ZimVAC (2018) further argues that, in Matabeleland South Province, government and donor support was the

major source of social assistance reaching out to 61% of the households and the church being the least with a coverage of 2%.

In Zimbabwe, indications are that large-scale irrigation projects cropped up due to commercialization of agriculture whilst the smallholder irrigation projects were largely put in place to provide food security in the drought prone areas. Food and Agriculture Organization (2007) has the view that, the other reason for the establishment of the irrigation projects was to settle people who had been displaced from the commercial farms around the 1940's. Another way of ameliorating agricultural production that is both commercial and subsistence farming is through irrigation farming. The sporadic irrigation schemes in Zimbabwe on a large scale, for instance the Mushandike and the Mukwasine Irrigation scheme in Masvingo. The regions that are dominated by irrigation schemes in Zimbabwe are regions four and five. The Agricultural Rural Development Authority (ARDA) has partnered with TREK Petroleum to resuscitate Ingwizi small irrigation scheme, which falls under region five in Matabeleland South province, but the partnership was an unsustainable alliance due to unclear implementation model. For the third time, the partnership is continuously becoming a failure. Food and Agriculture Organization (2007) argues that, large-scale irrigation schemes moderately are more gainful and have socio-economic merits than small scale ones.

The statistics released in 2015 by Brunapeg Hospital in its outpatient department, show that out of five infant deaths two are related to malnutrition. Sachikonye (2001), posits that, Matabeleland South Province has a total population of 152 880 people and 50% of this population is food insecure and the other 50% is food secure but get the food from the local shops and Botswana. The World Bank, (2003) indicates that, irrigated agriculture provides about ten per cent of Matabeleland South's food production from 5% of the province's cultivated land.

Chenje, *et al.* (1998), claims that, the major purpose of irrigation schemes was to make sure that crop cultivation is carried out throughout the year to improve food surplus in the country and simultaneously alleviate poverty. Nevertheless, the government's major thrust on the development of these small scale-irrigation schemes was to decentralize irrigation schemes to empower the rural folk. Despite these efforts, ZimASSET implementation model remains at the epicentre of trying to address food shortages in Matabeleland South Province. The gains of the blue print are not yet fully materialized because the government and non-state actors

are still dishing out food to food insecure people, an indication of unsustainable way of meeting food requirements for households. To add up to the precarious situation of the region, the average rainfall of the area is between 450mm to 600mm per year. Therefore, it is against this background that the research has identified an Implementation Model to address acute food shortages in Matabeleland South Province.

1.2. STATEMENT OF THE RESEARCH PROBLEM

The crisis of chronic food shortages in Zimbabwe is most dominant in semi-arid regions of Zimbabwe where food production levels are alarmingly very low due to both natural and man-made factors. The people from Matabeleland South Province experience poor living standards, low incomes, poor housing, poor health and poor nutrition, (Dlamini 2003). This is caused by very little and unreliable rainfall. Chazovachii, (2012) posits that, annual rainfall is less than 500 mm per year in this region. In this area, rain fed agriculture plummets almost every year. This acute shortage of adequate rainfall, subjects the general population to severe hunger and starvation. Food and Agriculture Organization (2006), posits that, out of the ten provinces in Zimbabwe, Matabeleland South Province is the hardest hit in as far as food (in) security is concerned. In the year 2012, it is argued that, 68% of the rural Zimbabwean households were suffering from acute food shortages, compared to 32% in towns and cities (Monde 2003). Critically examining the sentiments by these two authors, it shows that their views are in agreement on the worsening food (in) security status in the semi-arid Provinces of Zimbabwe, being Matabeleland South one of them. Moreover, the level national, clearly describes the challenge due to increasing import dependency. Zimbabwe has been getting increasingly shouldering on food imports (Moyo, 2000). To withstand the ever increasing need for provisions, the state has the obligation to bring in cereals from other countries. Zimbabwe Vulnerability Assessment Committee (2012), found that approximately between 1992 and 2012, the production of cereal per capita increased by almost 10%, whereas the imports from commercial sector increased sharply by 300%. The sharp rise in the importation of cereal from other countries as propounded by the two authors leaves a lot to be desired in relation to food insecurity in semi-arid areas.

The price of basic goods, mealie-meal in particular, rice and cooking oil are hiked almost every month. Of late, the President announced that the year 2016 is a drought year, hence

appealed to development actors to help the government to secure food for the people. Of all the ten provinces, Matabeleland South was the hardest hit. The prices are not yet stable due to erratic supply of the commodities in Matabeleland South Province. Food and Nutrition Bulletin (2014) resonates that, based on data from the Scientific and Industrial Research and Development (SIRDC), and the Zimbabwe Statistical Agency abstracts 2014, the prices of rice and maize were estimated to have been arisen higher than the poverty datum line by 22% and 30% in 1992 and 2012 correspondingly. In brief, the price rise was generally more as compared to that of profits. These sky rocketing prices for staple foods places the rural folk and other low-income earners in urban areas at a great disadvantage. This is because they are not able to bring to the table basic food needed for family survival.

It is at family level, where the joint ripple effects of inadequate local food production and rising food prices have arrested the capacity by many people to access sufficient food. This is substantiated by a big proportion and number of malnourished persons in the province of Matabeleland South of Zimbabwe. In like manner, despite the quantity of the underfed population declined by 10% between the 1991-1993, 2002-2004 and 2012-14 periods, it still remained relatively exorbitant since 30% of the population suffered undernourishment within the same period (this translates into 4.2 million people).

Of late, the continuous price rise in the world and persistent food shortages from the year 2000 to date has had adverse effects on food security at household level in Zimbabwe. The year 2008, in August almost 4.2m persons in a nation were in demand of food from other partners (USAID, 2009). Simultaneously, the price rises rate on food related commodities reached 1200%, the maximum rate hike among all products. The problem was an increase on the whole food shortages to an estimated 80% of the population (ZimStat, 2008).

A Food shortages crisis cascades to local levels arresting the potential to do agriculture and graduates into a calamity in rural areas. This is characterized with low purchasing power and agricultural productivity, because livelihoods are anchored on vast herding and crop cultivation. (Inter-government Panel on Climate Change, 2007). Related study in the phenomena was confined to the examination of the extent and causes of the problem. In other words, food (in) security is connected to deteriorating productivity in agriculture (Nyangito *et al.*, 2004). Mbogoh (2000) points out that, drought as an ordinary cause is the major phenomena, and inappropriate policy sums up to the issue. This is supported by Kimenyi

(2002) when he argues that, this is also reflected in institutional failures and economic problems. It can be however deduced that, the major contributors to food insecurity are a decline in agricultural production and crafting of blind policies that are weak in addressing the current food shortages.

The major threat to food security in Zimbabwe has always been aridity. Government of Zimbabwe report of 2009, 10% of the entire nation's total land has enough and dependable rainfall, topography suitable for crop production and soil, Matabeleland South Province is not included in this group. An extra 5% can maintain crops in years of enough rainfall while the outstanding (85%) comprises of the Semi-Arid and Arid Lands. By 2012, it was obvious that dryness in Zimbabwe was deteriorating, minimizing the cultivable land with unenthusiastic impacts on food security (FAO, 2016). In the past decade, Zimbabwe's rural areas have experienced growing chances of failing to reap associated to recognized shift in the levels and patterns of rainfall.

Macro-economic policies that were regarded as inappropriate on agricultural productivity also considerably affected productivity in agriculture in Zimbabwe including the Economic Structural Adjustment Programme (ESAP) of the 1990s (Zimbabwe Emergency Food Security Assessment (2002)). The changes attributed to ESAP were connected with a speedy withdrawal of the state from providing essential services, like marketing and credit (Kimenyi, 2002). In the late seventies and till the 80s, funding for development was intended for "provision of basic needs" and "integrated development" through the introduction of the "structural adjustment". Raftopoulos and Sachikonye (2001:8) cemented that SAPS, "mortgages the economy to foreigners and leaves the nation economically powerless and without control over its future". Consequently, the liberalization of the economy led institutional incapacitation especially providing different services that are agriculture related. The challenge was exasperated by sudden decrease of financing from government. Nyangito *et al.*, (2004) adds that, the better effects of the alteration, such as increased allocation of inputs in agriculture through the private sector, were weak and productivity on small-scale farm was compromised.

From that period, different involvement strategies were increased to viaduct the gap in service provision. Taking into consideration that stop gate measures exist, and the phenomenon and probable solutions are incorporated in policy and documents for research are enclosed in policy and research documents, the ever increasing amount of food shortages

in the nation indicates that the ways of achieving these aims are inconsistent. As Nyong'o (2007) resonates that, the problem of Africa does in being ignorant on what should be done; issues were listed and discussed in thousands if not millions of speeches, workshops, peer reviewed journals and seminars, but the problem is on knowing where, how and when to do it. On the issue of "how to do it", Nyong'o (2007: 23) further explains: "we Africans have abdicated our thinking and resulted being led by the development partners and charities from the West". The soil makes a seed to germinate, the "how" associated with the past actions was crafted by paradigms that are driven by donors, which are the root causes of underdevelopment in Zimbabwe.

Nevertheless, their designs were donor driven leading to the emergency of foreign aid which, according to Hewitt *et al.* (1992), is a psychological condition behind food shortages and poverty. Aid has conditionality attached to it, which has to be honoured in the near future with the intention of keeping developing countries a begging bowl. Petifor (2002) espoused that Malawi was indebted; its economic policies were determined by creditors, the IMF forced Malawi to sell its grain in favour of foreign exchange before famine struck, \$47 million in aid were withheld because it was off donors' rails. Transnational corporations have wreaked havoc in developing countries, no wonder why Hancock (1999) regarded them as 'lords of poverty'. Aid has led to the current state of debt crises in developing nations because they failed to meet conditions attached, (Allock 1999). The impact, nature and effectiveness of aid in Matabeleland South Province in alleviating hunger remains a mystery, donor aid has created a dependency syndrome and hunger continues to permeate all parts of the province.

The 21st century passed, with 'poverty decrease strategy papers', which failed to register any important outcomes, created the means for the "millennium development goals" that stretched from two thousand and five to two thousand and fifteen, which covers the 1996 World Summit plan of minimizing starvation by 50% (FAO, 2003a). Ellis and Biggs (2001), the development was not that even. In exercise, involvement strategies extend beyond in both time and space. The overlap of strategies is catalysed by not having a central harmonization of strategies. The outcome was a mixture of strategies and repetition of actions with slight (if any) advantage to the locals (Mulwa, 2004). Millennium Development Goals Report (2015:6), postulates that, "the proportion of undernourished people in the developing regions has fallen by almost half since 1990, from 23.3% in 1990-1992 to 12.9% in 2014 to 2015."

Non-governmental funding in Zimbabwe has been restraint, since 1990 (Vining and Boardman, 2000; Nyangito *et al.*, 2004) and there was force for expression of involvement impacts (Pratt *et al.*, 2000). The involvement of Non-governmental organizations led to the dependency syndrome by the local people and unfortunately they were not able to meet their daily food requirements since they could not invest productive efforts in food security related programmes. The research noted that too often, agricultural policies that were useful in one region of the country at one specific time, turned into a panacea for all regions of the country for all times. Above all, it can be further maintained that, the problem of food insecurity in Matabeleland South Province has reached alarming levels and if not arrested immediately food insecurity related deaths might be recorded. The current literature, has identified the problem and it is bridging this gap in knowledge by developing and designing a sustainable intervention, which is specific to Matabeleland South Province and guarantees food security for several years to come.

1.3. RESEARCH OBJECTIVES

The study seeks to address the following objectives:

- i. To explore food (in) security within the context of the Zimbabwe Agenda for Sustainable Socio Economic Transformation (ZimASSET) blue print in Matabeleland South Province.
- ii. To assess how food security implementation models have worked globally, regionally, nationally and locally to address food insecurity.
- iii. To develop a specific food security implementation model that addresses food shortages in Matabeleland South Province.
- iv. To validate the food security implementation model for Matabeleland South Province with experts and stakeholders.

1.4. RESEARCH QUESTIONS

- i. What are the current trends and realities of food (in) security in Matabeleland South Province?

- ii. How have food security implementation models worked in other countries to address food insecurity?
- iii. Which food security implementation model can be developed to address food (in)security in Matabeleland South Province?
- iv. What processes are involved in validating a food security implementation model?

1.5. SIGNIFICANCE OF THE STUDY

The Zimbabwean Government and other agencies of development have been trying to attain food security at both family and national level through strategies to improve productivity on communal and resettled farmers. The government of Zimbabwe in October 2013 rolled out a blue print, Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimASSET). One of the blue print's clusters is anchored on food security and nutrition.

Rukuni and Eicker (1994), postulate that Zimbabwe's economy is based on agriculture of which 70% of its people living in rural areas and highly dependent on agriculture. The study contributed on influencing policy through lessons learned that is maximum participation through bottom approaches to policy making, community development through the active involvement of communities affected by the problem of food shortages and scholarship by contributing to the current body of knowledge in food security and community development. Various factors leading food security at household were discussed and suggestions were made for better and more sustainable strategies and measures to come up with the best food security implementation model that addressed family food insecurity in the dry areas of Zimbabwe, particularly in Matabeleland South Province. This study helped to identify gaps in communal areas, and came up with reasons to explain why people in Matabeleland South are food insecure. The study developed a specific implementation model to address food shortages in the province bearing in mind that when approaching the predicament of food shortages, communities should not be treated or regarded as homogeneous as each community or case presents itself with its own unique set of challenges to food security, hence the need for more specific solutions.

As part of fulfillment of the call by ZimASSET to promote food security and nutrition, the model that was developed by this study helped in coming up with activities to improve food security in Matabeleland South Province. Taylor (2002) reveals that, “One cannot inevitably rely on data mined in one country to replicate practice in another.” However, the model developed by the study can be used as a template to influence policy making at highest decision-making level to address food shortages at local level.

It is evident that food security models are regarded as having more benefits which include; crop diversification, better incomes, crop diversification, employment opportunities and good nutrition to locality, and above all, farmers can be able to attain household food security. However, it is prudent to note that, this approach to thrive it needs combined strategies from other players to ensure accessible, combined and successful food security improvement services. Therefore, this study aimed at providing empirical evidence and direction to this quest to improve food security. The study created a pool for relevant local logical information and a new consciousness of food security. It is premised that this new consciousness realigned food insecurity and meets the mandates of stakeholders in government and agricultural sector.

The model also guides food security practice in Zimbabwe with regards to what exactly is expected from food security players in those settings in terms of food security programmes formulation and implementation. The research is also an eye opener for food security study in Zimbabwe and tried level best to create consciousness to investigators about truths of food security study. In the future, it is premised that, there shall be a strong connection between policy formulation, research and implementation. It is substantiated by findings and results the Zimbabwean government can also tape on the best way to implement the food security implementation models to improve food security in Matabeleland South Province and Zimbabwe at large. The lessons learned from the implementation of the ZimASSET can be used in the implementation of future macro-economic blue prints.

1.6. OPERATIONALIZATION OF KEY CONCEPTS

1.6.1 FOOD SECURITY

The term ‘food security’ is complex and attracts various definitions from various scholars, hence the reason why it is regarded as multifaceted, making reference to time and

geographical context to which it is inserted. The Hot Springs Conference of Food and Agriculture (1943) described it as denoting safe, enough and appropriate supply of food for everybody. This definition has been assimilated for the purpose of this study. Maxwell (1996) posits that the entire concept has emerged, multiplied, developed and diversified. The World Food Summit in November 1996 defines the existence of 'food security' when every person every time, have economic, physical and social access to sufficient, nutritious and safe food which addresses their nutritional requirements and food choices for healthy and active being.

According to the United Nations (1995), availability entails enough world food provisions of essential produce at all times to maintain a stable expansion of food assumption and to counterbalance changes in production prices. The Green Revolution of early 1980 started to usher its expectations and the amount of food creation did not increase. Nevertheless, the predicament of food shortage did not disappear, and it was at this juncture that it was discovered that the major reason was not really of food supply but the ability to purchase a commodity by different classes in the social system. Hence the meaning of 'food security' took into consideration both economic and physical aspects of food availability with a focus on alienating scarcity and advancing the role women play in the development discourse.

The meaning of food security was broadened further by the advent of Sen's book *Poverty and famines* in 1981. Sen's book propounded, the hungry are frequently deprived of food access instead of anguish because food is not available and by doing so birthed the concept of food entitlement. Sen (1981) posits that undernourishment can be best described as, the feature of the population not having food to eat; it is not the attribute of there being not adequate food to eat.

The idea was to make a paradigm shift on the concept of 'food security' out of the fundamental farming also place it in a wider situation of shortage and inadequate development. This culminated in the Food and Agriculture Organization adding the component of access to price stability and production.

FAO (1983) pronounces that, "the final objective of World Food Security must be to guarantee that all people at all times have both physical and economic access to the basic food they need". 'Food security' should have three specific aims, which are i) guaranteeing enough food supplies, ii) increasing stability in the supply flow process, and iii) accessibility to available supplies on the part of those who need them.

However, it is highly debatable that, even though access is a social factor in ‘food security’, it is insufficient alone and should be accompanied by stability. More so, ‘food insecurity’ could be distinguished in two types; that is, also transitory or chronic. The latter indicating a condition where food lack has been an everlasting attribute, and the former representing a impermanent scarcity. Chronic ‘food insecurity’ can be best described as when the problem of food shortfall increases, and to ascertain ‘food security’ that phenomenon must be dealt with and uprooted, leading to the concept of access to everybody at every time to adequate food for a lively health life.

An additional aspect in the food security definition of emphasizes on the actual type and quality of food supplied. Further to that, it is essential to note; it must not only meet protein energy requirements, but should give in a protracted way the dietary balance needed for an active and health life. Additionally, this was the acknowledgment of choices, socially acceptable food types and traditional habits when bearing in mind the definition of ‘food security’. The World Food Summit (1996:17) defines ‘food security’ as, "access to safe, nutritious and sufficient food which meets dietary requirements and food choices for healthy and active life”.

The idea of ‘food security’ has been explained on a number of occasions by the global community and it has changed meanings over a period of time. One of the major digressions has been the migration from the first thought in which food security was viewed as corresponding to the dependable availability of food, towards the modern concept in which food is one of the multifaceted social contexts that defines livelihoods. Some definitions of “food security” by different authors and institutions will be given as follows.

Carr (2006) posits that, the public background and the relative sense of balance of power that prevails amongst various concern groups are key determining variables of the ‘food security’ situation. The conclusion that has evolved from the international debate is: ‘food security’ prevails when all people, every time, have physical and economic access to safe, nutritious and safe food that meets their dietetic requirements and food choices for health and active life (Carr, 2006). ‘Food security’ in simple terms means food availability and being able to access it. The FAO (2017) views food security as when the occupants of a household do not suffer from hunger or fear of malnourishment. Idachaba (2006) says ‘food security’ prevails when every person, every time, have physical, economic and social access to adequate, nutritious and safe food to address their nutritional requirements and food choices for a health and

active life. 'Food security' for a family consequently means that, access by all members every time to enough food for healthy and active life. USAID (2017) asserts that, 'food security' encompasses a lowest of the prepared available nutritional safe and adequate foods and an guaranteed capability to obtain satisfactory foods in communally satisfactory conduct that is without resorting to crisis food scavenging, supplies, other cropping strategies or stealing.

According to the WB Policy Study (2006), 'food security' is viewed as the access by every person every time to adequate food for a vigorous health life. Furthermore, the Economic Commission for Africa (2009) postulates that 'food security' encompasses not only availability of food through trade and storage, but more significantly, food access achieved through production at home. It has been declared, for a nation to have self-sufficient food supplies and food security must maintain with increases in populace and urbanization (FAO, 2010). In like manner, the Economic Commission for Africa addressing agriculture and population growth is vital to achieving food security. Singer (2008) resonates that other people and organizations have come to this same analysis in population control and agriculture.

Having looked at all the definitions of 'food security' as propounded by different authorities, this study will adopt the definition by Idachaba (2006) which says that 'food security' prevails when every person, every time, have economic, physical and social access to nutritious, and safe food to meet their dietary requirements and food choices for a health and active life. This definition is wholesome and includes every component that fulfils the term 'food security'.

USAID (2011) suggests a number of key strides to rising agricultural productivity, which is imperative to improving rural proceeds and plummeting food shortages. They incorporate the need to boost technology and agricultural science. Existing agricultural outputs are inadequate to provide for the increasing populations. Suddenly, efficiency derives in economic augmentation. Other components are: access to finance, enhancing human capital through education, securing property rights and, improving health, agreed mechanisms and conflict prevention, good governance and democracy based on principles of answerability and lucidity in public institutions, and observing the rule of law. All these are fundamental aspects to dropping the number of vulnerable members of society.

The United Nations Sustainable Development Goals advocates for the initiatives intended at attaining 'food security' around the globe. The Sustainable Development Goals states and

advocates for an end to hunger, the achievement of 'food security' and enhanced nutrition, and support of sustainable agriculture. The aim to eradicate hunger, attain food security and enhanced nutrition, and encourage sustainable agriculture, depends on agricultural productivity entirely. Enhancement on 'food security' approaches by people and families is not a short term event, it requires enough period and income to be allocated towards bettering financial circumstances through either savings in better means of production, promote education, or other quality of life process which can better the communities.

The other macroeconomic variables must be recognized when handling issues of food security. It is necessary to do justice to the advent of new liberal policies that are capitalist in nature that were forced through the Washington concession, that includes raft measures, structural adjustment programmes, and weight on expanding trade which is export-oriented at the disadvantage of rural development and small-scale producers. International Money Lending Institutions such as the World Bank, and more that pressurized and encouraged countries in Africa as a whole, and Zimbabwe in specific, into reducing subsidies by government for seed improvement, fertilizer and other input as condition to benefit from aid. This is a true manifestation of sabotaging the economy and insincerity on the part of those institutions whose philosophy is rooted neo-liberal fundamentals that are purporting to be supporting administration involvement in their economies. This happens concurrently with the period of advising other nations, particularly African Countries and Zimbabwe in particular, to stop giving subsidies in all essential necessities agricultural production inclusive. Basing on the implementation of new-liberal policies, Zimbabwe is a major importer of food at the present moment. However, while shifting blame to neo-liberal institutions on forcing countries such as Zimbabwe to embrace these policies, the major blame should also go to Zimbabwean politicians for embracing exogenous policies that are unfavourable to their own fiscal policies because of corruption and greediness.

1.6.2 FOOD INSECURITY

'Food Security' is a complex concept that presents a gallery of definitions. Contemporary scholars conflate food production, distribution and consumption as denoting 'food security'. This concept must not be confused with 'food insecurity', therefore maintaining such divisions are appropriate. FAO (2010) delineates the above concepts as two sides of the same coin arguing that 'food security' is the availability of food, while hunger and famine are the consequences of food shortages.

The FAO (2016: 33) defined 'food insecurity' as, "a situation that exists when people lack secure access to sufficient amounts of safe and nutritious food for normal growth and development, and an active and healthy life." 'Food insecurity' can be better described as a condition of lack in diversity of choice in relation to food required for the normal growth of people in a given community over a long period of time. The poor are always vulnerable and face many uncertainties. Ellis (1998) sees 'food security' as a deliberate strategy to constantly enhancing or maintaining the production, distribution and consumption of food and not as an involuntary response to a crisis. WFP (2016) resonates that, variables that may result to a condition of shortages include: lack of access, improper utilization, non-availability of food, and instability for a period of time. The above-mentioned issues are major determinants typical in Matabeleland South Province of Zimbabwe according to the Zimbabwe Vulnerability Assessment Committee report of 2015.

The World Food Summit affirmed the struggle against 'food shortages' as one of its major objectives: "This Plan of Action envisages an on-going effort to eradicate hunger in all countries, with an immediate view to reducing the number of undernourished people to half their present level no later than 2015, and a mid-term review to ascertain whether it is possible to achieve this target by 2010" (WFP 2009: 170). The action plan ended up being a pie in the sky because fighting 'food security' requires people participation, rather than being generated by policy makers. It has been the tendency that policy makers seek to improve the affected communities' lives on the basis of their own knowledge and resources but without the involvement of the community itself instead, food deficit and malnutrition levels reached precarious levels, a sign of a pre-reflective set of overlapping interest within stakeholders. Mudimu (1991) elaborated and stated, some strategies and donor programmes are excitedly implemented by government officials because they benefited financially since those who participated received allowances.

'Food insecurity' continues to erode Matabeleland South Province from inside out consistently. It is the research's contention that the best insurance is voluntary, practical and beneficial participation by the poorest so that they can cope, recover and stabilized from the shocks of food insecurity.

1.6.3 FOOD AVAILABILITY

Humankind and other living creatures depend on food availability. WFP (2009:170) defines 'food availability' as, "the amount of food that is present in a country or area through all forms of domestic production, imports, food stocks and food aid." The above scholar's observation on 'food insecurity' is not sufficient and wholesome because food is always available, communities have guaranteed sustenance, and food is always available at macro and micro levels in sufficient quantities irrespective of their geographical origin. What is however unavailable, is the capital to tap the available food in one's backyard to keep hunger away from family bays. Riely *et al.* (1995), reveal that, the expression is usually associated with food that is available at a national or regional and not confined to household level. Sachs (1992: 56) has succinctly asserted that, "modern economy invented the idea of an ever-present universal scarcity as the founding myth of modern society". As deduced from the above definition, Thomson *et al.* (2000), resonate that 'food availability' is the adequate amount of food of a suitable quality and nature in all parts of the country, regardless of its source (imports, food aid or local production).

FAO (2018) espoused that 'food availability' can be best described as, the extent to which food is within reach of households (for example in local shops and markets), both in terms of sufficient quantity and quality. 'Food availability' is now a shifting target, now better defined as qualitative improvement, which is closely associated with nutrition in a way drawing a boundary line between those living and existing. According to Sachs (1992; 110), "people who want to live do not want to reach down to the level of survival". Nutritious food is available in right quantities for those living, but for those surviving, food available is sometimes not available. In other words, good quality food can be available in the shops but at the same time this food can be so expensive that not everyone can get it. Therefore, "food availability" was, is and will remain a myth as long as government treats communal farmers or rural dwellers in Matabeleland South Province as a homogeneous group, failing to appreciate the sole scientific and socioeconomic needs of people with various resources endowment.

Agricultural subsidies, policies on exchange rate on international trade and policies creating attractive and stable conditions are other policies directly affecting 'food availability'. (World Bank, 2017). Zimbabwe in general, and Matabeleland South Province in particular, 'food unavailability' was visible after the Fast Track Land Reform Program. In other words, one might argue that, the land reform policy did not give impetus to potential investors in

agriculture. Moyo (2002) asserted that political expediency overrides farming objectives for Land Reform in Matabeleland South Province; specifically, some commercial white farms invasions were ignited by revenge motives sprouting from historical events in the armed struggle. Marombwe (2002) and Sachikonye (2003) chronicled that in BulillimaMangwe District, some natives occupied a white man's farm on the basis of it being used as a shooting range by Rhodesian soldiers where locals were terrorized, shot, butchered and buried in the farm during the liberation war. 'Food security' and consequently 'food availability' are constructed in our heads and forged in our deeds, thus delimiting the definition in Matabeleland South Province is problematic. The truth never seems obvious until it is known; 'food security' in its broadest meaning is the liberation of human mind and potential.

Critical writers like Makunike (2000) posit that there was a lack of tenure after the Land Reform amongst those who occupied farms, once tenure misunderstood; it led to mismanagement of land. Chingarande (2011) further propounded that men got a lion share of land compared to women, the majority of whom lack primary tenure because they accessed land through their male relatives. This undoubtedly leads to the feminisation of poverty and to 'food insecurity'; where poverty and women reflect two sides of the same coin. Participation must go beyond slogans to rather something that is both practical and beneficial to women in Matabeleland South Province. The farming creative capacity of women is not utilised to its fullest because of disparities in access and ownership to farming inputs such as technology, pesticides, land and credit (World Bank 2016; Deere and Doss 2006). It is a peculiar triumph of society when it is able to convince the relevant characters to enhance the food security of individuals, such as women, who have received inferior status and therefore suffered from food issues in Matabeleland South Province.

1.6.4 FOOD ACCESSIBILITY

There is common lack of consensus among the scholars in accepting 'accessibility' as a major component of 'food security' regardless of Sen Amartya's initial sentiments on the idea in the early 1980s. The World Food Program defines 'food access' as, "A household's ability to find adequate amount of food regularly through a combination of purchases, barter, borrowings, food assistance or gifts" (WFP, 2018: 173). The World Food Summit (1996) argued that 'access' involves having physical, economic and social access to food. For the purpose of this study 'food access' can be best described as having capabilities, assets and activities required to guarantee food at one's household. 'Food access' has a tripartite dimension: it revolves around economic/financial, sociocultural and physical aspects.

Physically, food can be produced in abundance in one place, whilst people starve in another part due to an inefficient or non-existent transport infrastructure. This is the case experienced in Matabeleland South Province of Zimbabwe.

OXFAM, (2017: 12) argues that, “Even in rural areas, most people, and especially the poor, rely on market systems to provide food and essential goods and services but also for selling their produce.” ‘Food insecurity’ took a different position assimilating economic connotations as the difference between limited means and unlimited end. Food is accessible to those with a healthy financial muscle. In Matabeleland South Province, keen dependency among households is a prevalent source of income, though not a reliable. Remittances from their kin in neighbouring Botswana and South Africa are not sustainable because they rarely remit, wives usually borrow money to chase their husbands behind, and most of whom remitted inconsistently, Mutoko (2011).

Carney (1998: 28) espoused that, “cultural practises may affect how people manage and chose their livelihoods”. For example, it is a cultural prescription for the vaMwenye people in Mberengwa, Midlands Province and Maranda in Masvingo Province of Zimbabwe that they do not eat their staple food (sadza) made from maize meal but eat the one made from millet meal. Provisions may be actually abundant and the possible end user has the capacity to purchase the food but it is prohibited on the basis of belonging to a particular gender or social group (WFP 2016). Culturally, lack of diversification triggered ‘food insecurity’, Eicher and Rukuni (1994) postulate that taking cereal such as maize grain as the main source of ‘food security’ is problematic in that people who do not consume it are left vulnerable. Besides, Mudimu (1991) elaborated that culture has such effect that even where sorghum, millet and tubers are produced, they perform a meagre role as normal sources of household food security. This leaves such people vulnerable to ‘food insecurity’ because of sociocultural beliefs.

Broca, (2002) asserts that ‘food accessibility’ is access by every person to the possessions needed to acquire the food required for a nutritionally sufficient diet. These possessions are not only confined to monetary possessions, but as well access rights to the possessions needed to make food or to get it from others. In a nutshell ‘accessibility’ refers to both economic and physical access. There may be adequate ‘food availability’ but this does not guarantee adequate supply at the household level. Food may be available at national and

international level, whilst some households may not be able to afford it (no economic access) or they may not be able to physically get the food due to inadequate infrastructure, for instance bad roads (no physical access).

1.6.5 FOOD UTILIZATION

The World Food Summit (1996) defines ‘food utilization’ as, nutritious and safe food, which meets people’s nutritional requirements. By merely looking at ‘food availability’ and ‘accessibility’, we are not viewing the whole picture; people should also be allowed to safe and nutritious food. For people to carry out their daily physical activities they need to get this nutritious food. As noted by the Food and Agriculture Organization (2017), ‘utilization’ further incorporates such variables as enough sanitary facilities and safe drinking to stop the spread of diseases let alone alertness of food storage and preparation procedures.

‘Utilization’ hence is multifaceted since it covers a wide range of aspects including elements such as the consumer’s understanding on the selection of food, and how to prepare and store food. Still, it should not be mistaken to assume that traditional communities know the best way to use food resources. It should be observed that, habits of diet such as weaning and breast feeding change drastically across cultures.

FAO (2017) argues that, when food consumed by consumers is not inhibited by hygiene or health predicaments (medical services, sanitation and safe drinking water), it entails and promotes better utilization. It is imperative to note that, for an individual to be in a food secure zone, all the said factors should be taken on board. ‘Utilization’ is generally understood as the way the body uses various nutrients in the food. ‘Food utilization’ can be a consequence of good quality food handling and food preparation, feeding practices, variety of the diet and intra-family distribution of food. It should be coupled with good biological utilization of food consumed; this determines the nutritional status of individuals. ‘Utilization’ at household level can sometimes differ for various members of the same household. In the case of Zimbabwe, most rural households give preference to males when allocating food, for instance, males being given more meat than women. This would mean that males would have more protein intake though all members have enough to eat.

1.6.6 FOOD STABILITY

According to Broca (2002), ‘food stability’ refers to how the above dimensions of ‘food security’ can reliably occur over time. How stable is the availability, and the access or the utilization over different periods determines the issue of food stability. Even if your food intake is adequate today, you are still considered to be food insecure if you have inadequate access to food on a periodic basis, risking a deterioration of your nutritional status.

The World Food Summit (1996) posits that, ‘stability’ should be there every time in terms of ‘availability of food’, ‘utilization’ and ‘access’ to fulfil ‘food security’ in a nation. Nonetheless, the prevailing literature differentiates between ‘chronic food insecurity’ where requirements cannot be fulfilled over a long period of time and ‘transitory food insecurity’, where the time is not period is not permanent in nature (Maxwell and Frankenber, 1992).

The ‘food stability’ dimension embraces the idea of people being food secure is not static in nature but rather dynamic over a period of time. ‘Food stability’ is commonly referred to with an accompanying phrase: “all people, at all times.”(WFP,2016). It is in unison with the definition propounded by the World Food Summit (1996), whose major thrust was to attain countrywide food security’ aims. The aspect emphasized the significance to minimize the problem of unfavourable effects on the other three dimensions, *i.e.*, food utilization, access or availability. Therefore, for a household to be in a state of food security it should be guaranteed of access to food, availability of food and food utilization every time in a stable way.

1.6.7 FOOD VULNERABILITY

‘Vulnerability’ to food insecurity refers to many of the factors that place people at risk of becoming food-insecure (Huang, 1996). The level of vulnerability of communities, groups, individuals, households or groups of people is determined by their ability to cope or withstand stressful conditions without dove tailing into a situation of food insecurity or remaining in that state if they were already food insecure.

As propounded by FAO (2018), defines vulnerability as danger that the food security status the family is looked down upon by retrogressive shocks. Families commonly face manifold unhelpful shocks over a period, and every hazard may influence the universal well-being and food security standing of the domiciliary. By embracing specific livelihood approaches to

eradicate the said shocks, families can increase the well-being effect and minimize their 'vulnerability' to food insecurity. Approaches of livelihood however are a main variable of the extent of vulnerability of the family, and what source of revenue interventions are embraced will entirely rely on the family's possessions and its capacity to access insurance markets and credit.

There are three livelihood strategies namely: risk prevention, risk mitigation and risk coping. Heitzmann *et al.* (2002), postulates that, the risk prevention usually happens before the shock occurs. It is an intervention initiated by the family to minimize the likelihood of unforeseen circumstances. At individual or household stage these interventions may comprise of minimum risky migration, production, prevention of diseases or proper feeding (Holzmann & Jorgensen, 2000).

Hazard reduction approaches are also embraced earlier than the shock is experienced and contain the aim of minimizing the pessimistic benefit effect of potential phenomena (Heitzmann *et al.*, 2002). Once families become capable to reassure the common benefit effect of potential hazards, the penalties for utilization of food and nutrition will be also dealt with magnanimously. The above-mentioned arresting approaches could be done by a family. The initial strategy is range variation that lessens largely hazard disclosure to a particular hazard by investing possessions in non-profit and profit actions as of which the proceeds are not entirely interconnected (Holzmann & Jorgensen, 2000). Having manifold concurrent job creation is an instance of an approach to minimize returns instability.

Formal or informal insurance is the second mitigating strategy. Insurance heavily depends on the concept of sharing a risk. Recognized indemnity strategies are based on market and usually enjoy the merit of being capable to depend on a huge pond of unrelated obligors. Holzmann and Jorgensen, (2000), propose that, unofficial indemnity strategies that depend on societal platforms and sharing risks based on relationships sharing instead of official markets frequently profit from low information irregularity and minimized phenomena of ethical risk. Engagements at community level such as groups of memorial service cover and marriage are instances of unofficial indemnity strategies (Townsend, 1994; Udry 1999Ligon *et al.*, 2002; Fafchamps & Lund, 2003). It should be on record that indemnity strategies in countries that are developing however do not easily come to fruition. From the point of view of a policy, initiating the improvement of mechanisms that prevent shocks can be regarded as efficient.

Venturing into farming that is aided by irrigation, that minimizes the hazards of dry land cultivation, could for example be substitute to crafting agricultural indemnity strategies.

The alleviation plan number three is hedging; this is mainly characterized on the exchange of future hazards (Holzmann and Jorgensen, 2000). The advantages of hedging can be demonstrated as follows; at the start of each farming season the prices of sorghum are generally high especially in the Twice area and usually very minimal especially in Abyei region and the opposite for beef prices (Deng, 2012). Peasants can hence create price adjustments to calm down potential prices for beef and sorghum in the two areas (Deng, 2012).

The strategies of coping to risks depend heavily on family wealth, but the social networks also play a pivotal role. When the social network is huge, it has the capacity to deal with the risk in the event it happens (Woolcock & Narayan, 2000). Education however should be taken as another variable which should not be looked down upon as it is important in this context. It has got a bearing on individuals not being able to connect and cooperate with other people, which generally viewed as a social capital (OECD, 2017). There are a myriad of channels which can be used by households to extend social connection. In Bangladesh and India, deprived women for example create self-help clubs to support one another in the event of need. Food insecurity can be temporary or chronic in as far as vulnerability is considered (FAO, 2016). The hazard outline of a person or family relies on the channels used by the person to have food and on the adopted hazard approaches. The strategy chosen often relies on the structure, type of shock and the endowments of the family (Carter, 1997).

The strategies mentioned above present themselves with some negative implications especially on household assets, although it is imperative to contest vulnerability to food insecurity. A number of ex-ante source of revenue interventions are likely to decrease family revenue or riches when shocks are not available (Sachikonye, 2012). For instance, hazard avoidance and alleviation interventions may depress savings in modern technologies or decrease productivity in agriculture as a consequence of diversification (Carter, 1997). The consequences will have an effect on family wealth and as a result influence food security in the near; in the same line, low hazard endurance, regarded as an after plan employed to reduce the impact of a well-being defeat once it happens (Heitzmann *et al.*, 2002). Strategies of coping can include withdrawing savings, reducing a diversified diet, withdrawing children from school, migrating, selling assets, and seeking temporary employment (Heitzmann *et al.*,

2002). Women usually minimize their own expenditure after a hazard to leave extra food for the other family members (Quisumbing *et al.*, 2008).

1.6.8. RESILIENCE

In the framework of food security, ‘resilience’ can be viewed as the period required attaining or exceeding the pre-shock position of well being (Sachikonye, 2001). It is imperative at this juncture to emphasize the dissimilarity between vulnerability and resilience. ‘Vulnerability’ is the likelihood of a family achieving food security after probably a food price hike (WFP, 2017). ‘Resilience’ is the total amount of time wanted for the family unit to return to its food security position before the shock occurred (FAO, 2018). The two terms are closely related though they convey a different meaning. ‘Vulnerability’ can be simply perceived as, failing to cope with the effects of being food insecure while ‘resilience’ is the phase that is being undergone by different households trying to cope up with food shortages.

The approaches embraced by families to minimize the period required to get back to the level before the shock of living well can comprise of ex-post and ex-ante interventions (Alinovi *et al.*, 2008). In tradition, most of the interventions targeted at minimizing vulnerability that were explained in the last paragraph can be employed to augment flexibility. For example, by making sure that food making against severe effects of weather, a household concurrently reduces ex-ante vulnerability and heightens its flexibility, every time an adverse drought affects the produce, the reward from the insurer will enable the family to immediately recuperate from the destructive hazard. Changing of strategies is likelihood to guard from life-threatening circumstances like food shortages. In case of harvest destruction by shocks, the household can pay attention to previous monetary actions and (at least partly) recuperate the loss of food and income.

1.6.9. FOOD SOVEREIGNTY

It is as a very important option to the idea of ‘food security’, and is globally viewed as, “the right of local peoples to control their own food systems, including markets, ecological resources, food cultures, and production modes” (Schiavoni 2009: 687). The classical meaning of ‘food sovereignty’ was first decided in Tlaxcala, with the perception to advocate for the idea within the dictates of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) and at the FAO World Food Summit. In their position paper, ‘Food Sovereignty: A Future Generation without Hunger’, Via Campesina stated that:

“Food sovereignty is the right of each nation to maintain and develop its own capacity to produce its basic foods respecting cultural and productive diversity. We have the right to produce our own food in our own territory. Food sovereignty is a precondition to genuine food security.” (Via Campesina, 1996: 1)

Critically looking at the two definitions of ‘food sovereignty’, it can be deduced that, the two proponents tie the same knot on the issue of the local communities to control their own food systems but observing the cultural component. However, it should be clearly noted that, this study embraces the definition by Schiavon since it fits well with the objectives of the study.

Jonsen and Windfuhr (2005: 15) state: “While food security is more of a technical concept, and the right to food a legal one, food sovereignty is essentially a political concept.” Food sovereignty was initially viewed as a policy model and dialogue in 1996, mainly as a reply to embed agriculture weaved in the trading system of the world. Its conception is often associated with the international farming system which is self-styled and peasant migration Via Campesina, an organ formed in 1992 at the Congress of the National Union of Farmers and Livestock Owners (UNAG), and which facilitates individual groups from Europe, the Caribbean, Asia, North, Central and South America and Africa, (Windfuhr and Jonsen, 2005: 15).

In a series of publications from 1996 onwards there are some declarations and statements that have explained and refocused the food sovereignty framework.

The coalescing of a myriad of Non-Governmental Organizations and public organizations approximately an ordinary structure of food control can be best demonstrated by the creation of the International Planning Committee for Food Sovereignty (IPC) (International Planning Committee for Food Sovereignty, 2006). The modalities to have an IPC gathered momentum well before the World Food Summit of 2002, and have evolved as a point of convergence for this alliance, although it sees self like:

“a facilitation mechanism for diffusion of information on, and capacity building for, food sovereignty and food security issues. It is not a centralized structure and does not claim to represent its members and the wider movement. Instead, it is a regionally-based Network with constituency and thematic representation in its membership.” (International Planning Committee for Food Sovereignty, 2006)

Smith *et al.*, (1992) propound that, the IPC have indicated that, food independence addresses four components: i) mainstreaming of agro-ecological production, ii) access to productive resources, iii) food rights and iv) productive resource access. In tandem with the above-

mentioned components, the IPC seconds institutions like ‘concept central points’ for every pillar and as ‘district central points’ to stand for different communal interests (Smith et al, 1992). “The right to food” component be more worried with coming up with human rights strategy to make sure that, all the people in Matabeleland South Province are entitled to safe, nutritious and culturally acceptable food.

Smith *et al.*, (1992) argue that, the “access to productive resources” component concentrates on the promotion of access to water, land, natural and genetic possessions and with the allocation of remuneration which are obtained from their use. The present study takes this view with the weight that it deserves. The nation can be only food sovereign when the community has access to natural resources and land. Windfuhr, M. and Jonsen, J. (2005), assert that, the component concentrating on agricultural production frameworks advocate the “mainstreaming of agro-ecological production”, that is explained as follows; application of environmental fundamentals to the plan and organization of agro-ecological systems. Matabeleland South Province is a region, which has completely different rainfall patterns in comparison to other regions; hence a context specific type of intervention is needed. The last pillar of “trade and food”, seeks to improve policies which undertake the dangers of dumping food, low agricultural prices artificially, subsidized exports, and other elements that are negative of the model on agricultural trade (World Forum for Food Sovereignty, 2007). This can only be realized if the food security policies are crafted using the bottom approach, whereby affected communities take an active role in dealing with problems that they are facing.

Following is a table showing a sequence of the advent of the “food sovereignty” framework from 1996 to 2016:

TABLE 1.1: CHRONOLOGY OF THE EMERGENCE OF THE FOOD SOVEREIGNTY FRAMEWORK

Date	Declaration/Statement/Publication	Location /Authors
1996	'Food Sovereignty: A Future Without Hunger'	Via Campesina
1996	'Statement by the NGO Forum to the World Food Summit'	NGO Forum to the World Food Summit
2001	'Our World is Not For Sale. WTO: Shrink of Sink'	Our World is Not for Sale Network
2001	'Final Declaration of the World Forum on Food Sovereignty'	Havana, Cuba
2001	'Priority to Peoples' Food Sovereignty'	Via Campesina
2001	'Sale of the Century? Peoples Food Sovereignty. Part 1 – the Implications of Trade Negotiations'	Friends of the Earth International

2001	'Sale of the Century? Peoples Food Sovereignty. Part 2 – a New Multilateral Framework for Food and Agriculture'	Friends of the Earth International
2001	'Food Sovereignty in the Era of Trade Liberalisation: Are Multilateral Means Feasible?'	Steve Suppan, Institute for Agriculture and Trade Policy
2002	'Food Sovereignty: A Right for All. Political Statement of the NGO/CSO Forum for Food Sovereignty'	Rome, Italy
2002	'Statement on People's Food Sovereignty: Our World is Not for Sale.'	Cancun, Mexico
2002	'Sustaining Agricultural Biodiversity and the Integrity and Free Flow of Genetic Resources for Food and Agriculture'	ITDG/GRAIN/ETC Group
2003	'What is Food Sovereignty?'	Via Campesina
2003	'Towards Food Sovereignty: Constructing and Alternative to the WTO's AoA'	Geneva, Switzerland
2003	'Trade and People's Food Sovereignty'	Friends of the Earth
2003	'How TRIPS Threatens Biodiversity and Food Sovereignty'	Hyderabad, India
2003	'Statement on People's Food Sovereignty: Our World is Not for Sale.'	Cancun, Mexico
2005	'Food Sovereignty: Towards Democracy in Localised Food Systems	Michael Windfuhr and Jennie Jonsen, FIAN International
2006	'Agrarian Reform and Food Sovereignty: Alternative Model for the Rural World'	Peter Rosset, Univ California at Berkeley / Global Alternatives
2016	Food Sovereignty and the role of the state	Bolivia

(Adapted from Windfuhr and Jonson, 2005: 47-48) and (Andrea, 2016)

The prevailing literature on the concept of 'food sovereignty' is increasingly pollinating on a world wide scale, more specifically in popular publications from continents such as Asia and Latin America. Present documents of 'food sovereignty' interventions stay difficult to conglomerate, because it is "based in the experience and knowledge of community groups, small farmers organizations, and those working directly with them" (Ishii-Eiteman 2009: 691). This critical analysis however tries to harmonise understanding around 'food sovereignty' as an emerging discipline. Kassam (2009) further asserts that, 'food sovereignty' should not be viewed as an well-known concept/paradigm but instead as a possible original model emanating from a different set of modern popular invention practices and political strategies. This consolidation of information cantering on the possible of food sovereignty is imperative because its practitioners and proponents, both in practice and theory, confront conservative policy and wisdom on how to best "feed the world and cool the planet", and highlight the significance of acknowledging communities of practitioners and aboriginal information in this plan (CLOC-La Via Campesina 2010).

1.7 FOUNDATION OF THE STUDY

The study employed an investigative approach basing on a constructivist grounded theory philosophy. The research was carried out in a natural set up where communities were used as laboratories. The study used exploratory design to investigate food (in) security within the context of the Zimbabwe Agenda for Sustainable Socioeconomic Transformation blue print in Matabeleland South Province. The study used grounded theory approach when the researcher and the participants co-created reality from the data collected. The aim of the study was to develop an implementation model that addresses acute food shortages in Matabeleland South Province, Zimbabwe. Use of the approach and design was proposed to sufficiently provide an answer to the research question in tandem with the investigator's ontological and epistemological influence, which was showed continuously up until the end of the thesis. The qualitative research was centred on and generated an idiographic truth obtained from the respondents' contexts and experiences in the revitalization of food security in Zimbabwe.

1.8 META-THEORETICAL GROUNDING THEORY

In this particular research, the study's thrust was on theoretical approach grounded on constructivism in accordance with the Kathy Charmaz philosophy. Charmaz's thoughts were to deviate from the traditional-grounded theory approach because of its positivistic connotation. Charmaz (cited in Denzin & Lincoln 2005:509) argues for "building on the pragmatist underpinning in grounded theory and developing it as a social constructionist method". This implies that Charmaz projected at the period that the constructivist grounded theory concentrated on truths within the study process, and the standpoint of the investigator in that process. This would mean that, both the participants and the researcher should co-construct a reality so that they are able to define and understand it. Kathy Charmaz's deprecation on this opinion was put more vividly when she wrote: "Categories arise through our interpretations of data rather than emanating from them or from our methodological practices [...] thus, our theoretical analysis is interpretive renderings of reality, not objective reporting of it." (Charmaz cited in Denzin & Lincoln 2005: 510).

During the process of operationalizing constructivism, Charmaz (cited in Denzin & Lincoln 2005: 521-525) propounded five guidelines to guide the investigator:

- i. Familiarise with the current settings and proceedings occurring within it as well as with the research respondents.
- ii. Deliberate mainly on processes and meanings.
- iii. Engage in a very close study of achievement.
- iv. Find out and document the social background where it occurs.
- v. Pay special concentration to verbal communication.

Charmaz's proclamation is backed by Crotty (1998: 58), Charmaz's (2014: 14) view explains that, "constructivists are disciples of a subjective epistemology, in other words, the researcher and the participant co-create an experience and its meaning." In regards to the constructivists' approach, renowned investigators such as Guba and Lincoln (cited in Denzin & Lincoln 1994: 107), Crotty (1998: 58) and Gardner, McCutcheon and Fedoruk (2012: 67) resonate that, significance is appreciated, done and co-created in the researcher's interface with the collected data. The present study specifically used social constructivism. The major aim of social constructivism is to unpack the various ways in which persons and groups contribute in the construction of their apparent reality.

The basis for constructivism is that, a constructivist has faith in, experientially based, multiple and socially crafted truths. Ideas are generated or made-up from data. What constructivists establish is what they create. Charmaz (2014: 13) and Sandelowski and Barroso (2003: 797) propounds that for constructivists, all that was discovered by humans is a creation. The investigator hence employs the social construction of the understandings of people and stakeholders. In this research the respondents were asked questions and played a substantial position in coming up with the Food Security Implementation model in a bid to socially creates a given truth.

1.9 ASSUMPTIONS

- i. The study assumes that there is uniformity on rainfall patterns and soil throughout the whole Province of Matabeleland South.
- ii. It is assumed that acute food shortages in the province of Matabeleland South of Zimbabwe are caused by lack of a community driven food security implementation model.

- iii. The study assumes that, there is a weak relationship between the government and development actors in coming up with food (in) security intervention strategies.

1.10 DELIMITATIONS

The research was confined to Matabeleland South Province only and this gave the researcher ample time to administer data mining instruments to the respondents. Moreover, the researcher resides in Bulawayo Metropolitan Province hence the researcher made frequent visits to the respondents, as it is only 124km to Gwanda, the provincial capital of Matabeleland South Province. The research is anchored on Sen's Entitlement Theory and the Systems Theory; these theories perfectly fit into the research study thrust as they complement each other.

1.11 LIMITATIONS

The majority of respondents in Matabeleland South Province were unable to draw a boundary line between government policies and ruling party ZANU PF business. The Zimbabwe Agenda for Sustainable Socio Economic Transformation economic blue print, a pivot of this research, was viewed by some people as a ZANU PF document yet it is a government policy. Given such misconceptions, the majority of key participants alienated themselves from this research for fear of being victimised; besides, academic research seemed to be foreign amongst the population. Nevertheless, the researcher engaged traditional leadership, district administrators, and held several meetings with the stakeholders in order to demystify the misconceptions surrounding academic research; the researcher's suspicious intention in the mind of the respondents was cleared. The researcher later carried on with the study and recruited some previously hidden key respondents, and extracted the relevant and vital information for the investigation.

1.12 THEORETICAL MODEL

This research is hinged on Sen's Entitlement Theory and the Systems Theory. The two theories complement each other and perfectly address the researchers study thrust. Food security is a human entitlement, which can be achieved through ensuring stable and sustainable availability, accessibility and utilization of food. This is the major thrust of Sen's Entitlement Theory when it views entitlements as a set of commodity bundles that can be converted to address food security in a household. Systems comprising both human beings

and other necessary resources and structures, should be developed since they feed into each other to promote synergies for sustainable food security in a given community. The Entitlement Theory looks at how communities can become food secure specifically looking at food access, while the Systems Theory looks at the how part. That is how communities can become food secure. A combination of the two theories helps the study to answer all the research questions as they play a complementary role. This research took into consideration this vital need to develop a Food Security Implementation Model for Matabeleland South Province and this will go a long way in ameliorating food shortages in the province.

1.12.1 SEN ARMARTYA’S ENTITLEMENT THEORY

Sen’s Entitlement Theory is one of the theories underpinning and influencing this study; the basis of this Theory came from the analysis of famines. Entitlements have been defined by Sen (1984: 497) as “the set of alternative commodity bundles that a person can command in a society using the totality of rights and opportunities that he or she faces”. This would involve everything that a person has that can bring food on the table; it could be in form of food or non-food material. Sen (1981: 166) resolves famines and poverty with this well-known scrutiny: “The law stands between food availability and food entitlement.” In Zimbabwe, there are different statutes that are used by the government to regulate the importation of food from neighbouring countries such as South Africa and Botswana. Of late, the government of Zimbabwe introduced Statutory Instrument 64 of 2016, which prohibits the importation of foodstuffs from outside the country. When the President of the Republic of Zimbabwe, declared food (in) security as a national disaster, only selected licensed business were allowed to source food from other countries.

However, individual people were prohibited to source food on their own. This is a clear indication, as resonated by Sen, that the law stands as a barrier between food availability and food entitlement; *i.e.*, the law acts as a barrier which restricts people from getting food from the shops, farms, and neighbors only to mention a few. If people try to get food from those who have without their consent it might be regarded as a serious crime. In other words, it may mean that even though food is available, it might not be easy to access because of either exorbitant prices or inaccessible roads leading to hunger and starvation of the general populace. Edkins (1996: 550) propounds that, in “Sen’s model, people destitute by famine are not entitled to food; instead they are entitled to starve”. Matabeleland South Province is well known of erratic rainfall, which leads to poor field harvests that in turn lead to severe food

shortages. Severe food shortages are a major problem and people starve almost every year. The individual's right set is the whole variety of services and goods that she or he can obtain by changing her or his endowments that is, possessions and income, as well as effort power. It can be argued that, though the people of Matabeleland are able to sell assets (their labour and other endowments), this cannot be regarded as a panacea to the question of food (in) security in the Province. Hence, the Province should embark on a coordinated implementation Food (in) Security Model that ensures that food will be brought to the table for the people in the Province.

This model further asserts that, in the event of hunger, people can sell their belongings to get money so that they can support their families. These families however, can actually work and in return they can be given money that can be used to buy food, hence bringing food security in the family. In the context of poverty and famine, the Entitlement Approach aims comprehensively to describe all legal sources of food. Sen (1981: 2) reduces these sources to four categories: "production-based entitlement, trade-based entitlement, own labour entitlement and inheritance and transfer entitlement." The production based entitlement focuses on growing food for example using irrigation schemes. The trade based entitlement looks at buying food from irrigated farm produce. The own labour-based entitlement deliberates on working for food in these irrigation schemes and in return people are rewarded. The inheritance and transfer entitlement looks at food given by others when irrigated produce reach fruition and the ones who are in dire need for food can also benefit. It connotes that, the family can also benefit from the deceased's property to get out of the food insecurity bag. Persons encounter hunger when their complete right set does not give them sufficient food for survival.

People are in dire need of food, yet the government of Zimbabwe is implementing its economic blue print: Zimbabwe Agenda for Sustainable Socio Economic Transformation (ZimASSET) with its first cluster on improving food security and nutrition. There are signals indicating that there is little or no trade, no employment, no exchange of labour since production is at stand still and food crisis goes up.

Domesticating the Entitlement Theory to food (in) security in Matabeleland South Province is a reality because when food (in) security has nested in a village or area, entitlement exchange decline drastically. Normally when people are in abject poverty, the power to negotiate

becomes less, just as an English proverb says: “beggars cannot be choosers.” This will lead to a sudden fall in both wages; livestock prices and food prices start to skyrocket. However, the sudden fall of all the said variables might be a result of an uncoordinated Food (in) Security Implementation Model. When the Implementation Model is executed holistically, it would mean that, markets for different products would be known by almost everyone. This makes the entitlements to fetch a better price instead of selling livestock at a very low price. For Sen, it is ordinary and his followers to do away with antagonists of the Entitlement Approach as “misleading”, “misinterpreting”, or even “misrepresenting” Sen’s intentions.

Sen (1981: 162) resonates that the Entitlement strategy is expressive rather than hypothetical, and empiricist rather than normative, “a general model for analysing famines rather than one particular hypothesis about their causation”. It is very imperative to borrow the contents of this theory because it helps to define a phenomenon rather than prescribing it. When a phenomenon is clearly understood, it is very easy to come up with an intervention strategy. In this instance, it helps the Province to come up with an informed type of an Implementation Model, which addresses food (in) security in the Province of Matabeleland South.

Amartya Sen has given both a universal logical model for investigating all famines (the Entitlement Approach) and simultaneously a “new” hypothesis of causation that specific famines are described by decreases in access to food for identifiable populace groups regardless of available food at national level (“exchange entitlement failure”). Food might be available at national level, for example Grain Marketing Boards (GMBs), but at district level people might be starving since they are not able to access food from GMBs because of prices, distance or any other reasons. Hence, the ZimASSET implementation model will come into play to address specific causes as highlighted by Sen’s Causation Theory. It can be easy to address a problem if a root cause is known. Food might be available at national level, for example Grain Marketing Boards (GMBs), but at district level people might be starving since they are not able to access food from GMBs because of prices, distance or any other reasons. Hence, the ZimASSET implementation model will come into play to address specific causes as highlighted by Sen’s Causation Theory. It can be easy to address a problem if a root cause is known.

Sen's Entitlement Theory basically approaches food security from access point of view. It further spells out the barriers such as the law that can stand between food availability and food access. The theory believes that, food can be available but at the same time not accessible to everyone. This can be witnessed by the abundance of food in supermarkets in the province while people are food insecure. The Theory helps to finish the food chain from the producer to the consumer. The Theory further asserts that, in the event of famines, people can sell their belongings so that they can get food, though those without or in abject poverty can exchange their labour at a very low cost. However, all these imbalances in food (in) security can be addressed when a Food (in) Security Implementation Model that addresses food shortages in the province is mooted. The Model is people centred and it brings everyone's concerns on board. This helps to improve the food security status in the province.

1.12.2 THE SYSTEMS THEORY

The Systems Theory cuts across the study of systems. A system is a unified collection of consistent and mutually dependent parts that are either man-made or natural. Each system is defined by its temporal and spatial boundaries, bordered and affected by its surroundings, defined by its purpose or nature and structure articulated in its performance. In conditions of its effects, a system is bigger than the sum of its parts if it expresses emergent behaviour and synergy. Altering a single part of the system usually has an impact on other parts and the entire system with expected traits of behaviour. The aim of the Systems Theory is to thoroughly discover a system's constraints, conditions, dynamics, and explaining fundamentals that can be applied and discerned to systems at each level of nesting, and in every field for attaining heightened equifinality.

Von Bertalanffy views a system as, "elements in standing relationship." A system is an organised entity made up of interrelated and interdependent parts. The development of an Implementation Model to address food shortages in the province of Matabeleland South Province of Zimbabwe needs to be deeply rooted also in the Systems Theory. The Systems Theory was propounded by Cristina Mele, Jacqueline Pels and Francesco Polese. The implementation of the Food (in) Security Model does not happen in a vacuum but in a community with conscious human beings. These human beings have different religious faiths, culture and even geographical specificities. It is prudent however to take Matabeleland South Province as a system that has parts that are connected together towards the survival of a whole. Facts are realised from the deep appreciation of the entire and not that of the

individual parts (Aristotle's Holism); researchers were grappling with systems and parts in terms of their relative dynamics and contents (Gwirayi, 2012). Based on Gwirayi's assertion, it can be posited that, it is imperative to understand how the system works so that it can be easy to synchronise different parts of the system so that they can be meaningful.

However, Gwirayi's assertion did not fully explain the relationship between a system and its elements. It should be noted that, a system is made up of small parts that are interrelated, interact and work towards the survival of the whole system. Hence it can be less meaningful for one to concentrate on the functioning of the whole system without observing the small parts in a particular system. This momentous effort emerged during the previous century into the so-called "systems theory" (Bogdanov, 1922; 1980; von Bertalaffy, 1968; Lazlo, 1996; Meadows, 2008). This study continuously employs the Systems Theory since its tenants are of relevance in coming up with a sound implementation model that is community driven and at the same time addresses food (in) security in Matabeleland South Province of Zimbabwe.

A system can be referred to as an entity, which is a unified whole (Ng, Maull and Yip, 2009:22) in such a way that, a demarcation is apparent around it in order to differentiate external and internal components and to recognize output and input pertaining to and evolving from the unit. Von Bertalaffy (1956) defines a system as a complex of interacting elements. Looking closely at the two above given definitions, it can be deduced that, a system is characterised by its coherence and interrelatedness of parts. It can be further argued that, a system is complex in nature and has different elements, which are coordinated and intertwined to serve a single purpose. The Systems Theory further asserts that, an element in a system cannot be bigger than a system but rather small enough to combine with other elements to strengthen the system. In simple terms, this system can be viewed as a unit, which is solid and contains small parts that interact together and can be summed up together to form one whole. It means, these parts depend on each other, no one part is independent from the other and they interact for a common purpose.

Von Bertalaffy encourages systems philosophy in all subjects in a view to find general values important to all systems (Checkland, 1997). A fundamental notion of the general Systems Theory is its focus on interactions (Boulding, 1956). The centre in relationships lead to sustain that the behaviour of a single autonomous element is different from its behaviour when the element interacts with other elements (Espejo, 1999). A Systems Theory is therefore a theoretical model that analyses a problem seen as a whole and not as simply the

total number of elementary parts. Matabeleland South Province can be equated to a system. This system can be viewed as a whole. Inside the system, there are small parts that can be called districts and wards. In these districts and wards respectively, there are different stakeholders such as heads of government ministries, representatives of the non-governmental organisations, Rural District Councils, local leadership and the community members at large. The major thrust is on the relationships and interactions between parts in a bid to appreciate a unit's outcomes, functioning and organization an entity's organization, functioning and outcomes (Ashby, 1958).

The major characteristic of a system is that, there should be interaction among the parts. This Theory is very useful in this study in the sense that, for a sound implementation model to address food (in) security to be done, interaction is needed from the community members, local leadership, and heads of different government ministries, local authority and even the Rural District Councils. When all these stakeholders are interacting, it means they are working together towards the survival of a whole, which in this case is the Province of Matabeleland South. When every element of the Province is taken on board that means every geographic space in the province, culture, religion, social and economic status of everyone is represented. The Implementation Model is owned by everyone. In other words, the Systems Theory dwells on home grown solution to a problem. The phenomenon of food (in) security is tormenting Zimbabwe in general and Matabeleland South Province in particular. Hence, the Systems Theory contextualises the problem per province and promotes the interaction of stakeholders to work together towards the accomplishment of a common goal.

A number of implementation models have collapsed because of two reasons: i) the implementation was imposed from the top or, ii) it was imposed from the bottom but lacked interaction between stakeholders. This theoretical Model advocates for a dialogue between holism and reductionism. When developing an Implementation Model to alleviate food (in) security in the Province of Matabeleland South it is imperative to treat each stakeholder with the respect that each deserves. Different contributions from stakeholders give the total number of contributions for the whole province. Hence, the role of researchers and developers should not be to impose the Implementation Model, rather the people of Matabeleland South Province should come up with their own product. The role of the researchers should be to facilitate the development of an Implementation Model. Moreover, the researcher should be part of the system, which also interacts with other parts so that the interaction is purposeful towards the establishment of a solid whole.

The Systems Theory is an interdisciplinary theory about every system in nature, in society and in many scientific domains as well as a model with which we can investigate phenomena from a holistic approach (Capra, 1997). The Systems Theory cuts across all the disciplines hence its employment in community development is of significance. It can be assumed that, the problem of food (in) security should be viewed with a holistic eye. However, the execution of actions in addressing this problem should be shared among different parts of the Province. Systems thinking come from the shift in attention from the part to the whole (Checkland, 1997; Weinberg, 2001; Jackson, 2003), considering the observed reality as an integrated and interacting unicum of phenomena where the individual properties of the single parts become indistinct. When parts work independently without relationships, this can cause a serious discord and it is hard to form a system. In like manner, when the stakeholders in the Province do not work together, it is very difficult to come up with a solid system, which can produce a Shared Implementation Model that addresses food (in) security in the Province. In contrast, the relationships between the parts themselves and the events they produce through their interaction become much more important, with the outcome of “system elements are rationally connected” (Luhmann, 1990) towards a shared purpose (Golinelli, 2009). What is of paramount importance in the Systems Theory is the relationship between the parts and the result that is obtained from working together.

In other words, the Systems Theory is goal oriented or guided by task accomplishment. Task accomplishment can only be achieved when the elements are strongly connected together with sense of unity. This is the same that is expected in the province of Matabeleland South for communities to be connected and unite to come up with a working Implementation Model that unpacks the prospects of the Agenda for Sustainable Socio-Economic Transformation, which would bring a practical solution to acute food shortages in the province. All this can be realised through interaction and unity of purpose among different interrelated parts in the Province. A major characteristic of a system is that, it believes that every part is equally important and no part is better than the other. Each part contributes equally towards the survival of the whole system. When it comes to stakeholder participation in the province, no stakeholder is better than the other but each is of equal importance in the system.

The Systems Theory resonates that, it is not possible to completely understand a problem simply by splitting it up into smaller parts and then remould it; we instead want to demonstrate a holistic view to underscore its usefulness. A system displays a true picture of a whole, which needs interaction among the parts. Even though we can begin from the scrutiny

of the basic elements of a problem, in a view to wholesomely understand the problem in its fullness we need scrutinize it also from an elevated level: a holistic perspective (von Bertalaffy, 1968). The previous assertion by Von indicates that, though it is commendable to analyse the elements of the system for the good functioning of the system, we should strike a balance between the analysis of elements and of the system itself. Hence, the problem of food (in) security should be viewed in a holistic manner.

In a nutshell, the major content of the Systems Theory is that a system is a whole, which have interrelated parts that work together towards the fruition of the whole system. The elements in a system should have relationships that are meaningful in nature. No one element in a system is bigger than the other but all work equally together to achieve a common goal. Although the analysis of elements is needed in a system, it is of paramount importance to have a holistic view of the system itself to understand the problems affecting the system. A Systems Theory can be equated to human pathology where different parts of the body have different functions but all work in unison towards the survival of the whole body. This can be also transferred to the Province of Matabeleland South situation: different parts of the body connected together, i.e. the food security stakeholders working together to address the food (in) security issue in the Province. These stakeholders might interact together at district level as Rural District Development Committees and feed to form the Provincial Development Committee with a shared view from the communities of developing an Implementation Model which addresses food (in) security which is one of the major thrust of the Zimbabwe Agenda for Sustainable socio-Economic Transformation.

1.12.3 MAJOR CHARACTERISTICS OF THE ENTITLEMENT THEORY AND SYSTEMS THEORY

A comparison between the two theories used in this research is presented in a form of a table:

TABLE 1.2: MAJOR CHARACTERISTICS OF THE ENTITLEMENT THEORY AND SYSTEMS THEORY

Entitlement Theory	Systems Theory
Propounded by Sen Armartya	Propounded by Cristina Mele, Jacqueline Pels and Francesco Polese
Looks at the analysis of famines and food (in) security	Looks at system dynamics
The law is a prohibiting factor between food	Understanding is realized from the deep appreciation

availability and food entitlement	of a whole rather than of individual parts
People affected by famines are not entitled to food but rather to starve	A system is composed of interrelated parts that work together towards the survival of a whole
Legal sources of food: Production based, Trade based, Own labour, and Inheritance and Transfer entitlements	Boundaries: demarcations that describe a system and differentiates it from other systems in the surroundings
It is descriptive rather than theoretical	Homeostasis: The ability of a system to endure towards outside variables and uphold its key fundamentals
A general model of analysing famines concentrating on their causation	Adaptation: The ability of a self-regulatory system to effect the inside changes wanted to guard itself and keep satisfying its aim
Theory dwells of food accessibility rather than availability	Cyclical connections that systems connect in such that they control one another
Exchange Entitlement Failure: Famines are characterized by declines in food access	Feedback loop: A situation by which systems self-rectify themselves based on interactions from other systems in the surroundings

1.12.4 THE SYNERGISTIC RELATIONSHIP BETWEEN ENTITLEMENT THEORY AND SYSTEMS THEORY

Sen (1982:2) describes all sources of food as, “production based entitlement, trade based entitlement, own labour entitlement and inheritance and transfer entitlement.” Gwirayi (2012) defines a system as a coherent unit built up of interconnected and parts that depend on each other that work in unison towards the survival of a whole. Bringing the major focus of the two theories, it can be concluded that, the two theories played an imperative role in the study. The Entitlement Theory looks at food access whilst the Systems Theory looks at how parts of a system can work together in fighting a common cause. In other words the Entitlement Theory spelt out the four legal sources of food; but in the community, if parts do not come together in one focus, the community will continue to suffer from food insecurity. The Entitlement Theory defined the problem of food insecurity but the Systems Theory informed the affected community of Matabeleland South to bring different interrelated parts to work together in fighting food insecurity. The two theories worked hand and glove to answer the research objectives of the study as follows:

TABLE 1.3: THEORIES USED BY THE STUDY AND CORRESPONDING RESEARCH OBJECTIVES.

Theory	Research Objectives Answered
The Entitlement Theory	<ul style="list-style-type: none"> ▪ To explore food (in) security within the context of the Zimbabwe Agenda for Sustainable Economic Transformation blue print in Matabeleland South Province ▪ To assess how food security implementation models have worked globally, regionally, nationally and locally to address food insecurity
The Systems Theory	<ul style="list-style-type: none"> ▪ To develop a specific food security implementation model that addresses food shortages in Matabeleland South Province ▪ To validate the food security implementation model for Matabeleland South Province with experts and stakeholders

The table above clearly describes the two theories that anchored this study. These theories worked together as shown above. The Entitlement Theory explored the current trends and realities on food (in) security in general and possible ways that can be used to address the problem. However, the Systems Theory played a significant role in the development of an implementation model as well as validating it. The development of a model was done by the people of Matabeleland South Province, and the province can be equated to a system. The province is made up of seven districts that are food insecure. In these districts there are various stakeholders and these can be equated to interrelated parts that work together towards the survival of the whole province.

1.12.5. CONCLUSION

The Entitlement Theory and the Systems Theory largely inform this study. The theories are married to reach a common understanding and grounding in developing the food security model for Matabeleland South Province. The research places recognition of food security as an entitlement to human beings hence the need to develop a model that cuts across issues of availability, access and utilization in a sustainable and stable way. For food security to be achieved, the view that communities are a system needs to be embraced. Matabeleland South Province is a system made up of its own people and other resources both man-made and natural and these components are interrelated. This means that it should be taken into cognizance that for any developmental action all the parts of a system should support each other to make a whole, as was the case in developing this Food Security Implementation Model for Matabeleland South Province. [

1.13 CHAPTER SUMMARY

This chapter mainly focused on the background of the research problem, where the genesis of the problem of food insecurity was discussed since the Colonial era to date. The history of power dynamics between the black people and the white people formed part of this chapter. The current problem at hand of food insecurity was also discussed looking at alarming numbers of people who are food insecure in the province which might be life threatening as it caused some nutrition diseases. In this chapter research questions were also derived from the research objectives. It is in this chapter however, where it was highlighted that, the study contributed to the body of existing knowledge by developing a unique food security implementation model to address food insecurity in Matabeleland South Province, policy by redefining the policy making landscape in Zimbabwe embracing the holistic approach to policy making and community development by borrowing lessons into practice in the food security field. The study was rooted in the exploratory plan weaved into the constructivist grounded theory strategy. In this chapter, the researcher's thrust was on theoretical approach grounded in constructivism according to Kathy Charmaz orientation. The two theoretical frameworks were used to underpin the study; those are the Entitlement Theory and the Systems Theory. Both theories were useful to the study as they played a complimentary role.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

The concept of food security dates back to the evolution of humankind. This is justified by the all-inclusive dependency by human communities on food access and availability. It is rather critical to note that the interpretation of the concept of food security has consistently changed over time to synergize different elements or more advanced definitions from various scholars. This study used a systematic way of reviewing literature. Literature review is a procedure where a scholar organises what has already been written or printed by other researchers and puts it together in writing (Bowling, 2009: 147; Bryman, 2008: 81; Jones cited in Saks & Allsop, 2007: 32; Saunders, Lewis & Thornhill, 2009: 58). The present chapter examines how the concept of food security has developed, and propounds a very wide definition that links or correlates it to sustainability principles. This goal is achieved by putting into consideration and encompassing each of the elements viewed as imperative and vital for a state of sustainable food security. The purpose of the present work is to finally build a sustainable Food Security Model that can be used to address food shortages in real-world contexts. The nature of the literature reviewed for this study focuses mainly on the current trends and realities of food (in) security globally, continentally, regionally, nationally and locally. The chapter further looks at document review of economic blue prints that Zimbabwe used from the colonial era till present. Implementation Models for food security globally, continentally, regionally, nationally and locally are also examined in this chapter.

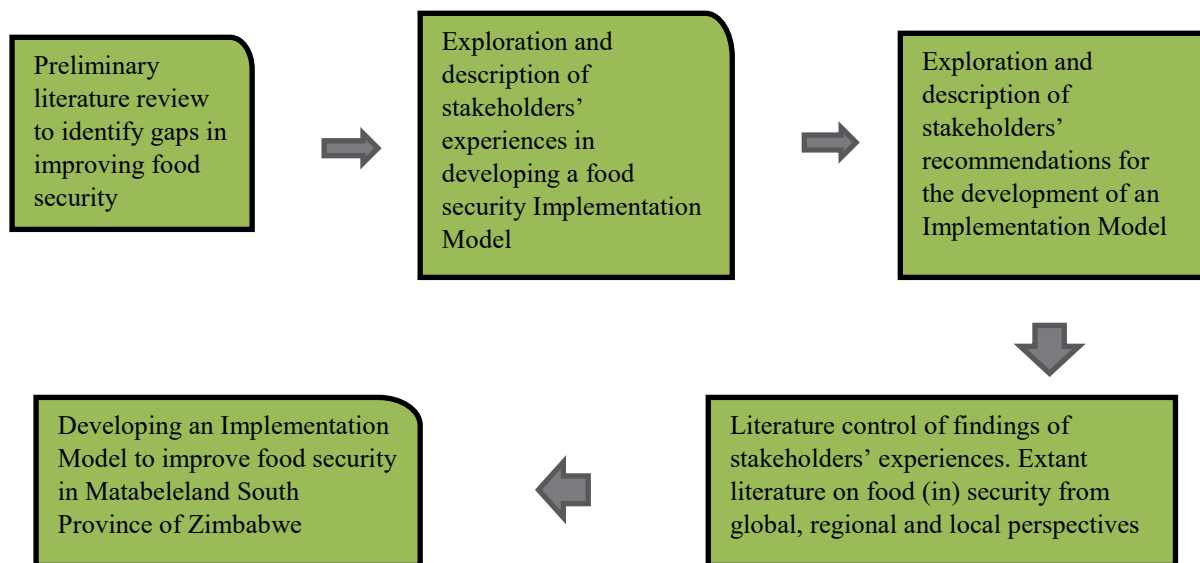
2.2 APPLICATION OF LITERATURE IN THE STUDY

The pertinent literature to this research was firstly reviewed to recognise areas of food (in) security that had been explored already. Also, the literature review contributed to outline the research questions and provide reflective focus and insight throughout the study (Bryman, 2008: 81). The choice to use the reviewed literature this way comes from Glaser (1998: 67) who posits that the Grounded Theory's dictates are: "(a) do not do literature review in the substantive area and related areas where research is to be done, and b) when Grounded Theory is nearly completed during the sorting and writing up, then the literature search in the substantive area can be accomplished and woven into the theory as more data for constant comparison."

The literature was nevertheless contextualised to the investigation study. Once the findings were gathered, a literature control was done so as to ‘ground the data’, in order to develop a credible Implementation Model for the Zimbabwe Agenda for Sustainable Socio Economic Transformation (ZimASSET) to address food shortages in the province of Matabeleland South (Dunne 2011:121; Johnson & Christensen 2008: 66; Polit & Beck, 2010: 170; Tritter cited in Saks & Allsop, 2007: 302). This was also in line with Charmaz (2006:165) who points out that “the intended purpose for delaying literature review is to avoid importing preconceived ideas and imposing them on your work. Delaying the review encourages you to articulate your ideas”.

The preliminary literature review was therefore meant to identify gaps for the study of food (in) security, whilst existing literature controlled the outcomes of the research. This is to say that the findings in this Grounded Theory based study were considered to be the ‘researcher’s ideas as Charmaz mentions in the description above. Therefore, the existing literature “will earn its way into this narrative (findings)” (Charmaz 2006: 126). In other words, as study data analysis evolved, the researcher engaged in bibliography that explained or disproved the emerging categories and subjects to maximise on the quality and accuracy of the analysis that ultimately lead to the development of the Implementation Model for the Zimbabwe Agenda for Sustainable Socio Economic Transformation for the improvement of food security in Matabeleland South Province of Zimbabwe.

FIGURE 2.1 USE OF LITERATURE REVIEW IN THIS STUDY



The above graphic shows how the literature review was used in this study. It highlights how preliminary and existing literature was used to develop the Implementation Model.

It can be posited that sustainability problems and uncertainties experienced in Matabeleland South Province's food crisis situation in Zimbabwe today, might be an outcome of decisions made in the past with regards to food security interventions and other community development interventions. In fact, this might be the reason why current information on Implementation Models of blue prints directly relevant to Zimbabwe is scarce, and Implementation Models have not yet been fully explored in food security literature in Zimbabwe. It is then essential to rely heavily on external sources throughout this study.

2.3 THE CONCEPT OF FOOD SECURITY

The history of food security as a more topical issue began in the mid 70s, when a critical shortage of food grain occurred worldwide. The World Food Conference defined food security in terms of food supply in 1974. Todaro and Smith (2011) argue that at the World Food Summit in 1996, a definition of food security was released: a physical and economic access by all people at all times to sufficient, nutritious and safe food, and dietary food preference for a healthy and active life. 182 nations agreed on this definition, which has four backbones, namely: i) food availability, ii) food accessibility, iii) food utilization, and iv) food stability. The above definition enables to set a threshold and differentiate situations of food security from food insecurity.

“Food availability” explains the sufficient amounts of food with proper quality provided through local production or imports including food aid. This refers to the presence of food on the table whenever need arises. “Food access” is the existence of adequate funds to acquire appropriate food for a healthy diet. It can be further elaborated that, food can be available but cannot be accessed. It is an entitlement or command over the food supplied. “Utilization of food” is defined as to meeting adequate diet, and clean water, as well as sanitation and health care to satisfy a state of dietary wellness. It is about the local communities accepting the food in accordance to their culture.. “Stability of food” refers to the level of strength a population has to overcome shocks and other crises. Therefore, the concept of food security consists of both food and non-food inputs, and can be attained with the fulfillment of the above four food security pillars.

The significance of an Implementation Model comes in bold and prerequisite on the food supply, stability and access pillars. For instance, irrigation ameliorates agricultural productivity by means of solving the rainfall shortage and inspires farmers to harvest year-round. The sector creates employment to some members of the family, especially to wife and children. The family can take the balanced diet and nutritious food from their crop, fruit and vegetable produce. Irrigation can stimulate rural farmers to use additional modern inputs available. Irrigation can be a source of an extra income for the rural farmers. Food security can be measured and assessed using either “supply-side approach” or “demand-side approach”. Norton et al. (2010) assert that on one hand, the “food supply” equation has to do with the food availability issues, for instance: food production index, per capita output, food aid delivery, livestock index, crop index and others. On the other hand, the “food demand” equation, studies the accessibility mainly focusing on income, anthropometrics index, consumption expenditure, nutrition index, diet diversity score, calorie intake index, hunger index and other derived indicators.

Depending on the goal of the study, some scholars favoured food supply whilst others preferred the food distribution. Randela *et al.* (2000) believes that, supply variables are a more influential determinant of household food security in comparison to the demand variables. If the supply is high, people have access to food and the demand variables are not so significant. It can also be argued that if food is in plenty supply, it does not necessarily mean that all people can access it. If it is viewed from that angle, it might be taken as

misleading. Gegziabher (2008) supports that, the “supply” variable shows food availability while the “demand” approach indicates food access or entitlement. Therefore, the demand-side approach is the most preferable. For example, there is enough food to offer at least 1.9 kg per person a day for the world population; yet, there were about eight hundred million food insecure and malnutrition people in the world in 2011. Todaro & Smith (2011) argue that, more than half of the population of under-developed countries are food insecure and earned less than one United States Dollar per day in 2010. The Food and Agriculture Organisation (2011), asserts that the world will have about three hundred and seventy million food insecure and mal-nutritious people in less developed countries in 2048.

Zimbabwe, since year 2000 has recorded on average about three million food insecure and malnourished people. Sachikonye (2013) resonates that in Masvingo Province in particular, there are almost two hundred thousand people who are food insecure. On the other hand, data set of institutions like the World Food Program, the Food and Agriculture Organisation and the World Bank, show that the per capita domestic food production in Zimbabwe between 2004 and 2012 was more than the global recommended per capita food grain; nevertheless, there was a significant level of food aid flows between these periods. This supports the fact that the availability of food supply doesn't indicate the command of the people over the supplied food. Food entitlement takes higher weight than the food availability. Therefore, the food supply is a necessary condition whereas the food access is a sufficient condition for food security. This is the reason why this study prefers the expenditure-based demand-side of the food security analysis. However, it can be debated that, the concept of food security cannot be complete if issues of food stability, utilization and sovereignty are not included. The explanation of the concept of food security cannot be wholesome if these elements are not included. Therefore, one of the major focuses of this study is that the concept of food security should be explored fully so that it can be straightforwardly dealt with.

2.4 CAUSES OF FOOD INSECURITY

There are a number of factors that influence food security, thereby impacting negatively on food availability, physical food access, food utilisation and food stability. On a global scale, the major problem is that of distribution, which then disturbs the access of food by certain groups of people. This is negatively affected by income levels, trade impediments, and sometimes mere logistics as people affected by hunger may be in inaccessible places.

2.4.1. NATURAL DISASTERS

A natural disaster can be described as a natural incident with detrimental consequences for living things in the area (FAO, 2016). Hallegatte and Przulski (2010), cited in Israel and Briones (2013) resonate that, from an economic point of view, a natural disaster can be taken as a natural incident that causes agitation to the functioning of the economic system, with meaningful negative impact on assets, production factors, output, employment, or consumption. Over the past thirty years, Africa has become a victim to unpredictable weather patterns and is often plagued by lengthy droughts followed by floods. These natural shocks exacerbate adverse results, including widespread food shortages. The country's food security situation is fragile. Zimbabwe is in the midst of a severe drought that has caused large scale crop failure throughout the country, which makes it difficult for farmers to maintain healthy livestock and grow crops. ZimVAC (2016), 4.1 million (42% of the rural population) will be food insecure during the period from January to March 2017. USAID (2016:1) posits that, "since June 2015, we have contributed \$127 million in emergency food assistance to response to the El Nino induced drought in Zimbabwe." This was focusing on vulnerable households that are food insecure because of both floods and drought.

Sub-Saharan Africa (SSA) is the second largest harshly affected region with disasters related to climatology among the developing areas of the world (Frimpong, 2013), with the main causal factor being high temperatures. Further, most of the region's inhabitants are dependent on rain fed agriculture for their livelihoods. Only very few of cropland in SSA is irrigated; in comparison to a global level of more than 20%, it shows the great potential to rise production and improve food security. In Sub-Saharan Africa and other developing nations, the rural farming population is the most affected by the vagaries of weather because of their particularly low adaptive capacity, which is related to abject poverty levels and lack of assets.

Food insecurity is sporadically more prevalent in Africa and in South Asia and there are factors confined to Africa in particular that have contributed to the status quo. Bad weather events and natural phenomena including drought are some of the major causes as mentioned earlier on. Theoretically, the impacts of natural phenomena on agriculture and the natural resources and environment sectors can be indirect or direct as well as negative or positive. These impacts in agriculture are easy to identify. For instance, in the case of excessive rains and floods, there is a perceptible increase in the supply of water for agriculture if the flood water can be harvested.

Another advantage is that, the water table is heightened making underground water easy to access for agricultural purposes (Moyo, 2002). Floods may be beneficial though, as they increase soil fertility since they transport nutrients from the uplands to the lowlands. Furthermore, floods temporarily create a bigger water habitat for inland fish and other aquatic animals. Taking into consideration the other yet-to-be-identified factors, the influence of cyclones and floods are seen as helpful because they facilitate an increase in agricultural production in the affected regions and help ameliorate the food security situation.

Natural disasters also have negative effects on agricultural production and food security when compared to the above positive effects. These negative effects are more visible than the positive ones, especially in the Southern African countries. Droughts, cyclones and floods have the potential to downsize productive agricultural land, damage farm inputs, reduce agricultural productivity, facilities and infrastructure, and limit farm-planting options. Additionally, cyclones and floods can destruct farm supply routes and instigate death or injury to farm workers. As a result, these factors can further lead to negative and indirect impacts on agriculture and the economy at large. Floods and droughts can lead to increased agricultural production costs, lessened agricultural output, and limited food availability; and as a result, food prices rise. The indirect and direct adverse impacts on agriculture, taken wholesomely, pose a definite threat to food security in the affected areas.

The comparison of the severest food disasters in the later history of the world and in Africa in particular reveals that all were preceded by drought or other intense weather events (Chazovachii, 2003). They resulted in failed or poor harvests, which consequently resulted in food shortage and high prices of the food available. The famines of Ethiopia in the 1980s and others experienced in the horn of Africa are a case that can be referenced. In Zimbabwe, the 1991-92 and the 2002 drought are the most recent. Crop failure caused by the recent El-Niño and the recent cyclone Deneo severely impacted food availability. Many harvests in Africa have been severely affected by diseases and pests that have wiped out entire crops. Sachikonye (2002) argues that, the SADC region very often experiences red locust and armyworm outbreaks. In the season, 2015/2016, the Southeastern region of Zimbabwe has experienced an armyworm outbreak. Experts predicted that natural disasters in the future will become even more frequent and their impact more rampant, mainly due to climate change and a further concentration of the world's population in susceptible habitats.

2.4.2. CLIMATE CHANGE AND ITS EFFECTS ON FOOD SECURITY

According to the Inter-Governmental Panel on Climate Change, the concept of climate change refers to the substantial difference of the average condition of climate suitable factors such as precipitation, hotness, and wind in a given time, commonly more than thirty years (Inter-governmental Panel on Climate Change IPCC 2007: 96). Such fluctuations can be caused by the internal dynamics and climatic system. Nonetheless, external influences can again induce climate changes. The System of Climate develops in time under the control of its self inside changes and because of transformations in outside variables that influence climate (known as “forcings”). Exterior forcings comprise natural calamities like solar variations and volcanic eruptions, and also human-generated dynamics in atmospheric composition (IPCC, 2007: 96-97). The sudden change in climate results in ice melting which leads to the rise in sea levels. This causes flooding in arable land that is designated for agricultural activities. Climate Change also cause flooding which in turn causes water logging that affects crop failures. Drought can be a result of excessive or erratic rainfall which cause crop failure. The crops are affected and this leads drought and leave households food insecure. WFP (2017), argues that, Climate Change causes diseases and pests and the number of people on food aid in Zimbabwe increased from 1.2 million in 2015 to 2 million in 2016. These pests destroy crops and affect agricultural production. Furthermore, the pesticides applied to control pests and diseases are harmful to aqua life and destroys the soil structure. The aqua life is destroyed by eutrophication hence the people might suffer from protein content obtained from the aqua life.

The United Nations Model Convention on Climate Change (UNMCCC) posits in Article 1 that change of climate is a modification of climate attributed to human activity directly or indirectly; such modification adjusts the combination of the world atmosphere, and happens to aide on normal climate unpredictability detected over equivalent time periods (<http://unfccc.int>). The concept “climate change” typically refers to changes that are provoked by human activity, for instance aerosols and greenhouse gases emissions, which are changing the atmospheric composition, producing the so called greenhouse effect. On the other hand, climate variability refers to changes caused exclusively from human activity. The IPCC (2007: 45) point out that since the beginning of the industrialization, human influence on global climate surpasses the natural processes of climate change.

2.4.3. AGRICULTURE RELATED ECONOMIC IMPACTS OF CLIMATE CHANGE IN AFRICA

According to the IPCC (2001: 89), the susceptibility of Africa is viewed as a consequence of the compassion of agriculture to fluctuations in climate, the degree of exposure to climate hazards, and the capacity of a system to adapt. The economic impression of variability and climate change in Africa is compounded by its utilization of technology which is traditional, agriculture-based economies, and its reliance on small agricultural exports. The phenomenon of climate change is projected to head to a 50% drop in agricultural yield by 2020. The consequence would be not only the endangerment of food security, but it will also escalate the vulnerability of small-holder agriculturalists in countries that are developing. The situation of persistent food shortage is expected to get worse because of declining of water resources; the consequence will be the expansion in arid and semi-arid lands by 5-8% by the 2080s (IPCC, 2007). A number of African Countries suffering from food insecurity are economically, socially, and environmentally helpless, plus their situation has been aggravated by climate change, which makes much difficult the eradication of poverty and hunger. Recurrent and prolonged droughts have become a severe threat that affects water supplies and agriculture. As droughts are turning out to be more common, tenacious and widespread, sub-arid and semi-humid African regions currently encounter big difficulties to maintain sustainable agricultural systems. Due to their substantial reliance on rain fed cultivation, elevated poverty levels, physical and human capital low levels and reduced road and rail network, Countries in Africa have become more susceptible to Change of climate.

The agricultural sector has been crushed negatively by the scarcity of suitable irrigation structures to avoid the consequences of droughts caused by climate change. In mainly regions in Africa, specifically the sub-tropics, the rainfall pattern has turn out to be erratic; thus it is not possible to rely on rain-fed agriculture to ensure the fulfillment of optimum crop harvests. In Sub-Saharan Africa the hostile outcomes of climate change on agricultural production are especially prominent; this is because the sector for agriculture accounts for a great share of Gross Domestic Product, employment and earnings from exports. Socioeconomic activity in the region of Sub-Sahara region is a guided by agriculture, which supports about 80% of the population. In terms of percentages, agriculture accounts for 30% of foreign exchange revenue, 30% of the GDP, 40% of exports, and 70% of employment. Thus it is obvious that agriculture is the chief of the greatest crucial cost-effective drivers (Feyissa, 2007: 103). Over

the past twenty years, one of the impacts of change in climate has been the reduction earnings from exports; evidently, this has increased the rate of unemployment and has affected the GDP and in sub-Saharan Africa.

Several people are turning to a more conscious view of climate change seeing it as a real hazard undermining ecological and social sustainability, thus adaptation to change in climate has showed up as a trendy objective in research, program development and policy making in Africa. In regards to crop growing, it is crucial that countries participate in adjustment efforts concentrated on applying guidelines that assist in forming communities that are agriculture based which are more resistant to change of climate, disaster and variability (Nelson *et al.*, 2009: 17 & Feyissa, 2007: 110). The search for development which is sustainable in Africa greatly relies on its capacity to implement fitting approaches that are intended to mitigate the effects of climate change as well as on its ability to form competence of adjustment to the new effects. African governments should be prioritized the issue of adaptation to climate change, since it is the sole avenue to diminish the consequences of change in climate on production of food (International Food Policy Research Institute [IFPRI], 2009).

2.4.4. CLIMATE CHANGE IN ZIMBABWE AND ITS EFFECT ON SHORTAGE OF FOOD

The pillar of the Zimbabwean economy is the agriculture sector; it contributes sixty one percent of the raw materials utilized by the national industry that is into manufacturing, 40% to exports, and 15-20% to the GDP, (ZUNDAF, 2011: 9). For the last ten years, Zimbabwe has seen a growth in foodstuff and nourishment shortage at domestic and countrywide levels, deriving from decreased productivity of the principal crops. This is partially because of social and political actions that were happening in the country, as well as climate change. Recent studies using global circulation models establish that from now up to the year 2080, Zimbabwe will encounter the increase of temperature by 2°C, and at the same time a general fall off in predictability and reliability of rainfall patterns (Bohle *et al.*, 1994: 47). These modifications have a severe impression on the food security of the country, therefore the necessity for emergency actions to be put in practice. Currently, it is comprehensively established that, climate variability and climate change are amid the utmost defies that humanity is facing in the 21st century. Lately, there is a concern that in Zimbabwe, no one is being accountable for advising farmers what to grow, when to grow, and methods involved on how to grow in tandem with the imminent new patterns that climate change has triggered.

The Zimbabwe Department of Meteorological Services, reports that the country has been seeing additional scorching days between 1950 and 1990 (UNEP/GRIDA, 2002). Escalation in usual temperatures by 2°C will most probably generate a shrinkage of wetlands from nine percent to three percent; a 4°C escalation shrink water-surplus in summer by less than 2% (Bohle *et al.*, 1994: 47). This variation in temperatures will disturb the agricultural production, predominantly for crop yields. More specifically, a rise temperature of 4 °C will result in decline in maize production by twenty percent in the Northeast, and twenty seven percent in the South-East region (Magadza, 1994: 175). The National Centre of Atmospheric Research (NCAR) Model and the Commonwealth Scientific and Industrial Research Organization (CSIRO) Model, which are global climate change Simulation Models, have discovered that the beginning, termination and length of effectual precipitation seasons have turn out to be more unpredictable at the same time variable.

A sudden rise in world temperature has triggered an escalation in the typical temperatures in Zimbabwe, which has resulted in the shifting of the conventional agro-ecological zones (natural regions) and the farming seasons. Throughout the sixties, seventies and eighties, droughts relapsed after a period of 10 years. Still, this tendency has stopped because of the fast fluctuations in conditions in climate that have made the pattern of rainfall throughout Zimbabwe more erratic and therefore challenging to calculate. By the mid-nineties the occurrences of famines and dry seasons augmented to each four to five years, and by the late nineties, the nation started to observe alternating dry and wet seasons after every 3 years. Given that in the year 2000, the condition of Zimbabwe has deteriorated as food shortages have been more permanent from years 2002-2003, 2004-2005 and 2007-2008. Since the responsible authority had not implemented specific adaptation procedures to alleviate the effects of change in climate, the consecutive incidence of droughts significantly affected food production. Annual rainfall reduction during summer (November to March) cropping period is implied by the month on month rainfall patterns. This clearly shows the ominous demand for Zimbabwe's farming community to begin adjusting to forthcoming alterations in the climate.

Projections warn that change in climate will considerably influence farming in Zimbabwe such that by 2080 there will be a wide-ranging reduction in places appropriate for growing maize from eighty five percent to seventy five percent whilst other places in the South

Western division of the nation will turn out to be completely inappropriate for growing maize (www.zbc.co.zw). Zimbabwe in particular, maize is the main cereal crop grown and it is part of the fundamental diet. This forecast illustrates that Zimbabwe will certainly confront a main food security catastrophe in the future if nothing is done to lessen the outcomes of climate change. The most affected areas are found in the drier parts of Zimbabwe in the Masvingo, Midlands and Matabeleland regions; there rainfall has dropped fifteen percent since year 1960 (Gogo, 2012: 8). An escalation in departure from the average precipitation quantity between 1985 and 2000, illustrates the magnitude to which precipitation patterns are fluctuating nationwide. This shows there is demand to encourage the growing of small grains such as millet and sorghum to ensure food security and diminish the consequences of such changes. Climate change presents a severe menace on Zimbabwe's agricultural industry, which has persistently suffered because of droughts and natural disasters. Droughts, erratic precipitation, and cyclones, played a part to deprived performance in agriculture in Zimbabwe due to excessive rainfall and floods.

Zimbabwe was shattered by cyclone Eline in 2000, followed by cyclone Japhet in 2003. Such phenomena triggered flooding in Muzarabani in the Zambezi valley, one of the low laying parts of the country. The escalation in the frequency of phenomena like cyclones is attributed to climate change. As expected, droughts experienced in 2002 and 2008 as well as floods associated with cyclones adversely impacted agricultural production in Zimbabwe.

The changing of agro- ecological regions of Zimbabwe is of pronounced concern. The responsible government should participate in widespread exploration and propose effective contributions to guide farmers on types of crops to cultivate, time to cultivate these crops and place to cultivate them. As a consequence of the lack of appropriate services of extension to farmers, a lot of them have kept up with their old-fashioned farming practices, these are no longer appropriate because of the randomness of rainfall patterns across Zimbabwe.

2.4.5 EFFECTS OF CLIMATE CHANGE ON POLITICS IN ZIMBABWE

There are nations whereby the consequences of change in climate on the social and economic framework are significant; it is in these countries where politics can act as stimulus to generate conflict. In this framework, climate change can represent a menace adder that interacts with social, political and economic systems to generate disagreement. Change in

climate impacts on water and food resources that are crucial for survival and livelihoods trigger socio-economic impacts. ZimVAC, (2017) argues that, many areas that suffer from continuous drought conditions which are susceptible to the hazard of climate provoked aggressive disagreements because struggle for water resources and food; one of these areas is the Matabeleland region as well as parts of Masvingo province in Zimbabwe. WFP, (2017), resonates that, the Geo-political scope, social and economic effects of change in climate present a harsh problem to political power stability of Zimbabwe. Folks in the parched Matabeleland province already perceive nothing much has been done by the government to tackle their quandary to have the problem of availability of water fixed. Looking at the previous occurrences, failure by government to allocate a plentiful quantity of its monetary budget in to resolving the challenges of water presently people in Matabeleland are facing, has forever prompted extensive arguments on whether the Government of Zimbabwe justly prioritizes the welfare of communities in that part of the country. USAID (2017), water resources are scarce and people compete in Matabeleland and have instigated internal battles within and amongst village communities. As the food shortages have turned out to be more recurrent, the water condition in Matabeleland has deteriorated; as a result, there is the risk of the escalation of conflict within the Matabeleland region due to food shortages if the Government does not address the issue of water scarcity with urgency.

Folks in this arid region, who sense the states, are disregarding them by not putting first their fundamental water rights, have continuously echoed sentiments of disgruntlement. A consequence could be any party in politics can approach the community and promise them a rapid end to their afflictions related to water; the politician in question can be chosen through an election and win. Though such party's set of ideologies do not quite provide for the needs of the people in the long distant future, the masses will choose a person to represent them because they want to witness an immediate end to their phenomena. Nevertheless, it has the direct impact on livelihoods of people that are most upsetting; human security factors are rated the highest amongst these. One of these human reassurance factors is food security, which is highly affected because of a myriad of effects exacerbated by climate change. Change in Climate and its economic effect are not isolated events. Relations between these monetary variations, and current economic, social, political and security environments might lead in further indirect economic bearings. For example, scientists expect that climate change will minimize flow of water in the Limpopo and Zambezi basin by ten percent (Swain *et al.*, 2011: 42). This result in a straight influence on crop production and this shall in turn thus

result to food shortages. As the saying goes, “A hungry man is an angry man”. The intensification of disagreement is extremely likely when there is food shortage in a country.

2.4.6 UNDERDEVELOPED STATE OF AGRICULTURE

The underdeveloped state of African agriculture is a contributor to food insecurity in the continent (Mwaniki, 2006). Most countries in Southern Africa depend on rain fed agriculture despite frequent droughts (FAO, 2016). This usually indicates that erratic rains or poorly distributed rains will always present a great threat to food security in the continent. There are other handfuls of factors that affect food security in Africa: low fertile soils, minimum use of external farm inputs, environmental degradation, crop losses at harvest and marketing crops with very low or no value addition.

More so, smallholder farmers, who make up the bulk of farmers in Africa, do not have access to lucrative formal markets. This implies that cash crops and excess food crops cannot be used to generate income, which can then be used to purchase food when necessary. This simultaneously reduces the food stability aspect of food security. Access to market is prohibited by a number of factors, including poor road infrastructure, restricted resource base, lack of information, absence of or inadequate institutional support, and poor policies in place (WFP,2017). Economic blue prints such as the Zimbabwe Agenda for Sustainable Socio Economic Transformation are meant to assist smallholder farmers to access these markets by putting favourable conditions in place for this to happen. Another contributor to food insecurity in some areas in Zimbabwe is over-reliance on cash crops at the expense of food crops. This presents a problem if there is a slump in the marketing of cotton for instance as no money will be realized to pay for food imports.

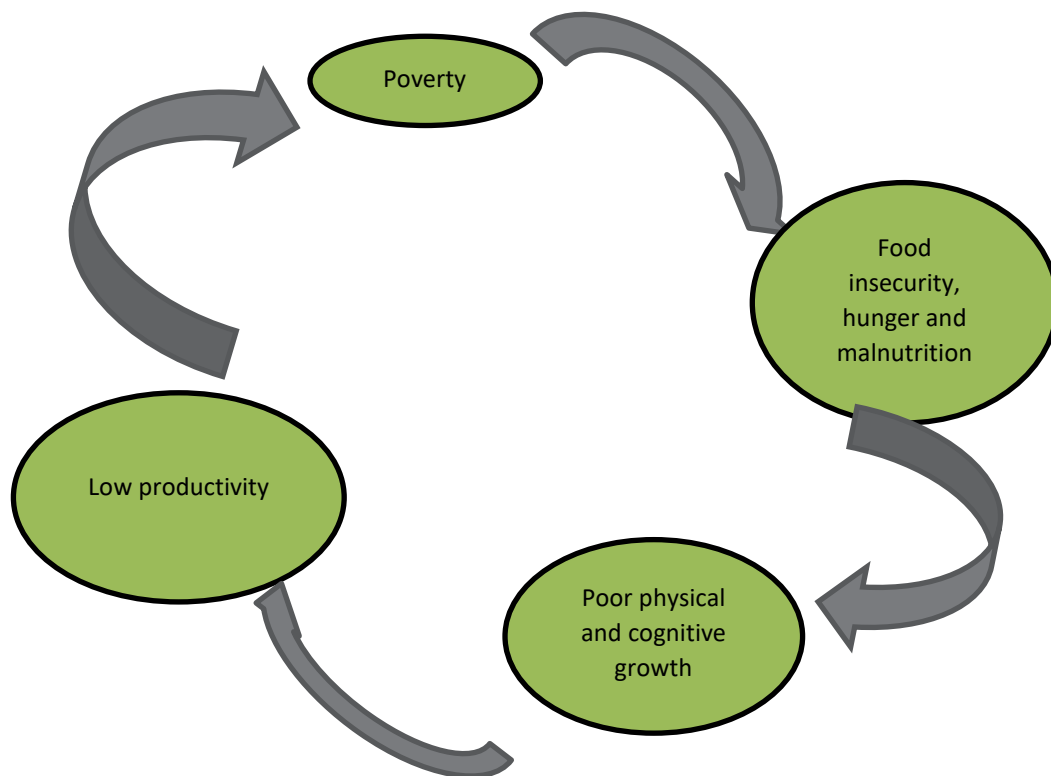
2.4.7 POVERTY

In the studies to establish drivers of food insecurity in Southern Africa, Misselhorn (2005), found that 17 drivers are responsible for 80% of the food insecurity impact. The chief drivers of food insecurity that were revealed include poverty and environmental circumstances. Conflict also featured prominently as performing to indirectly drive food insecurity levels in Southern Africa. Other drivers identified by her study are prevalence of HIV/AIDS, formal and informal government policies, in- and out- migration, poor human health, disposal of

assets, low regional cereal accessibility, absence of education, and population pressure. Poverty is by far the most important driver, especially in Zimbabwe as it encompasses unlike dimensions of deprivation that relate to human capabilities including health, food security, rights, education, security, voice, decent work and dignity.

Poverty causes food insecurity; food insecurity causes hunger and malnutrition, which in turn leads to poor physical development resulting in low productivity that further fuels poverty. The figure below shows a cyclic relationship between food insecurity and poverty as propounded by FAO (2008).

FIGURE 2.2 CYCLIC RELATIONSHIP BETWEEN FOOD INSECURITY AND POVERTY



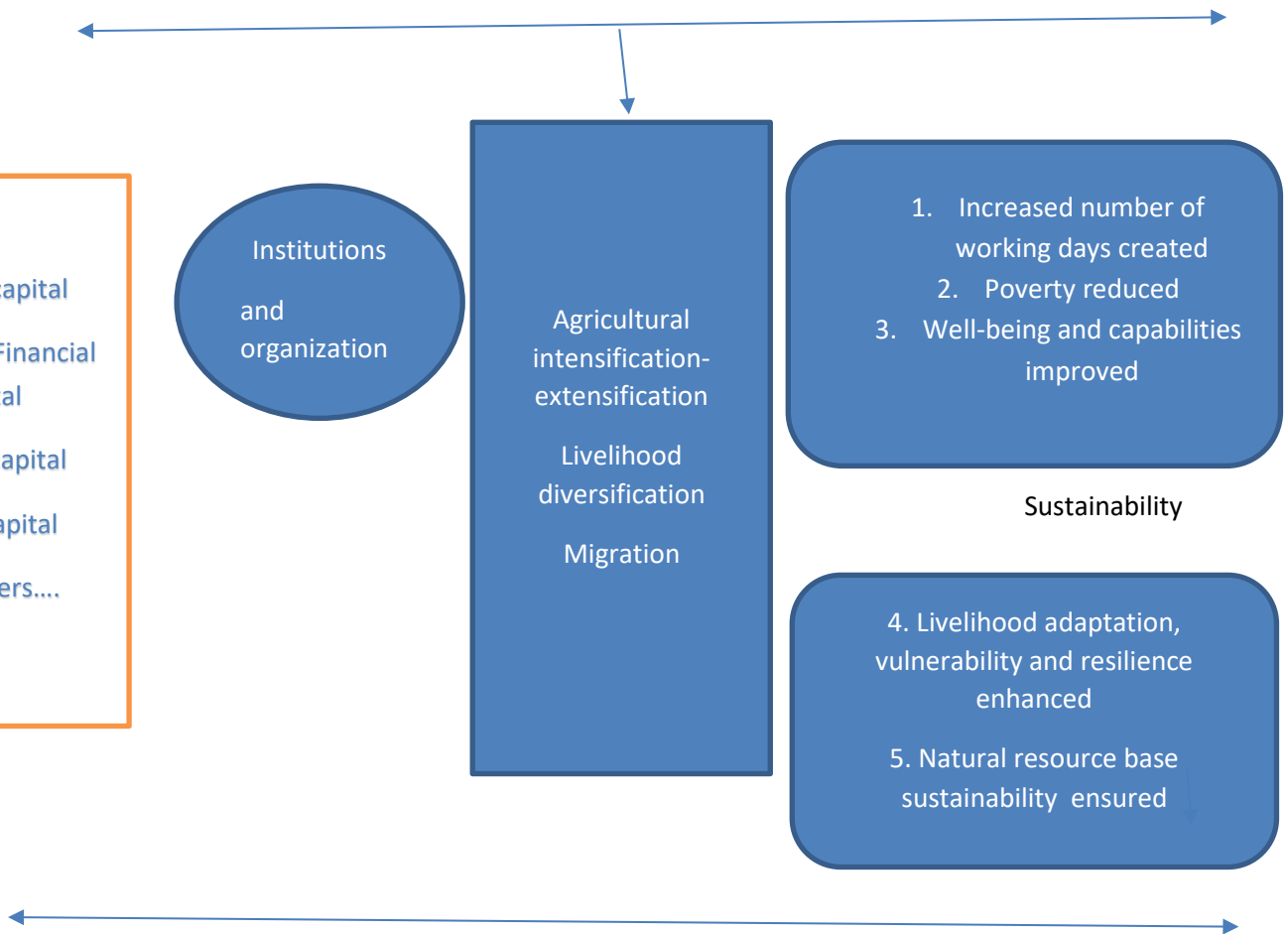
Food insecurity, malnutrition and poverty are profoundly interconnected phenomena. Food insecurity causes hunger, which will consequently cause poor nourishment, and as a consequence, reduction of the ability of affected people to be productive both physically and intellectually. Taking Zimbabwe as an example, this implies that people do not have the energy to engage in agricultural activities, which are the main source of food and livelihoods. Malnourished people are less likely to engage in meaningful economic activities of any kind

because malnutrition affects intellect. Von Braun *et al.*, (2004) also acknowledge the existence of resilient links between hunger, agricultural productivity, and poverty. The authors contend that if food insecurity is not arrested it can set in motion a collection of outcomes that can increase malnutrition, reduce the ability of adults to work and produce healthy children, diminish learning ability in children and eventually lead to poor economic performance at national level further stimulating poverty. The chronic food insecurity situation that exists in some parts of Southern Africa as well as in Zimbabwe attests to this.

2.4.8. SUSTAINABLE RURAL LIVELIHOODS

Human beings have the ability or potential to make development sustainable, that is, to ensure that it meets the necessities of the present generation without compromising the faculty of future generations to encounter their own needs. Sustainable development goals must go hand in hand with improved lifestyles for the least and more vulnerable members of the community. Ellis (2000) postulates that, livelihoods are comprised of assets, activities, and access to these that together determines the living gained by households or individuals. Rural people move regularly amid rural areas and towns or cities to market their produce, buy manufactured goods and seek work. Rural families through livelihood diversification construct a varied portfolio of activities and social support capabilities in their battle for survival and in order to improve their standard of living of which small scale irrigation schemes is one of the options. The Sustainable Livelihoods Model is designed to help understand and analyse poor people's livelihoods. The sustainability of a livelihood is when it can handle and recoup from stresses and shocks and enhance or maintain its capabilities and resources both now and in the future while not condemning the natural resource base.

Fig 2.3 SUSTAINABLE RURAL LIVELIHOODS FRAMEWORK



Source: Scoones (1998:4)

For sustainable livelihoods to be achieved, a collaborative approach is called for from both the local people and the interested stakeholders in rural development. Irrigation farming and development is possibly one of the chief drivers to heightening rural livelihoods, if required support is given to it. As Chambers (1983) points out, participation should not refer to simple involvement but should mean that beneficiaries of development proposals actively take part at all levels of development endeavors. Hodder (2000) argues that the active involvement of women is essential to agricultural prosperity and policy designers should guarantee that women are incorporated in all matters of life. In accordance to Msingo (2007) and Mujere, Chazovachii *et al.* (2010), irrigation farming has convert into a source of income for underprivileged people in rural areas. This clearly shows that, partaking is no longer limited

to the wealthy but also extended to vulnerable groups, for example widows and orphans. Widows and orphans can also play an active part as far as agricultural development is concerned.

According to Makadho (2002), access to information is restricted among irrigation farmers. These affect their competitiveness. There is need to rise access to knowledge on irrigation farming. This means that agricultural workers in rural areas should work hand in hand with farmers and should provide training programmes on how to ameliorate productivity, quality and competitiveness. On the other hand, it might be argued that, it is not necessarily the fact that agricultural extension workers are not working with the people but the people themselves might not be willing to participate in the training programs rolled out by the government. Hence this case is Janus headed in nature and should be treated with much introspection. Most rural people are normally kept busy with projects that quickly bring bread on the table even though they are not sustainable.

2.5 FOOD SECURITY IN THE WORLD

According to Anderson and Cook, (1999), in development circles in the 60s and 70s, the notion of food security initially showed up as the ability to meet food needs consistently. However the mismatch between total food supply and the number of people with access to that food came to light much earlier and tremendous efforts to correct this anomaly have been going on since the beginning of the twentieth century. Today there is sufficient food in the world to feed the world's population but still many families remain the victims of food insecurity due to accessibility issues. Agricultural production worldwide has grown at a pleasing rate, more than world population did over the last few decades. Simon (2012) claims that at present there is more food, at least in terms of macro-nutrients, accessible to feed more than today's world population; there is more food than ever before. However, what discredits Simon's assertion is the fact that, the number of people victim of food insecurity is reported to be growing day in and day out. The proportion of the overall population suffering from scarce amounts of food is still outsized.

Different scholars refer to people having insufficient food as "suffering from hunger" or as "food insecure", these two groups in principle are the same. The difference between the total number of people victims of hunger and the proportion of the total population being food

insecure emanates from the differences between the strides taken by the international community at the 1996 World Food Summit held in Rome, on one hand; and at the 2000 Extraordinary Meeting of the United Nations General Assembly endorsing the Millennium Development Goals (MDGs), on the other hand. These two terms, hunger and food insecurity, are used interchangeably with food insecurity being the most preferred term by scholars. According to FAO (2014), there is sufficient food available in the world, now the question remains on the effective distribution of that food. Most of the first world countries have food surpluses, while the developing world hosts the food insecure populations. In SADC and its member states, Zimbabwe in particular; there may be sufficient food at regional and national levels yet many households at grassroots level are yelling for food. This is because of the fact that, if households have not produced adequate food in a specific season, they may be incapable of purchasing food to meet their daily food requirements. Opportunities to interchange work for food may also be scarce, making food unreachable although it may be available. Programmes such as, food aid programmes contribute immensely to food availability in times of poor harvest and food shortage.

Food security has been a cause of concern at international level from the 1930s when the League of Nations tasked its health division to give a report on the availability of food in the representative countries. Shaw, quoted in (Simon 2012), resonates that the report showed an acute shortage of food in poor countries while developed countries had surpluses. The need to address food insecurity at international level was observed by the United Nations following the post Second World War period in Europe. The United Nations, through its newly established arm, Food and Agriculture Organisation (FAO), planned its first World Food Survey in 1946, whose prime objective was to know whether there was sufficient food for all people on earth. The conclusions were that, in 1945, at least 33% of the world population could not get enough amount of energy (through food). Since then, the Food and Agriculture Organization embarked on a serious fight against hunger and food insecurity, both at international and regional level and supported individual nations towards this end. According to FAO (2012), by 2050 the world's population will reach 9.1 billion and most of the increase will come from developing countries. To address this forecasted increase in population, agricultural production has to increase to meet the expected demand by improving food availability. Sustainable development and economic growth will ensure that most people have access to food by way of jobs and income. Manyame (2002) cites a number of factors that

need to be in place for food security to be achieved and these include land, water, information, human resources, technology, and extension services among others.

2.5.1 THE ROLE OF THE INTERNATIONAL COMMUNITY IN FOOD SECURITY

Ensuring food security has been a prominent feature of global agreements since World War II, and some of them set ambitious targets to address food insecurity. For example, the World Food Summit of 1996 sought to halve the number of the undernourished by 2015, while the Millennium Development Goals (MDGs) set in 2000, aspired to reduce by half the proportion of people suffering from hunger (McDonald 2010: 4). During the previous decades, many countries were satisfied in terms of food security because they were relying on cheaper imports that they thought would be, always or usually, available (Behnassi & Yaya 2011: 106). In this context, local food production was not often necessary and many developing countries have consequently reduced it by reference to international donors' instructions. Some of the structural adjustment policies include:

- (a) Dismantling marketing boards and guaranteed prices for farmers' products;
- (b) Phasing out or eliminating subsidies and support, such as fertilizer, machines and agricultural infrastructure; and
- (c) Reducing tariffs of food products to low levels (Behnassi & Yaya 2011:107).

However, the high price of many food items in recent years makes food imports increasingly expensive, and intensifies inflation of food prices in local markets. There have also been cases of shortages for some countries placing orders. For example, in the case of rice, it has been found that the supply is not guaranteed, sometimes because of export restrictions by the exporters of the food items.

Agriculture has important functions to perform in the economic development of most developing countries (Haruna & Umar 2011). However, many agricultural economists believed that agricultural increase could only be achieved with the introduction of new technology in traditional agriculture (Mohammed, *et al.* 2005). The introduction of simple technologies in the form of improved seeds, agro chemicals, fertilizers and improved cultural practices is one of the quickest ways of improving agricultural production technology raising the productivity of agricultural resources (Haruna & Kushwaha 2003). Although a lot of efforts have been made to improve agricultural systems, in order to increase the agricultural production both globally and internationally, it is still necessary to investigate how the

vulnerable poor members of communities benefit from the increase in agricultural production.

To coordinate international responses to the food crisis, Ban Ki-Moon, UN Secretary-General, set up the High-Level Task Force on the Global Food Security Crisis in April 2008. It brings together the heads of UN agencies, international financial institutions and the World Trade Organization (WTO). It met nine times from May 2008 to June 2009. In July 2008 it adopted a Comprehensive Framework for Action with two major objectives: provide food assistance to the most vulnerable and reinforce their food security in the long run. In his closing speech to a high-level meeting on food security for all, in Madrid on 27 January 2009, the UN Secretary-General proposed adding a third axis, the right to food: “We must continue to meet urgent hunger and humanitarian needs by providing food and nutrition assistance and safety nets, while focusing on improving food production and smallholder agriculture (FAO, 2018). This is the twin-track approach taken in the Comprehensive Framework for Action. WFP, (2017:34), “We should be ready to add a third track, the right to food, as a basis for analysis, action and accountability.”

The importance of the right to food in the fight against hunger was recognized in the guidelines unanimously adopted by the FAO Council in November 2004. It is, we might assume, to be as important as food assistance and food security in the UN approach to the crisis. These three pillars could form the grounds for a new world food order for battling hunger (HRC 2008b, 32-35).

Unfortunately, despite their willingness to coordinate activities, international organizations are still defending quite divergent approaches on this question. WFP, (2016:35), “The UN Secretary-General is surrounded by parties supporting often contradictory agricultural policies, some of them (e.g. the WTO) calling for a full liberalization of trade and others (e.g. FAO) advocating the protection of smallholders’ right to food.”

2.6 THE MYTH OF FOOD SECURITY: A WORLDWIDE PERSPECTIVE

It has been more than two decades since the world was hard hit by food panic exacerbated by an extremely unusual event: a series of simultaneous droughts in the former Soviet Union and the USA, which greatly affected global supply of grain and increased prices. This phenomenon increased predictions of a Malthusian scenario whereby food needs are outrunning supplies, rising prices and massive hunger and destitution. Gupta and Wright

(2017) argue that, the food panic has undoubtedly contributed to support the case for public and private investment in agriculture and sustained a gigantic expansion of the area under irrigation, a process that had its roots in the late 1950s. Rosegrant (1995) resonates that, the global irrigated area rose over the same period from 168 million to 215 million hectares. This clearly indicates that irrigation development was growing at a tremendous speed.

A decade ago, when the Irrigation and Drainage Systems was ushered, these Malthusian predictions were confounded. Gogo, (2012), points out that, northern countries recorded a significant growth in agriculture production and had surplus stocks of grain. Indeed, farmers were assisted with subsidies to encourage farmers to take land out of production. The vibrant green revolution also cascaded down to Southern African countries, which had seen them benefiting from the massive green revolution in wheat and rice production gains. In consequence, the prices of food on the market had remained low. The irrigation boom was later affected when there was a sudden drop in product prices and a less rewarding irrigation investment. Nevertheless, there was increased cost of production as evaluations revealed construction cost overruns, delays in project finishing, and slower than predicted increases in area and yields of crops. Rosegrant (1995) propounds that in the African continent the index of irrigated area expansion fell to 1.7% per year, with a global area totalling 248 million hectares. There was a noticeable adequate supply of food over the past decade, and at least until 1995, there were historically low food prices. Even compared to the recent run-up in cereal prices, prices remain far below the levels of the mid-1980s.

However, there are certainly real and important misdistribution predicaments with several hundred million, perhaps nearing a billion people having inadequate resources or income to ensure access to secure food supplies, among them nearly two hundred malnourished preschool children. Despite these acute regional food shortages and sporadic malnutrition, the relatively satisfactory aggregate food supply situation has birthed a widespread complacency about food security. The expert consensus is that, food production can and will forever keep up with growth in demand. How should various governments and others react to this analysis and prediction of continuing and growing food insecurity? We should recall here that, these experts were wrong twenty years ago about real food prices rising, since today they have fallen. Here we are dealing with a risky situation where the negative effects of albeit unlikely, downside event, lessen productivity growth and worsening food security will create more

hardship than the more likely positive events. This might be termed rapid growth and food surpluses.

Moreover, given the significant decline in public expenditures since the early 1980s on irrigation, agricultural research, and other productivity enhancing investments, the probability of occurrence of downside events appears significantly higher than the probability of occurrence of positive events. In these circumstances, we should adopt what environmentalists term “the precautionary principle”, and give greater weight and thrust to the downside risk and take action to avoid it. The additional costs incurred to avoid harmful negative effects of food shortages and exorbitant prices can be regarded as an insurance premium. Currently, the low food prices may not continue indefinitely, because on the supply side there are some important food productions systems that are not sustainable. In addition, there are also worrying signs that the various actions necessary to anchor a supply, growth on the remaining high potential and other farms. It is going to be noticed that, several water development problems feature in the downside food risk scenarios.

2.7. MODELS FROM OTHER COUNTRIES

2.7.1 COMMUNITY DEVELOPMENT

The aim of this model was to offer a prearranged community driven intervention to assist a community's capacity to manage circumstances and solve problems of their everyday life. The goal is also to make them confident among people to allow them to deal with their everyday problems efficiently and to solve other problems that are beyond the local community.

The Indian government applied the idea of community development initially in a bid to fulfil the thrust of National Rural Development effort. The Ford Foundation specialists came up with the idea as an answer to the famine in India in 1966. The reasoning was exhaustive combined efforts might inspire the agriculture sector in India (Vernon, 1984, Cohen, 1987:13). The scheme was effective in executing a self-help method to increase production in agriculture and reinforce infrastructure in rural areas in the Etawah District. Following, the idea was initiated in over sixty nations in Latin America, Asia and Africa. Conversely, on new areas, the methodology was not as efficacious. This was ascribed to the top down strategy employed and the crash of the participatory organizational structure. Lastly, approximately 1965 the self-help method was substituted by new proposals of integrated rural development (Korten, 1980; Cohen, 1987).

2.7.2 INTEGRATED RURAL DEVELOPMENT

The notion of 'integrated rural development' emerged through the ascent of the "system analysis" standpoint. In accordance to this standpoint, the source of rural poverty in rural areas was supposed to be the absence of combination of rural areas with the international and national socioeconomic and political systems (Kuhnen, 1998). By way of explanation, people in rural areas who do not engage themselves actively in the process of development as consumers or as producers of services and goods end up stuck in poverty.

The major thrust which defines 'integrated rural development' idea is to amalgamate, economic, political and social extents of growth, all of which are vital to deal with poverty in the rural setting. The 'integrated rural development' can be viewed as target oriented and methodological strategy where the aim is to include the overlooked people of the poor in rural areas in the process of improving well being of humanity. Hypothetically, the

‘integrated rural development’ considers different political, social, economic, and technical variables, to achieve the target of eradicating poverty in rural areas (Cohen, 1987; Kuhnen, 1998).

Ethiopia was one of the countries that implemented integrated rural development. The specific project was named the Chilalo Agricultural Development Unit (CADU project 1968). Other examples of implementation of this approach are: the Puebla Project in Mexico (1967), the Vihega Project in Kenya (1970), and the Lilongwe Project in Malawi (1968). The strategy was increasingly criticized “as being too costly to justify the limited gains, too complex to be administered and politically powerless to be effectively coordinated” (Cohen, 1987: 18). Lastly, in the early 1980s main two-pronged and polygonal donors distanced themselves from this method by advocating integrated rural development an impracticable strategy to enhance progress in rural areas (Cohen, 1987, Ellis and Stephen, 2001). As follows, we will elaborate on the experience in rural development in Ethiopia.

2.7.3 EMERGENCE OF THE PRODUCTIVE SAFETY NET PROGRAM (PSNP)

Ethiopian government formed the PSNP as a program for social assistance for people that cannot live for themselves for the entire year or parts of it. The teething troubles that face poor folks to sustain themselves might be affected by different processes: living under chronic or transient poverty, trade liberalization, stagnation policies, economic austerity, and economic transitions. Regardless of the sources of the phenomena, the program helps people who are poor by letting them to partake in diverse communal activities. This would be what we now know as ‘public work’, this concept commenced in 1930 in countries from the west throughout the Great Depression (Subbarao *et al* 1997: 676-678).

At present, public works such as irrigation canals construction, road construction, road and rail network development, tree planting, and protection of the environment perform a significant function in countries that are still developing since they generate employment prospects and / or benefits that stabilize the poor. One of these programmes is Safety Nets, which works on poverty alleviation; it was developed by the World Bank with the aim of protecting the underprivileged from the decisions employed by the poor households to mitigate food insecurity. Such decisions could be: lasting migration, the sale of productive assets and prostitution (farm tools), or to let children not to go to school so that the school fees could be used for buying food. (Bishop & Hilhorst, 2010). Safety Nets has been put into

operation as a permanent feature of social policy in the former Soviet Union, the Ukraine and Poland as transfer of cash ,subsidies in kind, public work, etc. This has brought a different outcome in Ethiopia, where Safety Nets has been employed as a provisional answer to food crises (Bishop & Hilhorst, 2010; Subbarao *et al* 1997: 3-5)

2.8 LAND OWNERSHIP IN COLONIAL ZIMBABWE

Zimbabwe's colonization can be traced back to 1890 through the British South African Company (BSAC), fronted by Cecil John Rhodes. As reported by Ranger (1981), the BSAC embarked on exploring minerals when it established that the soils and the climate were appropriate for production of agricultural produce. The colonization of Zimbabwe caused prospects in agriculture, and white race, especially from England, came to live in the protectorate. It was the late 1890's, when the local settlers revolted against the BSAC and white inhabitants who had seized the land. The original population of Zimbabwe was composed of the Karanga and Ndebele cultural groups, which constituted eighty percent and eighteen percent of the local inhabitants respectively. However, on a sad note, the uprisings caused by blacks against colonial settlers were overpowered during the Chimurenga one war due to their opponents' use of better armaments (Peel & Ranger, 1981). The downfall of the black people evidenced the commencement of a chain of widespread expropriation of land, substantial dislocation of the local inhabitants from land, appropriation of their cattle and utilization of their effort.

Numerous bigoted and tyrannical laws and policies were put in place to warrant total defeat of the local inhabitants. More so, race became the most crucial variable in many features of the majestic economy and society, showing considerable disparities between whites and blacks. Consequently, the whites (who constituted 4% of the country's population) controlled over 90% of the economy in terms of possessing the means of production (Peel and Ranger, 1981). Black people (which constituted ninety six percent of the total inhabitants) ten percent of the economy was only controlled. Besides entrenching in racial land imbalances, the white settlers also controlled politics to an extent that they started depriving the blacks the freedom of assembly, the right to participate in politics and the freedom of association.

The black people had also multiple deprivations ranging from restricted access to land, essential public services such as education and health to other social facilities; whilst, the top services were conferred to the white colonist communities. Coloured and Asian communities

had access to the medium-range services. More so, the blacks experienced discrimination at places of work. Furthermore, growth was also ethnically motivated in favour of the white people. For example, the presence of elementary infrastructural amenities such as roads that are tarred and piped water were only located in white commercial farms or in urban white residential areas. In cities and towns, black people were restricted to growth points with restricted recreational and infrastructural services, which were no-existent in rural areas, which were a residence to the majority of blacks. The assertions above show how blacks were usually regarded as citizens of the second-class. This racial segregation clearly indicates that, irrigation farming in rural areas was a non-existent since in rural areas there were too many people, but acute shortage of infrastructure; this situation made black people lag behind for a long time in as far as sustainable food security is concerned.

Chazovachii (2003) argues that black women in particular, were facing two pronged discrimination because of sex and colour, that is, in society and at the workplace. What drove the military fronts of the ZANU-PF and ZAPU to confront the colonial rule between 1960 and 1979 was the ethnically embedded disparities, unfairness, skewed access to resources, and rejection to fundamental freedoms. The liberation war, in particular the Chimurenga two, was prolonged and cruel on both sides. In the long run, in 1965, Douglas Smith, who had announced self-rule from the Administration of Britain, agreed to a political resolution in London at Lancaster House, United Kingdom, in 1979, which led in the political sovereignty of the country on 18th April 1980. Nevertheless, this accord was limited in scope and only presented the new government with restricted legitimate options for restoring the “land question” since it was guided by the “willing buyer – willing seller” ideology for the first ten years of self-rule. The dictates of the Lancaster House protected successfully the interests of white settlers by preserving their firm grip on the economy and also the status quo on land. When the economy was in the hands of the whites, it was very hard for the blacks to embark on a robust irrigation agriculture that could see a black person getting out of the net of food insecurity. On the other hand, when the land was in the hands of the white men, Zimbabwe was named “the bread basket” of Africa. It is the major thrust of this study to bring back Zimbabwe its former glory of food security by developing a specific food security implementation model that addresses food shortages in Matabeleland South Province of Zimbabwe.

2.9 THE FAST TRACK LAND REFORM PROGRAMME (FTLRP) AND FOOD (IN) SECURITY IN ZIMBABWE

It results imperative to recall the definition of the expression ‘food security’ to clearly establish the nexus between FTLRP and food shortages. As mentioned before, World Bank (1986), ‘food security’ means access by all people at all times to enough food for an active and healthy life. In addition, the (FAO, 2012) views ‘food security’ as, when all people, at all times, have physical and economic access to sufficient, safe, and preferred food for an active and healthy life. Thus, ‘food security’ is when the whole population in the nation can access to adequate and decent foodstuffs for their usual well being. It was until the year 2000, when Zimbabwe ended up producing regular excess grain for sell abroad, which gave the nation Zimbabwe that it was the bread basket of Africa.

Before the Fast Track Land Reform Program in 2000, from a nationwide perspective, Zimbabwe was in a state of food secure because farmers were producing sufficient granule to accomplish the nation’s necessities in better years. Quite the reverse, the foodstuff surpluses gained prior to 2000 masked the food shortages faced by the deprived. With the advent of self-rule in 1980, the Zimbabwean Government launched tactics to augment the production of grain out of moved farmers and communal grain manufacturers. Some of the approaches were: ameliorated producer prices for maize, and the increase in agricultural extension services coverage. Institutions, such as the Grain Marketing Board (GMB), controlled by the government, stated situations for rising maize output in the communal areas. Notwithstanding its attempts to redress the long-standing ethnically unbalanced land possession in Zimbabwe, the FTLRP is held responsible for harmfully affect food production in the country. Accordingly, the FTLRP programme coincided with a sudden fall in agricultural production resulting in food insecurity in the country. Actually, the implementation of the FTLRP generated food insecurity in the nation thus pushing the responsible government to depend on the donor community and to purchase food from neighbouring countries.

So far, it would be right to determine that the years after the 2000s were characterised by: absence on the market and inadequacy of food, expensiveness and compromised quality of food availability, and low supply with changes and deficiency from one spell to another. Yet the FAO (2002) recognized the effect of the land redistribution saying that, the FTLRP stood a danger to agricultural production at national level and food security in the near future, and made the condition of critical civic road and rail network impracticable to attain within a realistic period. As a consequence, Zimbabwe violated its commitment to enshrine the right

to food contained in the Covenant on Economic, Social and Cultural Rights of 1991 (to which it is a signatory). Wolmer (2009) states that circumstances in the year 2000 in Zimbabwe were unhelpfully popularised for its explosive land query, and, the government was accused of its radical and seemingly racial prejudiced strategy used to tackle the land question.

In the course, FTLRP overlooked the interests and rights of the previous arable farm employees who stayed on the commercial farms. The redistribution of land and following expulsion of commercial white farmers had unfavourable impacts on production especially in agriculture. As a strategic move, the government could have excluded the commercial farms, since they hired big numbers of employees. The consequence of such an approach pushed huge numbers of people in the state of widespread joblessness and despicable poverty. Furthermore, this strategy minimised the production of food. The new occupiers failed to uphold tonnage levels of production previously attained by the white farmers; they did not even defend and check the equipment on the farm which they inherited in the farms. Sachikonye (2012) posits that, a considerable amount of the new inhabitants of the commercial agriculture areas did not seriously take farming, aggravating the situation and causing a sudden drop in production of food. Kojo, *et al*, (2008), affirm that production in agriculture suffered because of the inter-related drop of the macro-economic situations and their consequences on the provision of agricultural inputs. Despite the function of the function of other variables regarding food security, the FTLRP was the major impediment towards the falling-off in production of food since the government overtly executed its duties not following the law creating a lot of uncertainty and insecurity.

Therefore, we can determine that the government was responsible of the full force towards food shortage increase in Zimbabwe. Bernstein (2002), affirms that the latest relative political examination of redistribution of land plans have also treated the Zimbabwe FTLRP as a strange irregularity, schemed for thin political motivations or electoral supremacy purposes. The manner the government administered the FTLRP was an important constraining variable on local production of food and the capacity of millions of individuals in Zimbabwe to retrieve enough food. The reform caused damaging impacts on the nation's food security besides ensuring a quick transfer of land to black people. In accordance to UNDP (2002), the Zimbabwean government employed the accidental land reform as an approach for political convenience since the FTLRP was shortly launched after the ZANU PF government. This party has been in rule since self-government in 1980, and faced its first major crush in a

national referendum held to alter the constitution. Because of that, the government was coerced to increase its interests in politics of strengthening its base of support at the expense of social and economic objectives, which among other things include alleviation of poverty. Apart from the effect of the FTLRP on food security in Zimbabwe, the World Food Programme (WFP) and the FAO recognized other contributors to food insecurity; these are climatic factors, economic decline, and HIV/AIDS pandemic.

Actually, strategies and government policies in the execution phase of the FTLRP had a robust pessimistic effect on the food security since it tainted the picture of Zimbabwe in the view of the global village. Furthermore, Theron (2011) posits that the land reform consisted of fast decrease in production since year 2001 for products created mainly by commercial farmers with production lasting at around a 3rd of pre-2001 levels in 2004. Likewise, the FTLRP was speedily begun without a well-ordered plan (Phase 11 of the Land Reform Programme). In his 'Land Audit Report' Utete (2003) spells out that the main challenges were an outcome of deficient organizational competence to execute the FTLRP. These came into existence as absence of various subjects: planned use of land, basic infrastructure development, settler placement and selection, inputs provision, and other types of help to allow inhabitants to make a considerable role on their new farms. In fact, Utete (2003) resonates that, FTLRP manifested in multiple possession of farmers by influential people who had insufficient experience in agriculture. The challenge was further worsened by the destruction or sabotage of infrastructure such as irrigation equipment and building structures during the compulsory removal of white farmers.

In addition, inconsistent supply of power, particularly in large and small scale commercial agriculture regions, was a discouraging aspect that sustained to unsettle irrigation schedules. Electricity scarcity disturbed winter cropping over the preceding decade resulting in decreased production of wheat. The production levels described above, mainly caused by the accidental start of the FTLRP, are evidence of food insecurity in Zimbabwe. An intense drop in Zimbabwe's agricultural production cannot be entirely laden on the Fast Track Land Reform implementation and policies alone. Food shortages were further intensified by lengthy droughts that consistently affected Zimbabwe. Furthermore, the selling of the major food crops, among others wheat and maize was dominated by the Grain Marketing Board. The GMB priced food crops at untenable and idealistic prices, which were not proportionate with the ever rising expenses of inputs and farm equipment servicing. Put separately, these

prices were quite rigid against a run-away inflationary milieu, which compelled farmers to function at a deficit.

In reaction to the defies that faced them, a number of farmers decided to sell their grain on parallel market in order to profit away from the reach of a lot of citizens, therefore rubber stamping food shortages in the state. By supporting this idea, Sithole (2006), argued that in 2006 those farmers who had produced maize (Zimbabwean's staple food), could not sell their farm produce through the GMB since the Z\$33,000 (US\$132) per metric ton given by the marketing board was unprofitable and by so doing they favoured to sell on the parallel market for lucrative prices. Poor timing was also witnessed in the allocation of GMB agricultural inputs. It became normal that cultivators got inputs for farming belatedly into the rain period causing severe drastic impacts on production competence.

The GMB shifted the blame to the government's delay to give monetary possessions essential to purchase and timely apportion inputs such as seeds, fertilizers, and chemicals to farmers. In accordance to the GMB, Zakaria (2012) echoed similar sentiments, by acknowledging that a number of farmers benefited inputs well after the suggested dates of sampling and element of this was necessitated by the absence of discussion among farmers institutions which on top of that, were not co-ordinated very well. Zakaria adds that the circumstances was aggravated by the reason that the government encountered critical challenges on resources to satisfactorily help the farmers who were newly in the form of infrastructure development and infrastructure for farming such as dams, irrigation and roads. Undeniably, the recipients of land reform wanted more than just land in order to produce more. Some of the farmers experienced seed shortages, draught power, top dressing fertilisers, and compound D. The decrease in agro-industry ability to supply inputs, mainly due to the shortage of currency from other countries and control of prices caused the shortages (Kojo 2008). To worsen things, the government's subsidies in agriculture and other strategies were affected by incapacity of resources, lack of monitoring and evaluation policy, and deficiency of foreign currency. Nyakazeya (2012) asserts that at hand distribution shortcomings by GMB, which did not include the most worthy farmers even where resources were made available.

In situations where the needed products were available on the market, these were overly costly and sometimes sold by unworthy farmers causing failure to arrive at the anticipated production levels in food crops. The GMB was unsuccessful in partially give agricultural

inputs because of corrupt politicians' doings. The inputs received by dishonest politicians returned to the parallel market at outrageous prices. Computerization at GMB was a major impediment that led to numerous entries by some corrupt parties who got massive inputs quantities, which they ended up not fully utilising. The majority of the fertile lands that were formerly owned by white commercial farmers started to be occupied by powerful government officials who were named cellular-phone farmers since there was lack of commitment by farmers. IN the same page, Sithole (2006: 19) pointed out that, "...most of the resettled farmers under the FTLRP are called cell phone farmers because they visit their farms only at weekends of braais or barbecues; they sell their subsidised cheap government fuel on the black market for huge profit. Instead of powering tractors and producing food, they sell it for quick and easy profits."

Corruption largely influenced the successful execution of the GMB mandate over the years. For example in Guruve, Mashonaland East Province, communal farmers protested about rampant corruption in the allocation of fertilisers at their GMB depot. Many influential people clandestinely collected as much as 300 bags of fertiliser per person and when the distribution was made public, each ward was getting 50 bags (*The Sunday Mail*, January 8-12, 2012). There was no concern of the volume of the land under cultivation, and farmers with about 27 hectares got two bags of Compound D fertilizers per head. Furthermore, those who habitually benefited from the government farming inputs plan, sold the fertilizers for immediate profits. Notwithstanding the fact that the diesel, coming from the army, was free of charge, villagers were made to pay between US\$4.00 and US\$5.00 per 50kg for transportation of fertilisers (Mwonzora, 2009).

Further to that, no records were kept to register the find out of each recipient and the amount given to a certain recipient. Expressed in a different way, there was no monitoring and evaluation instrument to make sure there are checks and balances. In addition, the unprepared, quick execution nature of the FTLRP in Zimbabwe generated a fertile plot for corruption and dishonest choice of beneficiaries picking the ones with no farming knowledge and skills. The FTLRP was seen as a narrowly political attention-grabber for ZANU PF because of these weaknesses. The strategy did not have proper planning; otherwise it was supposed to have improved production in the long run. In view of this, Amnesty International (2004) established that the political philosophy behind land grabbings appears to have been to, "occupy first, and worry about production later." Moreover, the Mass Public Opinion

Institute (MPOI) argues that, Zimbabwean citizens considered that the land reform was unplanned, speedily done and flawed. The period land was grabbed without recompense; fiscal organizations refrained from coining value to land for farming because of the nature of the land possession scheme. This was evident in the big number of A2 farmers who possessed proffer letters that were not received by financial organizations as collateral security (Zakaria, 2012).

Alarmingly, this reveals that the land title deeds that farmers could have obtained were not given to them that could have acted as collateral security needed by financial organizations before they could offer money to the farmers. Assumed this predicament, farmers went without adequate inputs; and as a consequence there was reduction of productivity of food crops and other agriculture produces. Previously to the rise of the FTLRP, the donor world helped greatly to improved production of food. The execution of the intervention spoiled relationships between the government of Zimbabwe and donors. Non-state actors condemned the government for violation of human rights linked with intimidation, deaths and human torture during the unplanned and ad-hoc Land Reform Programme. As a result, access to aid from non-state actors in food aid and farming was harmfully exaggerated as the non-governmental organizations scaled down or completely suspended Zimbabwean operations. The government blamed the non-governmental organizations for intruding into the internal affairs of the country and began to meticulously inspect their operations fearing that they were menacing nationwide independence. On the 4th of June 2008 Care International, among other humanitarian agencies, was suspended from their field relief services on the accusation of political activism, this is described as the peak of the resentment between the government and the government.

After a close analysis of Zimbabwe's food shortage problem, it is clear that poor planning and poor execution of FTLRP ignited it. It shows a way forward can be achieved by fighting the very political defies that led to the weakening of production of food in the country. Consequently, without the appropriate solutions in politics, food shortage challenges in Zimbabwe will continue. To address the problem, a policy model should be started in order to encourage a sustainable production of food structure in Zimbabwe. There is extreme need to overcome the challenge through the design of an efficient evaluation and monitoring instrument for the distribution, procurement, reimbursement and use of agricultural inputs by extension officers who are experienced. Empowerment and protection of extension officers is

very crucial as the can manage to deal with unscrupulous politicians. The New Political Dispensation led by President E. D. Mnangagwa has already made a call to farmers who are able to utilize land in a productive manner to partner with the current occupants. It is certainly, a brilliant idea to partner with farmers on an ability-based approach. The new dispensation believes that, economics should lead politics. However, during the mandate of former president Mugabe, politics was leading economics and this plunged the country into a food insecure zone for a long time. They should be allowed to carry out an all-inclusive audit process of land, which must be fulfilled in order to instil appropriate strategy for supporting worthy beneficiaries of the Land Reform Programme with the ability to produce more. It can be acknowledged that not every citizen is good at farming; therefore those people with other expertise can be assisted in other avenues of the economy such as transportation and mining. This will in return give people income to become self-sufficient and fend food for their families.

Critically looking at the issue of ‘food insecurity’ and FTLRP, it can be deduced that, to a greater extent, the programme had a negative bearing on the food security status of Zimbabwe. This was mainly caused by the unplanned and haphazard way of distributing land to beneficiaries. Further, this study has also identified a huge gap if not the weakness of the government in addressing food insecurity using short-term measures in the country. It is the major focus of this study to invest heavily in bottom up approaches whereby people affected by food insecurity are involved to address the problem, rather than just dishing out land and food aid to the people.

2.10. THE LAND REFORM EXERCISE AND ITS IMPLICATION ON FOOD SECURITY

The Land Reform and Resettlement Programme (LRRP) of 2000 was one of the ZAPF’s goals; the resulted was the expansion of the prospective agricultural production base by means of land restructuring to achieve more people. With this programme, the GoZ acquired approximately 11 million hectares of land making 14.4 million hectares in total of the land redistributed since independence (NIB, 2008: 5). The government’s goal was to relocate a total of 350,000 indigenous families under the A1 and A2 models as part of the LRRP. The process granted more weight to the A1 settlement model in order to de-congest the borderline communal regions (NIB, 2008: 5).

To address issues of land access in the region is significant because Southern African economies highly rely on land-based agricultural production, therefore access to land is an important factor of 'food entitlements', particularly for persons without employment and consequently without income. Sadly, the unreliable land tenure security and unequal delivery of land tend to be delayed, rather than ameliorated, by the currently in place land policies in Southern Africa. In accordance to Hendriks and Lyne (2003:47), the issues of insecure tenure and deficient physical and legal infrastructures limit the supply of tradable and non-tradable agricultural commodities in rural areas. A disadvantage of running land as communal areas is the increase in deal expenses in all markets, which denies prospective farmers access to land, inputs, credit and buyers. Furthermore, the region made available less arable land throughout the past forty years than in the years before. Moyo (2006) states that the per capita available arable land in all SADC countries shortened from 1965 to 2000. As a consequence, the quantity of arable land in the area decreased from 0, 47/ha in 1965 to 0, 22/ha in 2000.

In a recent publication of the South African Human Sciences Research Council, SAIIA (2004) observes that policies related to land reform have not been applied consistently in the Southern African region. Neither contemporary nor colonial practices have ever been alike. Another main issue in Southern Africa is the inability to incorporate tenure issues and land reform,, meaningful land-use policies that cover all land, whether rural or urban and resettlement programmes. Land reform policies ought affect non-agricultural land as well, this is because in many countries fertile soil is an extremely scarce resource to be made available to everyone. Barely 7% of all land in Africa is arable, whilst, in Southern Africa, this proportion is just 6%, with Malawi having the utmost sum at 18%, and Botswana the bottom most, at 0.5%. The land reform debate is intensely public in two other SADC countries: Zimbabwe having 8% and Namibia 1% of fertile land, only sufficient for the growing of crops. SADC and other regional organizations have yet to declare their view on land reform.

The United Nations states that the principal forms of land tenure insecurity consist of: i) the insecurity of minority groups (as in Botswana and Malawi); ii) overlapping or unclear land rights (as in South Africa); iii) overcrowding (as in Lesotho, South Africa and Malawi); iv) land alienation in the form of leasehold (as in Malawi, Mozambique and Zambia); v) the insecurity of farm workers and farm labour tenants (as in South Africa); vi) corrupt and exploitative administrative practices, and vii) limited women land rights which affect all

countries in the region (UN, 2003:45). In freehold, land rights include the ability to rent the land to others, to sell the land, and to use the land as collateral for a mortgage. Previous to colonization, the prevailing form of land tenure system was customary. Nowadays, practically all nations in the region have a dual land tenure system, where customary or communal system co-exists with statutory private, freehold and leasehold land rights.

According to the UN (2003), Mauritius (77%) enjoys the highest percentage of land ownership under the statutory tenure system, after is South Africa (72%); Namibia (44%); Zimbabwe (41%) and lastly Swaziland (40%). SAIIA (2004) observed that state tenure went from 100% in some countries (Mozambique and Zambia), to 1% (Zimbabwe), or 0% (Namibia). With regards to Zimbabwe, at the time of this study, 85% of land was state owned. At the end, it can be argued that, the Fast Track Land Reform Programme (FTLRP) brought more harm than good. In the 1999/2000 agricultural season food production in the country was adequate, eventually after the Fast Track Land Reform Programme food availability in the country dwindled.

2.11. AGRICULTURAL RESEARCH AND FOOD SECURITY IN ZIMBABWE

For years, Zimbabwe has been the breadbasket of Africa in terms of food security. Surprisingly, for the past decade, Zimbabwe is relying on food imports. The amazing question on this issue is that of development actors' role: are they investing enough in the agricultural research, or the government is just offering lip service to the industry of Agriculture? The issue might not be the nation's efforts to raise productivity in agriculture; there might be other factors that are beyond the nation's control, such as erratic rains caused by climate change. Climate change has become the topical issue in the region and world over. It is in this debate where it can be argued that, it is very true that the nation is failing to invest enough in Agricultural research and this has resulted in low productivity on our farms.

Ryan and Spencer (2001) propounded that smallholder farming systems in Zimbabwe are confronted with poor harvest production and recurrent food insecurity, especially in the semi-arid regions where most of the smallholders live. Parallel to poor rainfall, a key constraint to crop production is modest soil fertility, caused by inherently poor soil quality and wrong soil management practices (Sanchez 2002). Though the soil fertility was not good, the government lacked interest in providing education to farmers in arid regions such as Mwenzezi district and the whole of Matabeleland. Mutoko (2011) argues that people in

Mwenezi district were not given education on the types of crops to be grown to eradicate hunger and extreme poverty. Instead, the farmers in this district were growing long seasoned cultivars that needed a lot of rainfall and take time to reach fruition. This was against the idea of improving food security in the country.

Rigorous farming systems are required in order to develop suitable technological interventions to manage soil fertility. Other methods such as lack of crop rotation are an easy and cheap way that will help to improve productivity on our farms. However, the nation is putting less effort on training agricultural extension officers to help the already settled farmers under the fast track programme. Mapfumo and Giller (2001) further postulate that, farmers are facing a restricted use of soil improving nutrient sources, such as manure and fertilizer, mainly due to high cost and shortage. This can be further supported by the skyrocketing prices in fertilizers and seed. The nation should have intervened and subsidized the cost of fertilizer and seed, so that they become very affordable to the farmers. Moyo (2009), postulates that the Farm Mechanization Program by Gideon Gono was a brilliant strategy, but was hijacked by political heavy weights and marred with a high degree of corruption. The deserving people ended up not getting this farm equipment, and fertilizers were being sold at a very cheap price at the expense of agricultural production in Zimbabwe.

More so, the gazetted selling price at the Grain Marketing Board has been rather prohibitive than encouraging. The selling prices by farmers for maize or cereals to GMB are very low. Even the cotton companies such as Cottco, Taraffin, and Cargill are buying the product at a very low price, which is very discouraging. Of late, the President of Zimbabwe has unveiled the support scheme code named Presidential Input Support Scheme to give farmers seed for free. However, on this note, the seed again was distributed in most areas on political grounds, but not on ability based principles. The government on this issue is not investing much in agricultural research; it rather must put flexible policies that should protect the farmer against dubious buyers. Chigejo and Masiwa (2003), argue that there was growth without equity in Zimbabwe's Land Reform because marginalized people lacked bargaining power. The marginal farmers are characterized by infrastructure inefficiency and deficiency, for example poor road networks, and bridges, just to mention a few. Farmers were left to travel long distances to sell their produce where prices were determined by buyers. Miserably, these prices were very low, not rewarding and unfavourable for the farmer to get back into the fields the next season. This was a double blow on the jaws to the marginal farmers since they did not have a bargaining muscle. However, though some farmers could find their own

transport to ferry the produce to markets, still they did not have bargaining power. The buyer was the one who could determine the price, hence farmers could not see any sense of farming, motivation and interest dwindled and this lessens agricultural production in farms.

The land question is another issue that has taken a dramatic stage on the way it was distributed. The Cabinet Committee has been in place since 1985. Its role however, remains ambiguous when the various command centers, committees, task forces, and working parties are added to the organizational structure for land identification, acquisition and settlement. This complexity created hitches in defining responsibilities for land policy and implementation; it is difficult to decipher the actual policy decision-making process. UNDP (2008) posits the same sentiments arguing that as a result the majority of decisions are taken outside the limits of formal government institutional process. Rukuni (1994) stands against this backdrop of institutional vagueness, over centralization, and a lack of coordination of the programme. In a nutshell, it is a clear signal that the Programme Implementation had suffered the overtaking of its implementation by independent individuals, due to intrusion by politicians, and the lack of government capacity to coordinate implementation. The land acquisition was supposed to be done in a systematic manner that raised productivity on our farms; instead, there was distribution in a chaotic manner, and land given for cattle ranching people who are not well versed with that area of specialization. Instead of practicing animal husbandry, farmers were doing crop production. It can be further argued that, food insecurity in Zimbabwe is a result of the nation's failure to invest enough in agricultural research.

The limited capacity of the Zimbabwean government should be treated with the justice that it deserves in scrutinizing its impact on improving food security in the country, that is concomitant with the narrow capacity of various participants involved in the agricultural sector, involving farmers' organizations, the private sector and civil society. Presently, several farmers' groups exist, but indicators are that they do not possess a robust influence, if any, on policy outcomes (Hilhorst and Muchena, 2000). Regarding farmers' organizations, the Commercial farmers Union, which had been very persuasive in the past, has been weakened by the collapse of commercial agriculture following the land redistribution process. The Zimbabwe Commercial Farmers Union may yet emerge as the farming voice in the future, nevertheless, as its membership is linked to the leading faction in government, it has had limited autonomous impact in policy direction. Non-governmental organizations, although well developed and well organized, have seen their involvement inhibited by the restrictive political environment. Mutambanengwe and Mapfumo (2005), argue that most

non-governmental organizations are only undertaking humanitarian aid mostly channelled outside government structures.

The development of irrigation is a gateway to increased land, water and agricultural productivity, increased household and national food security. Nevertheless, irrigation development has been a key challenge in Zimbabwe (Hilder Brand, 1996). The launch of the Fast Track Land Reform Programme in 2003 accompanied new unskilled cadres, and this was followed by a reduction in the area developed for irrigation. This was due to vandalism, dilapidation and thefts of irrigation infrastructure. According to Gilter, *et al.* (2006), irrigation development continues to grow, however the pace is slowing countrywide. Small productivity of various existing schemes has provoked a change in investment policy away from new infrastructure and toward programmes that ameliorate the performance of existing schemes.

Jones (1995) indicates the World Bank has severely diminished its lending for new irrigation schemes. Jones also declares that the emphasis is on sustainability and efficiency of existing systems and not in funding for new irrigation construction systems. Supporting Jones (1995) at certain extent, Thompson (2001) says that irrigation is nevertheless one of the Core Investment activities of the World Bank's Rural Portfolio though the number of irrigation schemes is projected to decline. This, according to Thompson, is attributed to the fact that money investments in irrigation systems are alleged to have failed to address the changing requirements of irrigation services as rehabilitation of existing schemes was mostly carried out to restore original project objectives as this did not take into account or overlooked the desirable alterations in dropping patterns and irrigation procedures, thus allowing low water productivity practices.

Thompson (2001) further affirms that time and cost overruns in irrigation projects, further warning the confidence of funding agents in irrigation development. Mara (1990), highlights that related matters of physical and financial sustainability tend to be naturally related to revenue and expenditure sides of government operations. Hence, institutional options have substantial implication for the effectiveness of irrigation operations. Irrigation is expensive and the profitability of irrigated production is essential in justifying both short and long term viability of an initiative. Accordingly strong management is required to boost cost recovery, efficiency and the ability to sustain the whole system (Rukuni, 2006).

Development costs for small-scale irrigable systems continued to increase due to numerous factors, the development of a hectare of land rates between US\$2000 to US\$3000 for engineering works. Moreover, Zimbabwe is faced with a severe scarcity of foreign currency, which has affected the costs of raw supplies that are acquired from outside the country.

On the other hand, it can be argued that, food insecurity in Zimbabwe has been caused by other underlying factors such as biased political will. According to Mutambanengwe and Mapfumo (2005), the most significant precondition for any recovery programme is the concerted political determination of government. The political will, essentially generates a conducive operational setting for both state and non-state actors. The speed with which the land reform was planned and conducted explicitly demonstrates this attitude. Moyo (2009) explains that the failure of the government is not because there are no alternative policies that can be adopted, but because there is no visionary leadership. Such leadership, within which an established well-disposed political will can both existentially and ideologically make the pursuit of alternative national policies possible, should be qualified to kick start Zimbabwe's recovery.

The political commitment to crafting the necessary environment for economic growth and investment in Zimbabwe has been debatable and uninspiring. Due to polarized ideological views within the government of National Unity, the embracing of macroeconomic policy reforms has been sluggish (Mapuva, 2010). This has considerably debilitated the policy development process and directed to the embracing of limited policy reforms. Without a robust political will, current interventions in Zimbabwe's Land Reform Programme are not likely to see any affirmative policy development, owing to a lack of state building proposals, the lack of common vision, infighting and power struggles and polarized division within government on development policies.

Outstandingly, Policy Reform efforts relating to governance are not free from political interference. Moyo (2002) believes that, there was growth without equity in Zimbabwe's land reform program because there was exclusion on the basis of politics and gender. The beneficiaries of the land reform were from the ruling party whilst those from the opposition party, despite having the required capabilities, have been left in oblivion. Mugabe in Raftopoulos and Savage (2004:186) posits that, "Surely we are the first claimants, the first beneficiaries of Fast Track. We have no apologies to make on this one. Let MDC supporters

get allocated land in Britain where they have been getting pounds and politics. They cannot benefit from policies they have rejected and even opposed.”

Nyawo (2012: 314) argues that, “a majority of the population have remained landless while a handful have had more than what they can use.” To make matters worse, production has gone down so much that the breadbasket has become empty and the nation could not even feed itself.

However, it has been noted with great dismay by other authorities, such as Marombwe (2011), that good farmers from the opposition were left out. It can then be concluded that the acquisition of land in Zimbabwe was exclusionary rather than being inclusionary and this led to food insecurity in the country. Because policy reforms are supervised and directed by politicians conferring to their own interest, as opposed to the public interest, weakness and therefore, failure of the Policy Model is essentially attributed to the intervention of political interests. A clear shift in ideology and political determination may be the first step towards a sustainable recovery process for Zimbabwe.

Occupation of land in Bulilima-Mangwe District in Matabeleland South province happened with the motive of revenging rather than production reasons (Sachikonye, 2003). In Bulilima-Mangwe district, the natives occupied one white farm in order to revenge the atrocities committed to them or their keens during the time of the liberation struggle. The farm was used as an abattoir for butchering local people, hence the locals decided to grab it as revenge to previous atrocities. These people could pain the white farmer but could not increase food security to the country’s breadbasket.

By large, it can be strongly argued that, food insecurity is an outcome of the nation’s failure to invest enough in agricultural research. This can be evidenced by the government’s position in crafting production blind policies like the haphazard fast track Land Reform Programme, politicization of agricultural inputs, acute shortage of agricultural extension officers and exorbitant forces for inputs. However, it cannot be denied that there are some underlying causes, such as lack of political will by politicians who only craft policies for self-aggrandizement but not for the benefit of the nation.

2.12 GOVERNMENT EFFORTS TO ADDRESS FOOD INSECURITY

The Government of Zimbabwe has given priority to ameliorating national and household food security, as well as to improving the standard of living and the incomes in the rural areas. Mudimu *et al.* (1989), point out that a major challenge facing the government is to enable communal farmers to increase their involvement in the market to generate incomes and also intensify their production so that they can be food secure. Rukuni and Eicher (1994), posit that from independence in 1980 the government has undertaken various proposals to meet to these main concerns; one of them is encouraging irrigation development in the semi-arid areas. On an equal footing most irrigation schemes are white elephants and they are no longer operational. This is completely against the government's idea of improving food security in drought prone areas such as Matabeleland South province.

After independence, the government of Zimbabwe committed itself to guaranteeing incentive prices for food and cash crops. However, due to economic meltdown that has rocked the country, the Grain Marketing Board (GMB) is lagging behind in paying farmers for their produce, especially cash crops. This resulted in farmers not willing to grow cash crops since the GMB was not rewarding to them. The farmers were given very little money after delivering their precious commodities. Furthermore, the payments were staggered and money had no value since it was disbursed in bits and pieces. The government has further devoted itself on ameliorating physical infrastructure, specifically road network in communal areas. Based on this idea, the government through various ministries has managed to fulfil this idea partially as some roads in other parts of the country such as Matabeleland South Province are in bad shape. Hence an urgent face-lift on roads is required.

Sen (1998) resonates that over the years, investigators have worked hard to respond changing questions about agricultural technology adoption in accomplishing food security. Looking deep into the Zimbabwean situation on this issue of improving agricultural technology, it can be clearly seen that only the political heavy weights have benefited from the tractors that were bought by the government. Moreover, to worsen the situation, the tractors were distributed on partisan basis instead of ability (Chazovachii, 2012). Farmers were only given tractors without any technical knowledge on how to use these tractors; this really took the whole idea of improving agricultural technology into the drain. Firstly, policy makers and scholars in Africa have search for simple descriptive statistics about the diffusion of new seed selections and associate technologies such as fertilizer and irrigation. Later, concerns arose

about the influence of technology adoption that is irrigation, hybrid seeds, fertilizer and machinery on commodity production, poverty and malnutrition, farm size and input use in agriculture, genetic diversity and a variety of social issues. Sah (2002) propounds that a number of scholars have created innovative methodologies for dealing with such concerns, carried out surveys and gathered enormous quantities of data to describe and record the implementation of new agricultural technologies, but little has been done on adoption by these communal farmers.

In Zimbabwe, smallholder irrigation was introduced in the early 1930s by Emery Alvord (missionary) in the low altitude and low rainfall areas as a necessity to achieve food security. Thus, the Government of Zimbabwe (GoZ) also committed itself to a program of poverty alleviation through “growth and equity” which was aimed at attaining self-sufficiency in food production (Von Braun, 1992). However, from the evaluations that have been made by some researchers like Jayne *et al.* (1990), the result has been a food insecurity paradox. The government of Zimbabwe is making frantic efforts to bring the idea of small-scale irrigation schemes into reality through the establishment of the Zambezi-Mtshabezi water project to bring food security in Matabeleland as a whole.

2.12.1 FOOD IMPLEMENTATION MODELS IN ZIMBABWE

The Zimbabwe Agricultural Policy Model (ZAPF) is planned as from 1995–2020, as expected, attaining food security is one of the priority areas with national focus. In Zimbabwe, food shortages were a worry among the disadvantaged and those deprived of land to farm only at the household level. However, food shortages at both household and national level have augmented over the past twenty years and the country has had to depend on commercial grain imports and food aid to fulfil its needs. While droughts triggered by climate variability and climate change represented an immense cause for the country’s food shortages, the overall economy shrinkage has to do with new resettled farmers starting agricultural activities at a very slow pace (NIB, 2008: 1). The Policy Model in discussion established the long-term goals for the agricultural sector. The ZAPF founds the agricultural development on the principles below:

- Agrarian reforms and land to ensure meaningful land use;
- Organizational growth resolute on competent service delivery to farmers;
- Improved production to ascertain family food security; and

- Formation of a public sector investment agenda to hold up development in agriculture (NIB, 2008: 4-5).

2.12.2 FOOD SECURITY POLICY

The Agricultural Policy on food security in Zimbabwe has not been lucidly articulated with respect to drought mitigation and climate change. Kinsley, (1999) argues that, the present agricultural policy has suggested strategies meant to establish food security for Zimbabwe however, the execution of this plan has been obstructed by political and social and economic problems that have shaken the country for the past twenty years. Theron, (2011), resonates that the volatile political atmosphere that existed in the country after the fast track Agrarian Land Reform and resettlement scheme (LRRP) of 2000 along with the restrained social unrest affected Government's strategies like the Zimbabwe Agriculture Policy Model (ZAPF). This resulted in substantial discrepancies in policy implementation where with respect to food security one strategy contradicted another. It is well known that the fast track Agrarian Land Reform Programme had substantial negative effects to the country's food security since it unsettled agriculture, although the problem of land acquisition by the black majority had to be duly addressed in post-independent Zimbabwe. The "land question" had to be discussed to solve the economic and social injustices committed by Zimbabwe's former colonizers who possessed majority of the productive agricultural land, whilst most blacks remained ghettoised in the disadvantaged rural areas.

Once the GoZ seized land from the white settlers, it lacked a food security policy and this lead to the breakdown of strategies adopted previously, for instance the ZAPF to evolve into an unflinching model for addressing food insecurity in the nation (Moyo, 2006). The government boarded on numerous systems which goal was to boost the capacity of newly resettled black farmers with little or non-existent resources. These systems included the allocation of subsidized farming inputs to the resettled farmers; these were seeds, chemicals and fertilizers. To equip the new farmers and to prevent a collapse in food production, the government also obtained farming tools such as tractors, planters, disc harrows and ploughs (Mudzonga and Chigwada, 2009: 6-7).

Still, because of the absence of a well-put-together food security policy, the government was slightly throwing darts in the dark thinking that this would surmount the serious dangers presented by climate change on the country's food security. The government's efforts to guarantee adequate food for its people were stifled by the question of penalties forced by Britain and its western allies to frustrate the gains of the LRRP and choke the economic progress in Zimbabwe. As the new farmers came in place the GoZ realized that it was

necessary to design strategies to cushion these farmers from the threats posed by climate change, apart from equipping them with low-cost subsidized inputs. The government realized that even after equipping the farmers with suitable farming tools, they were still unsuccessful in attaining the needed crop yields because of the reappearance of droughts throughout most parts of the nation.

2.12.3 AGRICULTURAL SCHEMES ADOPTED BY THE GOZ TO BOOST FOOD PRODUCTION (2000- 2011)

2.12.3.0 INPUT CREDIT FACILITIES

2.12.3.1 GMB INPUT SCHEME

Following the acquirement of land in 2000, the Government of Zimbabwe unveiled an input credit facility system that allowed new farmers to buy inputs such as seeds, fertilizers, machinery and agro-chemicals on credit terms. The Grain Marketing Board (GMB) was in charge of running this credit system with the goal of encouraging productivity on the farms as well as enhancing farmers' confidence in the government's attempts to ensure food security for the nation. Still, this plan did not achieve its projected outcomes because of unfortunate management in the distribution of inputs. GMB was in charge of allocating the inputs, but the problem was that the Board did not have well-defined criteria for choosing the recipients of these inputs (Manyeruke and Hamauswa, 2012: 11). This situation generated the chance for non-farmers to purchase inputs at government controlled prices and route them onto the casual black market. Sometimes the inputs were circulated along political lines, and not based on the farmer's skill to successfully operate the inputs. This situation upset the government's efforts to fund farmers who were already beginning to experience the effects of successive droughts which had significantly crippled attempts to increase production on the farms.

2.12.3.2 AGRICULTURAL SECTOR PRODUCTIVITY ENHANCEMENT FACILITY DEVELOPMENT (ASPEF) LOANS

The GoZ created this credit facility, which involved the participation of commercial banks such as CBZ and Agribank; these institutions had received credit allocations from the Central Bank to support farmers (WFP, 2015). Previous to the insertion of the multi-currency system in Zimbabwe, these credit facilities had somewhat low interest duties, which was supposed to

allow farmers to pay back their loans. Unfortunately, due to farmers not paying back loans, has greatly troubled the continuity of this system.

2.12.3.3 OPERATION MAGUTA

Operation Maguta was a government programme launched in 2005, it quested for promoting food production in agriculture. The Zimbabwe Defence Forces (ZDF) in partnership with the Ministry of Finance spearheaded it. Operation Maguta had the goal of boosting food security, and at the same time strengthening the national strategic grain reserves (Manyeruke and Hamauswa, 2012). In this programme farmers received the usual inputs (fertilisers, seeds and herbicides) in order for them to grow targeted crops such as maize and wheat. The scheme's target was mainly communal farmers and A1 farmers. It was mandatory that the farmers paid at an interest rate of 50%. After harvesting their produce, they had the choice of paying in the form of harvested food (through the GMB) or in cash. With this system, each beneficiary got 300 kilograms of compound D, 200 kilograms of ammonium nitrate fertilizer and 25 kilograms of maize seed (Mudzonga and Chigwada, 2009: 6). At the end, this programme ended up failing to accomplish its intended objectives since there was a lack of proper coordination. A number of farmers who profited from this system did not pay off their loans. What they did instead was to side marketed their produce while avoiding selling to the GMB, whose reputation with farmers had turned bitter due to late payments. As one can imagine, this situation affected the continuity of this programme and led to its failure.

2.12.3.4 AGRICULTURAL MECHANIZATION PROGRAMME

In 2007 the government launched this programme which aim was to help farmers with instruments that accommodated their necessities. This mechanization programme was conceived as part of government's attempts to revive and rebuild the capital of the agriculture sector in the long term, as well as to reinforce the gains of the LRRP. Furthermore, this programme drastically changed the productive landscape and the equipment of the agriculture sector through the mechanization of the commercial and the communal farmers (Manyeruke and Hamauswa, 2012: 10-11). With this scheme, the government distributed to selected resettled farmers across the country a number of farming implements such as tractors, ploughs, disc harrows and combined harvesters with the aim of empowering farmers to generate at ideal harvest levels and therefore accomplish food security and sustenance.

Such empowerment drive was envisioned to fast-track economic growth by means of larger earnings and enlarged productivity from the empowered farmers (Mudzonga and Chigwada, 2009: 7). Nonetheless, the mechanization scheme turned out to be ineffective; this was because of two main factors: corruption, and scarcity of vital supplies such as spare parts for the tractors and fertilizers. Unfortunately corruption spoiled the distribution of the farming implements especially tractors and combined harvesters; because of their political influences, a number of individuals profited from the programme. The farmers that were away from politics did not take advantage from this scheme. As a consequence the whole mechanization programme was seen like a political stunt which goal was to develop a political agenda.

The difficulty that Zimbabwe has been facing is the fact that politicians inside government circles politicize every agenda that attempts to increase productivity in agriculture with the only purpose of collecting political millage. Zimbabwe's Government of National Unity (GNU) highlights this unfortunate situation; the GNU has been portrayed as a group that exercises diversified approaches and incompatible views on which sectors of the economy the government should prioritize, specifically from politicians in ZANU PF and the MDCs. It is out of debate that the government must prioritize agriculture and allocate a significant amount of the fiscal budget towards improving production in the sector in order to ensure that every Zimbabwean has food on the table.

2.12.3.5 ACCELERATED NATIONAL IRRIGATION DEVELOPMENT PROGRAMME (ANIDP)

The deterioration of existing irrigation systems and infrastructure as well as the general absence of irrigation infrastructure in Zimbabwe was debilitating food production. This situation presented the government with a major defy: the rehabilitation of the irrigation facilities in order to diminish the consequences of climate change and variability; programmes such as the Accelerated National Irrigation Development Programme (ANIDP) could contribute to battle the issue (Mudzonga and Chigwada, 2009: 7). Due to the absence of maintenance and reduced production in the agricultural sector, the general infrastructure and irrigation equipment obtained during the Agrarian Land Reform Programme had greatly deteriorated. Under this programme, farmers received loans to acquire irrigation equipment that matched their scale of production.

It is imperative to highlight that all the food mitigation that was used by the government of Zimbabwe grossly lacked a clear implementation structure and eventually could not realise

any positive impact. The way the inputs were distributed under the Grain Marketing Board Scheme did not have clear distribution criteria and ended up being given to undeserving beneficiaries. The haphazardness of the Intervention Strategies brought more harm than good in addressing food shortages in the country. The Operation Maguta, lacked community endorsement as it worked vigorously against the community's prospects. Operation Maguta was spearheaded by the Zimbabwe Defence Forces, and people did not like the approach that was used, i.e. soldiers forcing farmers to grow plants that they did not want. In a nutshell, all these food intervention strategies were not community oriented and they did not significantly improve the food security situation in Zimbabwe. The strategies did not consider that Zimbabwe has varied ecological zones and they used a "one size fits all" criteria for all the five ecological zones. From all the strategies discussed above, not even one was initiated by the communities. These weaknesses are addressed by this study as it advocates for community oriented intervention strategies where control, participation and ownership are ensured by the people.

2.12.4 ERRORS IN THE IMPLEMENTATION MODEL STRATEGY FORMULATION

2.12.4.1 TREATING SMALLHOLDER (A1) FARMERS AS A HOMOGENOUS GROUP

Food insecurity prevails relentlessly in the low rainfall areas in the NR IV and NR V in spite of the GoZ's attempts to encourage rural food production and incomes. The schemes used by the government leaned into treating the smallholder (A1) farmers as a homogenous group. IN other words, the government's strategies ignored the highly different socio-economic and technological needs of the farmers, who came from diverse financial situations. An example of this was the GMB input programme, where all A1 farmers, irrespective of their particular requirements as individuals, received equal amounts of inputs. For instance, an A1 farmer in Bindura was given the same amount of seeds and fertilizer as another A1 farmer in Tsholotsho. More to it, it could be that a small holder A1 farmer has sufficient money to acquire his own fertilizer and seeds, however he may be short on capital to secure irrigation equipment, which results essential to increase production in his farm.

Evidently, the government did not have proper awareness in pondering that farmers have diverse needs, and these have to be addressed individually.. Instead of assembling all farmers into the same group of demands, the government has to reflect on the particular necessities of each farmer.

2.12.4.2 LACK OF DIVERSIFICATION IN AGRICULTURE TO ENCOURAGE THE GROWING OF OTHER FOOD CROPS

Maize is the key source of food security in Zimbabwe and there has not been significant variation about it. Nevertheless, it has become relatively difficult for farmers to rely solely on maize as the major source of food security because of recurrent droughts that Zimbabwe has experienced for the past ten years. As a consequence, the country needs to diversify the source of food security through encouraging farmers to grow other things like sorghum and millet. These small grain crops are able to tolerate drought environments better than maize. So far, the government has not done much to encourage the cultivation of small grain crops and this has virtually emptied the country's small grain seed banks.

Instead of encouraging people to grow small grain crops in areas that are prone to drought the government keeps distributing maize seed in such areas. This is an obvious example of poor strategic planning on the side of the government. More to it, in 2012 the GoZ announced potato a food security strategic crop, however not much has been done to source farmers and deepen the production of this crop (*The Herald*, 2012). Potato farming is a capital-intensive crop that requires huge initial capital investment; that is why not many farmers have taken it up. Furthermore, the government has not done much to offer support to farmers who want to venture into potato farming; understandably this has contributed to the hesitancy of some farmers to enrol into potato farming. The GoZ should encourage farmers to grow tubers such as cassava, sweet potatoes and yams since they do not require huge capital to initiate production; instead, farmers are encouraged to grow potatoes only. In the wake of climate change, it is necessary for the agricultural sector to diversify and start producing rapoko, sorghum, millet, cassava, sweet potatoes and yams at a large scale to meet the country's food requirements. Such diversification will greatly contribute to ensure food security in Zimbabwe (Mudimu, 2003: 4).

2.12.4.3 THE MATABELELAND ZAMBEZI WATER PROJECT (MZWP)

The MZWP is one of the major efforts that the GoZ has engaged in to lessen the consequences of climate change by addressing the water challenges in the Matabeleland North Province. The region is unsuitable for crop production since much of Matabeleland North sits in NR IV and NR V, these regions are susceptible to droughts and successive dry spells. The project seeks to establish a 450km pipeline to the city from the Zambezi River in order to put an end to the continuing water shortages affecting people in Bulawayo (*Sunday*

Mail, 2012). A number of challenges, mainly the shortage of funds, spoiled earlier attempts to kick start this project. The Matabeleland Zambezi Water Project consists of three stages,:

- Stage 1: Building of the Gwayi-Shangani Dam
- Stage 2: Building of the pipeline connecting Bulawayo to the Gwayi-Shangani Dam
- Stage 3: Building of the Gwayi-Shangani Dam to Zambezi River pipeline

The building of the Gwayi-Shangani Dam started in September 2004, this is the primary stage of the project. The Government of Zimbabwe's failure to adequately fund the project has resulted in the slow pace construction of the dam, owing to the economic distresses the country is facing. Fortunately, in 2012 the Government of the People's Republic of China handed over US\$1,2 billion to the MZWP, which has accelerated the progress in the completion of stage 1 of the project. This was major, and even the Minister of Water Resources, Samuel Sipepa Nkomo, pointed out that the completion of MZWP would change the face of agriculture in Zimbabwe's arid South-western parts. Drought is persistent in this part of the nation and hunger is widespread. Success of this project will enable reliable irrigation infrastructure to be set up in the arid Matabeleland region, which is expected to turn this arid region into a "greenbelt of agricultural activity" (*Sunday Mail*, 2012).

Now the government must explore the various opportunities for development in agriculture presented by the MZWP. The GoZ has to facilitate the engagement of communities along the pipeline corridor with the corporate sector to initiate small and large-scale irrigation schemes and this way mitigate the effects of climate change that had ravaged people in this part of the country. This will enable the country to cement food security in its arid South-western part significantly turning things around in a positive direction.

Nonetheless, the MZWP faces a lot of external challenges, for instance Zambia's stiff resistance to allow Zimbabwe to draw water from the Zambezi River. In accordance to FAO data, the Zambezi basin accounts for 20.2 % of Mozambique's, 54.5 % of Zimbabwe's, 76.4 % of Zambia's, and 91.5 % of Malawi's total land area (Swain *et al.*, 2011: 37). Following this data, Zimbabwe has to dialogue with the involved countries and request permission to draw water from the Zambezi River based on mutually agreed terms. Most likely, MZWP will affect generation of hydroelectricity at Kariba and Cahora Bassa power stations due to a decrease in volume of water flowing in the Zambezi River. Other issue, apart from the power generation, is the drawing of large volumes of water from the Zambezi; this will result in

many ecological effects on ecosystems that rely on the Zambezi River. Zambia's continued resistance makes it difficult for the much-touted MZWP, which is seen as a lasting solution to the water distresses of Matabeleland. The fact that Zambia refuses to sign the Zambezi Watercourse Commission (ZAMCOM) Protocol has thrown a dark shadow over the MZWP. The countries benefitting from the Zambezi basin (Zimbabwe, Zambia, Tanzania, Mozambique, Botswana, Malawi, Namibia, and Angola) established ZAMCOM to corroborate the importance of resource sharing and the need to integrate management of shared water resources. The aim of this Commission is to encourage the equitable and reasonable exploitation of the Zambezi Watercourse as well as effective management and sustainable development (Mujoma, 2012).

Six of the eight SADC states have to sign and ratify the Zambezi Watercourse Commission Protocol in order to allow Zimbabwe to draw water from the Zambezi River. To date, only five countries have signed and ratified the ZAMCOM Protocol, while three have signed and not ratified. Zambia is the only country that has neither signed nor ratified the Protocol. Zambia claims that 75% of the Zambezi River basin is in its territory and that it supplies 42% of Zambezi River water. What Zambia wants is for this natural advantage to be factored in when it comes to water abstraction from the Zambezi River, which is not currently considered in the standing Protocol (Hove, 2012). Without Zambia's ratification of ZAMCOM, the success of the MZWP might be jeopardized consequently stifling Zimbabwe's efforts to alleviate the outcomes of climate change in the arid Southern region.

2.12.4.4 LACK OF STRICT LAWS CURBING CORRUPTION IN GOVERNMENT MANAGED SCHEMES

Government programmes like the GMB input scheme were spoiled by widespread corruption at the GMB depots. The scheme provided farmers with farming inputs at subsidized prices set out by the Ministry of Finance, Industry and International trade. Unfortunately, because of corruption, many people got more than they needed. Some of the recipients were not even farmers; they took advantage of the cheap prices and took the inputs to the informal market. Abuse of the government schemes and corruption was also noted in the National Oil Company of Zimbabwe (NOCZIM) fuel facility, which provided farmers with low-priced diesel at a time when the nation was in a fuel shortage crisis (Manyeruke & Hamauswa, 2012: 11-12). The fuel facility was high jacked by unscrupulous unofficial traders who purchased the fuel at subsidized prices and then sold it at greater prices on the informal

market. Instead of farmers benefiting from this subsidized diesel, they ended up purchasing the fuel at high prices from the unofficial dealers.

TABLE 2.2: FOOD SECURITY INTERVENTION STRATEGY ADOPTED BY ZIMBABWE

Food Security intervention strategy	Gaps
Food Security Policy	<ul style="list-style-type: none"> -Not clearly articulating change and drought mitigation -Implementation was hampered by socio-economic and political challenges -Contradiction on policy implementation -Inputs were given, but drought was continuous -Policy lacked grassroots ownership
Grain Marketing Board Input Scheme	<ul style="list-style-type: none"> -Failed to achieve food security due to lack of capacity building and coordination -No clear criteria of selecting beneficiaries -Inputs distributed on partisan lines
Agricultural Sector Productivity Enhancement Facility (ASPEF)	<ul style="list-style-type: none"> -Failure by farmers to pay back loans, which affected continuity of the scheme
Operation Maguta	<ul style="list-style-type: none"> -It was run by Soldiers and Ministry of Finance, which intimidated the farmers -Farmers were given seeds that were not compatible with their ecological regions - Farmers failed to grow various crops fearing that soldiers would terrorize them if they did not harvest
Agricultural Mechanization Programme	<ul style="list-style-type: none"> -There was critical shortage of fertilizers -Farm implements did not have repairs -Distribution of farm implements was marred by corruption
Accelerated National Irrigation Development Programme	<ul style="list-style-type: none"> -Lack of irrigation and deteriorating infrastructure was hampering food production -Lack of proper equipment maintenance -Farmers defaulted in paying back loans

Source:FAO (2016)

Taking a closer look at the above tabulated gaps exhibited by the intervention strategies to curb food insecurity, it creates a space for this study to play a significant role in addressing

food shortages using community driven implementation models to address food shortages in Zimbabwe. It is the main aim of the study to develop an Implementation Model which is home grown, area specific, not homogenous and also owned by the people.

2.13. THE BLUE PRINT MODEL IN DEVELOPMENT PLANNING

Development planners worldwide are faced with challenges of creativity in their programme development efforts and responsiveness to the requirements of rural communities and farmers. An approach to overcome these defies is to look at different programme development ideas and methodologies, analysing how they operate in practice or in every day programming, as well as understanding their advantages and disadvantages.

One way or another, programme development can be referred to as some kind of calculated change, that is, deliberate efforts to modify a given state of affairs. Economic, social, cultural, or technological changes are normally assumed to be the goals of planned and systematic developmental actions. It is in this thesis however, that a critical analysis of the concept was done to help the people of Matabeleland South Province to come up with a home-grown solution to address acute food shortage in the region.

Being change implementers, development workers should then be concerned with the preparation of programs and projects that are responsive to the needs and interests of rural communities and farming households. The Implementation Model that unpacks the prospects of the Zimbabwe Agenda for Sustainable Socioeconomic Transformation should not be imposed on the locally affected community, but rather the community development practitioners should play a facilitative role in constructing communities' ideas so that they become meaningful to problem solving. In essence, this means that relevant programs that address real issues for the intended beneficiaries are desirable. The Zimbabwe Agenda for Sustainable Socioeconomic Transformation blue print was crafted as a homogeneous blue print. This would suggest that the policy makers perceive the problems that the nation is facing as uniform. The blue print cannot be perforated at this juncture but indeed should be given the benefit of the doubt. Instead, what should be questioned is the Implementation Model itself. There is a common development say propounded by Robert Chambers (1983): "anything to us without us is not for us." This proposition emphasizes the fact that the people should be involved in development planning, implementation, monitoring and evaluation.

This is done so that, there is a sense of ownership in projects and programs. It is this sense of ownership by local communities that translates to sustainable programs.

Other development planners have contended that there is no single development model that can be universally applied in all situations or circumstances. A “one size- fits-all” model of planning is impossible given the dynamism that characterizes the environment in which the development process takes place. Diverse alternatives are available, and choices are dependent on a number of interceding variables upon a great number of variables (Rondinelli, 1987). Taking Matabeleland South Province in particular, a “one size-fits-all” model cannot be applied because it is a province which has multiple unique factors which affect it and these factors range from soil type, weather conditions, education, and rainfall patterns; as well as political and economic history, just to mention but a few. All these variables make the province very unique and also deserve distinct interventions, unique interventions that are context specific. The specific interventions can only be devised by local communities with the help of community development practitioners. This would mean that, a very unique implementation model is needed to unpack the prospects of the Zimbabwe Agenda for sustainable Socio Economic Transformation of addressing food insecurity in the province of Matabeleland South.

The following planning dichotomies or models are in vogue currently. Putting the planning models into divisions helps planners to measure their effectiveness and to finally choose the most useful combination. The most common planning approaches are: i) centralized - decentralized, ii) top-down - bottom-up, and iii) blueprint - process. The two extremes represent, indeed, distinct ways of approaching programme development and correspond to somewhat opposite assumptions, theories, and practices. Dichotomies, however, are simple ways of representing an issue, and in between the two extremes may lie a continuum of possibilities which must not be disregarded (Cornea, 1992).

The primary mission of this debate is to critique the blue print or top-down model of planning, and adopt the bottom up approach in coming up with an Implementation Model. Nevertheless, it is naturally impossible to discuss this Model in isolation or without referring to the other paradigms that compete with it. The first word in each of the pairs is centralized, top-down, and blueprint. In general terms, they correspond to the so-called conventional way of developing a programme. This is, in effect, what happens in many extension projects following the training and visit system, or other conventional model and stressing the transfer

of technology and information dissemination. For example, research stations develop technologies that are aimed at addressing food insecurity; these are then relocated to the extension service through subject-matter experts. Extension officers at the district or zone level, design the programs, defining messages to be disseminated as well as specific objectives. At the village level, extension workers put into operation the activities concurring to fixed work schedules, under close observation and guidance. This would mean that the local farmers, inhibitors of localised knowledge systems, which are more alive to the problems at hand than the extension officers, are not given the chance to give their contributions on how to solve the problem. In general, the involvement of farmers is not a priority (Bergdall, 1993).

It is commonly established that the centralized, top-down, or blueprint approach has got its own advantages. For instance, it simplifies evaluation tasks, monitoring and management, because both expected outcomes and activities are demarcated and a chain of responsibilities and duties are clearly described. In some cases, it can be the top alternative, for example, in emergency interventions where a solid management style may be necessary to attain objectives in an appropriate and highly organized way or in circumstances where extension duties are objective, that is, founded on precise facts and knowledge, rather than on beliefs, values feelings.

However, it should be noted that, though the top down approach to development enjoys some advantages as propounded above, it is necessary to highlight that the problem of food insecurity in the province of Matabeleland South is an emergency. The first handlers of the problem of food insecurity in this province were taking it as an emergency and simultaneously prescribed for raft measures such as food aid. Unfortunately, most scholars argue that the problem was exacerbated since the solutions were temporary in nature and could not suffice for a long period. This was one of the major calamities of a top down model. The government of Zimbabwe and development actors were supposed to embark on a bottom up approach, which is consultative in nature, instead of embarking on a top down approach which is prescriptive in nature. In this last instance, as Boyle (1981) stressed, "The programme would be able to make objective decisions and probably have less need for clientele input."

Top-down or blueprint planning has been subject to strong criticism for various reasons. An important one is that it is too uniform. This does not take into due account the dynamic and

culturally diverse and social complexities of the specific conditions where project implementation happens. The features of the diverse clientele groups are ignored, and mistakes in planning are made, for example design the enhancement of village irrigation systems ignoring the specific water rights, rules of water allocation and distribution as well as general local needs (Portela, 1990); or arranging the diffusion of certain technology set without sufficient knowledge of the diversity of farmer's strategies, problems, rationales, and potentials, as well as the farming systems in general.

To support the above assertion, all the head offices for both government and non-governmental development actors are housed in the capital city Harare. The head office sends community development practitioners to Matabeleland South Province. Most of these development practitioners, predominantly Ndebele, come down from Harare with a development template that they look forward to implement without even knowing the exact needs of local communities. Even the language itself is a barrier to development because, “no communication no development.” Hence there is a strong need to use the grassroots to take active part in their communities so as to see the situation improving.

It is under scholarly debate that, this approach is agency aligned and the programs are designed from the inside to the outside; planners assess and define necessities and difficulties and establish goals and courses of action. This is commonly the challenge with non-governmental organizations, which identify their clientele's needs without the involvement of the latter and only come to the beneficiaries for implementation. The priorities of the beneficiaries, their culture and even religion are considered secondary, let alone their contribution to the design of the plan (Bryant & White, 1982).

Programs are based on institutional philosophies and policies, ignoring the miscellany of angles about a particular reality. The approach adopts a great degree of easiness and order in the programme cycle, emphasising the likelihood of following a logical succession of phases. The approach is firm and assumes a high level of stability; problems will not vary while the programme is being designed and new problems will not develop (Compton, 1984).

Conversely, the major thrust of this study is that it focuses on decentralised, bottom up and process oriented type of Implementation Model. Considering the second word in each of the before mentioned pairs, a different set of key words can be seen: decentralized, bottom-up, and process. In general terms, these words correspond, to what is known as participatory planning, presently suggested as a crucial component of farmer-first models (Chambers,

Pacey, & Thrupp, 1989), farming systems development (Compton, 1984; FAO, 1994), participatory technology development, and local process facilitation activities (Roling, 1994).

The conducting beliefs are fairly different from those of the top-down perspective. Development is seen as a long-term effort and a procedure involving continued commitment and collective accountability. Programme personnel ought behave as partners and facilitators and not as experts. Involvement of local players is emphasised. It is recommended to spend more time on project preparation and needs identification, with the active contribution of the intended beneficiaries. The programmes should develop step-by-step, guaranteeing close connections to the felt requirements and the local environment. The fundamental target of the programme is to grow the power of the local players to design and instrument their own enhancements. Generally, this approach is described as being open and process centred, embracing faults as a knowledge-acquiring factor and leading to programs and tasks with an emergent type. Therefore a task at hand of developing an Implementation Model to address food shortages in Matabeleland South is regarded as inclusive, rather than exclusionary and iterative instead of irreversible.

The use of such principles and ideas is growing in small, local development projects with an integrated nature where citizen participation is highly valued and desired. For instance, in Sao Tome and Principe, a West African country, such projects are currently being promoted by the Ministry of Agriculture and Rural Development as part of a major land reform programme. These projects are animated by interdisciplinary and inter-institutional teams, having as partners, local farmers' associations and youth groups. The projects emerge out of a participatory rapid appraisal exercise, and activities draw funds from multiple sources (Cristóvão, Botelho, & Born Jesus, 1994).

It is clear that, this approach is not exempt from problems and criticisms. Some are quite evident; for instance, activities start without predefined objectives making things more difficult for personnel, and perhaps confusing for participants who often used to be recipients of interventions, not active partners. The overall philosophy and practices contrast with the conventional ones, with which most founders and official services are familiar, this situation may complicate relationships. The question of decentralization is critical in this last respect. In effect, even considering the efforts developed in the last decades in this direction, it is known that the capacities at the local level are still generally weak and "finding ways of building the capacity of local administrative units to implement development programs and of

eliciting the support of central bureaucracies in that task, offers an important challenge to governments of developing countries in the years to come" (Rondinelly, 1987: 54).

Just as significant is the subject of participation. It can be argued that participation is not desirable in all situations and that it has advantages and disadvantages. For example, it demands time, which in many cases is not accessible, and it may lead to political and social conflicts since it touches on the subject of power, and those who may lose it are likely to resist and oppose. Certainly, every project situation demands a cautious analysis concerning the purposes, which might be accomplished by means of citizen involvement, the ways to accomplish it, and the costs and benefits coming from it.

In many situations the option is not at one edge of the continuum, but somewhere in between. Simultaneously, a combination of diverse methodologies may be required and result advantageous. For example, Boyle (1981) noted three kinds of programs: i) developmental, ii) informational, and iii) institutional. A developmental program is clearly focused, and its goals derived mainly from the necessities and difficulties of the participants. The informational program is primarily top-down oriented; partakers are mainly recipients of information. The institutional program type has to do with instruction and training and is generated from the educator and from a field of knowledge. In any case, Boyle underlines the fact that in the course of extensive work, these types of programs frequently overlap; in other words, a locally initiated participatory scheme can very well take advantage of centralized efforts to disseminate information and training activities.

Creating programs with individuals entails a broad view of individuals' participation. Involvement should not be viewed, as the sporadic presence of rural dwellers in an information assembly, the simple use of public services, the voluntary contribution to a project (in ways of labour, money, and others), or as some kind of activity to increase support to pre-planned top-down projects. Involvement then becomes, people's participation in reflection and action, a process of empowerment and active participation in decision making through a plan, and access and control over assets and organisations (Cristóvão, 1990).

A new outlook about the citizens and their functions is also crucial. Actually, the very influential view that certain groups like administrators, planners and others embrace about rural people, is that of underprivileged and small farmers. The idea that local society is practically undifferentiated and that farmers are ignorant, passive, lack the ability to understand situations, analyse them and propose solutions, translate them into action, and evaluate the results is relatively widespread. Reijntjes, Haverford & Waters-Bayer (1992),

posits that, the direct consequence is the paternalistic and superior attitude of technicians who think they know best and have the right answers to development problems.

Development planning thus requires a comprehensive perception of involvement, implying the participation of diverse organizations and groups in various programme development phases and activities at the decision-making level. It is necessary to consider a different view of rural people and an attitude of humility and respect concerning their experience and knowledge, It is also needed close consideration to the way power is distributed and shared amid diverse social groups, segments of the population, and regional and local networks; and between these and the regional and national power holders (for instance parties and political leaders). In any situation, even in little rural areas, the existing interests, aspirations and needs of people are not homogeneous. Cernea (1992) argues that, we need a clear outlook of the problems and advantages related to participation or non-participation of key stakeholders.

Such reasoning is not only politically but also ethically sound. Today participation is regarded as a basic necessity and even a fundamental human right, but it is also economically justified, because experience shows that project accomplishment and long-term sustainable results demand people-centred approaches. People should be respected.

In light of the foregoing discussion, the adoption of a strategy to promote participation in planning to avoid blue print or top-down planning is a critical aspect. To that effect, it has been noted that five key, interconnected features are crucial (Bryant & White, 1982); and these are: i) keep extension projects simple and manageable, ii) differentiate various groups in the project area, iii) work with different types of organizations, iv) take advantage of all possible methods and techniques, and v) improve people's capacities to participate. It is imperative to indicate that, this thesis had looked into the participation of local communities, in such a way that the Implementation Model to address food shortages is explicitly their product.

There are a myriad of ways how development projects can be kept simple and manageable. According to Bryant & White (1982: 218), "It is known that small projects, developed at the local level, implying relatively simple skills, providing direct benefits to participants, and building on self-help arrangements, have better chances of mobilizing people's attention and active involvement." When projects are bigger and more complex, the task can be more challenging, but ways can be found to create participatory dynamics, which include

decentralization tools that allow a larger input to local extension units, and the work with rural groups and organizations at different levels.

Different groups in the project area need to be identified. How can this be achieved so that planners are assured that the needs of specific groups such as poor women or landless farmers are reflected in the planning process? This involves a clear identification of groups in the project area. Basically, "farmers" or "the rural population" are often seen as the "target group" without any additional specification, and they are assumed as a homogeneous group, which in reality does not exist. There is need for the identification of particular groups and subgroups to reach and work with. That is a critical element in a participatory planning process.

Identification can be accomplished in different means. Albrecht *et al.* (1989), suggest building on local common distinctions: it is more practical and simpler to categorise groups according to distinctions that already exist in a particular society. They are a more faithful reflection of the situation from the perspective of the population. Key-informant interviews or group discussions is a standard procedure in cases like this.

Matching with the previous identification strategies could be the identification of existing community organizations, looking at leadership and membership, the roles they play, and evaluating the types of interests they support and the extent to which they serve particular segments of the local society (Verhagen, 1987). Working with different types of organizations is another strategy that is recommended in development planning. It is widely accepted that some form of organization is crucial to encourage participation. For example, in their researches carried out in Brazil, Senegal, Bangladesh, and India, Verhagen (1987) noted that the formation of groups was a crucial aspect and she made four specific recommendations.

Firstly there was need to work with a broad diversity of organizations, thus increasing the odds of touching a wider spectrum of people. There is need to undertake institutional mapping, because in most circumstances diverse sorts of organizations, such as commodity groups, cooperatives, youth or women's clubs, irrigation and credit associations, village committees, development associations, leisure and cultural groups, and others with diversity of structures and labels, represent different interests and goals working at the local, regional or national levels. It is relevant to consider and work with existing organizations; as stressed by Bryant and White (1982), indigenous organizations in particular are an important resource due to their cohesiveness and reliance on mutual trust.

In any situation, it is important to analyse the interests represented by existing organizations and their degree of power and influence. In many cases, they are led by better-off farmers or representatives of elite groups and are not at all a reliable support to a participatory strategy aiming at the interests of different groups and attempting to reach the disadvantaged.

Boyle (1981), and Hemp, Kaczor, & Zwilling (1983), and Albrecht *et al.* (1990), argue that in relation to this element of the overall strategy, it must be stressed that the work with advisory committees or councils of different sorts has proven to be advantageous. Such organizations include a small group of chosen individuals, typically between 12 and 15 people, and help extension in different modes concerning the development works within a given area, being a specific means to assure formal participation in programme development.

Taking advantage of all conceivable techniques and methods is also vital. In whichever situation, with unfavourable or favourable institutional scenes, something can always be done so that extension programs are receptive to local needs and concerns. Some of the alternatives are: contacting specific groups, conducting community surveys, administering questionnaires at training courses, extension meetings, or other types of public events. Collecting information from knowledgeable individuals and other key informants, as well as from meetings at the village or other levels, and formal and informal group discussions, also enhances development planning. Another strategy for a bottom up approach is intentionally communicating with hard-to-reach groups and others with less power and visibility that are normally not involved in extension work. Obtaining public input through interactive focus group discussions or community programs is another element that should not be left out. Connecting with other service providers in fields such as health and education, and exchanging views, information, and experiences, keeping a permanent record of necessities, worries, values, outlooks and customs, is regarded as another recommendation by the bottom up approach in development planning.

Improving people's capacities to participate is one among other already stated factors, which should be considered by development planners. This entails, among other things, training and education. Normally in development work, agents and other officers are often short on skills to work with rural people in an interactive fashion. Their training is frequently limited and primarily highlights the acquisition of technical knowledge and abilities. More training may be needed so that extension people learn how to act as facilitators of participation and helpers in the different programme phases and moments.

In regards of rural people, farmers in particular, it is central to act in areas like leadership development and education. The acquisition of communication abilities, literacy skills, and organizational and leadership capabilities is key to instituting strong local organisations and encouraging conscientious and self-sustained problem-solving efforts. As Albrecht *et al.* (1989) posit, training can expand the proficiency of local organizations, make them assume more responsibilities, and acquire political weight, guaranteeing that the members' interests are taken into account at higher levels.

The blue print approach to community development especially in developing a model that addresses food shortages, is not thus in the best interest of the beneficiaries and on its own cannot deliver. It needs to be carefully combined with other approaches along the continuum of centralized and decentralized planning.

2.14 ZIMBABWE'S ECONOMIC BLUE PRINTS SINCE 1980

Table 2.3 below shows a timeline of some of the most notable programmes in chronological order.

TABLE 2.3: ECONOMIC POLICIES TIMELINE (1980-2018)

Date	Policy	Period
1 February 1981	Growth With Equity (GWE)	1981
	Transitional National Development Plan (TNDP)	1982-1985
	First Five Year National Development Plan (FFYNDP)	1985-1990
18 January 1991	Economic Structural Adjustment Programme (ESAP)	1991-1995
20 February 1998	Zimbabwe Programme for Economic and Social Transformation (ZIMPREST)	1996-2000
9 March 2000	Vision 2020 and Long Term Development Strategy	1997-2020
1 August 2001	Millennium Economic Recovery Programme (MERP)	2001-2002
1 February 2003	National Economic Recovery Programme (NERP)	2003-2004
1 November 2004	Macro Economic Policy Framework (MEPF)	2005-2006
1 April 2006	National Economic Development Priority Programme (NEDPP)	2006-2008
30 September 2007	Zimbabwe Economic Development Strategy (ZEDS)	2007-2011
19 March 2009	Short Term Emergency Recovery Programme (STERP I)	2009
23 December 2009	Short Term Emergency Recovery Programme (STERP II)	2010-2012

1 July 2011	Medium Term Plan (MTP)	2011-2015
26 August 2015	Ten Point Plan (TPP)	2015
1 October 2013	Zimbabwe Agenda for Sustainable Socio Economic Transformation (ZimASSET)	2013-2018

According to Gibbon (1995, in Sichone 2003), “Zimbabwe’s social and economic policies can be grouped into four main phases in post-colonial era.”

“The first, from independence to 1982 was accompanied by an economic boom and characterized by twin phenomena of the adoption of redistributive policies and a high level of mutual suspicion between government and capital. A second phase, from 1982 to around 1986, contained two major economic recessions, a check on redistributive policies and continuing cool relations between government and capital. The third, dating from 1986 to 1990 involved the resumption of a degree of economic growth and the downplaying of redistribution. The fourth, that of structural adjustment began in 1990 and has been marked by a very severe drought and economic contraction, an implicit rejection of redistributivism and liberal economic policies.” (Sachikonye 2012:12)

Upon attainment of independence in 1980, Zimbabwe inherited a dual economy from the Rhodesian government that consisted of two groups: a largely poor rural sector that provided livelihood to 80% of the population and a relatively well-developed modern sector (GoZ MDGs Report, 2009). In light of this background, the government of Zimbabwe saw it fit to direct bulk spending to social sectors with prominence on the development of rural infrastructure and redressing economic and social inequalities through the Land Resettlement Program. To warrant an improvement in living standards for the urban population, policies targeted areas of minimum wages, black affirmative and indigenization (Zhou and Zvoushe, 2012). In relation to this, undertaking the Growth with Equity Policy was born, and the statement provided a model for overall sectoral policies; this is how the foundation for national policy planning was constituted. Other economic policies include: Transitional National Development plan, Five Year Development Plan, Economic Structural Adjustment Programs, Model for Economic Reform just to mention a few.

2.14.1 GROWTH WITH EQUITY POLICY

Zhou and Masunungure (2006) pointed out that the new government in 1980 inherited a dual economy of white large-scale farms and a stagnant impoverished communal sector. Prioritization of socio-economic policies and embracing state led development strategies to

redress prevailing colonial imbalances was the only option for black government. Anything that was not in tandem with this objective could have amounted to the state renegeing on its liberation promises. It is against this background that, the black government adopted the Growth with Equity Policy in 1981 as the first economic policy statement after independence. The major thrust of the policy was to: "Achieve a sustained high rate of economic growth and speedy development in order to raise incomes and standards of living of all our people and expand productive employment of rural peasants and urban workers, especially the former." (Sachikonye 2012: 13)

This policy was initiated to deal with social and economic disparities inherited from the colonial era and were predominantly used in 1982. The Growth with Equity Policy also formed the backbone of the 1982-85 Plans (Shizha & Kariwo, 2011). The government wanted to vest control of economic activities in the hands of majority black people (Mzumara, 2012). It allowed politically marginal large-scale white farming, industry and mining, to continue their economic dominance (Shizha & Kariwo, 2011). The policy's major thrust was mainly on redistribution of wealth, expansion of rural infrastructure and addressing social and economic disparities including land reform. The economy recuperated significantly in the early years of independence averaging 10% growth during 1980-82. The only reason that saw the country registering such a development was because the country had inherited one of the most structurally developed economies and effective state systems in Africa.

In general, Growth with Equity asserted government's desire to develop the country guided by socialist and democratic principles in the allocation and distribution of resources and social benefits (Zhou & Zvoushe, 2012). It is critical to note that the positive outcomes of Growth with Equity policies were most evident and noticeable in the area of health; specifically where access to public services, resource distribution and allocation was de-racialized hence the black majority were able or allowed to access the services on equal basis without segregation. The state became a "distributive and welfarist state" (Zhou & Masunungure, 2006). It perceived itself as a generous father with a historical obligation to choose what it thought was good for its citizens in the long term quest of the objectives of the liberation struggle.

However decent as these welfarist policies were, carrying them out resulted to be a major defiance, especially in a decaying economy that prevailed in the first ten years of

independence. There was marginal citizen contribution and partaking in the planning and designing of the whole policy procedure; as a consequence, the bureaucracy solely handled everything (Zhou & Zvoushe, 2012). Moreover, the national economy was suffering from the hostile outcomes of the war in neighbouring countries such as Mozambique and South Africa and, it was not yet fully integrated in the international economy. According to Zhou and Zvoushe (2012), extensive rules and other inherent distortions further weighed the economy down. It was then obvious the need for restructuring the economy by means of sound economic planning.

In terms of food security, the production levels of grains like maize were between 0.8 million tons to 1,5 million tons between 1980 and 1983 seasons; these figures were not meaningful as agricultural production growth did not keep pace with population growth in the communal and resettlement areas (Poulton *et al.*, 2002). The commitment of the government to Mozambican war meant that it had limited resources to finance its own economic progress against agriculture, which was regarded as the backbone of the economy.

2.14.2. TRANSITIONAL NATIONAL DEVELOPMENT PLAN (TNDP) 1982-1990

In a bid to improve the lives of rural population, the government developed the Transitional National Development Plan (TNDP) in 1982. The TNDP created over 150,000 jobs and enhanced agricultural production of small-scale communal land farmers (GoZ, 1998). Like Growth with Equity Policy, the TNDP had also its thrust on reducing racial inequalities, reducing poverty and creating employment especially amongst the rural folk or marginalized black majority or Africans. Although the creation of the mentioned jobs and the improvement in agricultural production was marked during this phase, it was on a minimal level. Land redistribution remained or progressed so slow up to 1985 due to the willing buyer willing seller concept reached at the Lancaster House Conference. The government also faced financial constraints to purchase, develop and distribute land for its landless citizens. For example the government did not meet its initial target of 162 000 families by 1985 with only 36 616 having been resettled by then (Poulton *et al.*, 2002).

TABLE 2.4: SELECTED ECONOMIC INDICATORS DURING TNDP

Year	Real GDP Growth Rate (%)	Inflation rate (%)	Budget Deficit (% of GDP)	Money Supply Growth (%)	External Debt Service Ratio (%)	Current A/t Deficit as % of GDP
1980	10.8	7.3	-9	21.5	9	-4.9
1981	13.5	13.5	-7	13.1	10	-10.9
1982	3.3	14.6	-9	13.6	16	-11.6
1983	1.3	19.6	-10	11.7	25	-8.9
1984	-2.2	16.3	-11	10.5	27	-1.8
1985	10.5	9.2	-8	17.7	29	-1.9

Source: Zimstats (2015)

In light of the government failure to deliver land as anticipated, and the serious drought which hit the country in the 1982 to 1983 agricultural season, the food security level remained low because the few families who had benefitted from the land redistribution constituted the poor of the poor. These families had no required resources to farm meaningfully on their pieces of land, as they had no draught power and other agriculture inputs as well as extension services knowledge at their disposal. According to Vusani (2015), the newly resettled farmers were also limited in their production in terms of accessing loans, as only a mere 18,000 accessed loans by 1983. The TNDP was largely a failure but to its credit it created over 150,000 jobs and enhanced agricultural production of small-scale communal land farmers (Mapuva, 2015). The government embarked on another policy to try and rectify the TNDP failures.

2.14.3. THE FIRST FIVE YEAR NATIONAL DEVELOPMENT PLAN (FFYNDP) 1986-1990

Closely following the TDNP was the Five Year National Development Plan, which thrust was to improve service delivery in the education and health sectors. The Five Year Plan also aimed at further reducing inequality, reducing poverty and creating employment. This means that it also borrowed egalitarian principles from its predecessor policies like the TNDP and the Growth with Equity. Rural planning of the FFYNDP aimed at constructing infrastructure in rural areas, and in most rural areas, clinics, roads and schools were built. Improvement in

service delivery culminated in enhanced reproductive health services, with rural people enjoying free medical treatment (GoZ, 1998).

Furthermore, the Plan facilitated the decentralization of resources and opportunities to rural areas as a most notable post-colonial development. The growth pole policy was activated, formulated and adopted to try and promote rural development through physical development at designated centres. This was to curb the persistent migratory tendencies of most Africans through urbanization, sparked by the dictates of the 'bright lights theory'. These designated centres of physical development in rural areas came to be known as growth points. According to Manyanhaire *et al.* (2011), the adoption of the growth pole policy resulted in the establishment of centers that included Murambinda, Mubayira, Juru, Mupandawana and Gokwe, which were accorded town status, thereby received further enhancing employment and business opportunities for the rural folk and building investor confidence.

The town status bestowed upon growth points also boosted the revenue base for rural district councils that manned such centers. Infrastructural development was enhanced and the government supported rural growth centers for public and private investment as well as for the creation of equal job opportunities for the rural folk. Davies (1999) concurs that the growth pole policy deliberately sought to address regional disparities that had long existed between urban and rural areas through decentralization of services and investor focus. The implementation of the growth pole policy in rural areas had numerous positive gains for the rural folk. The policy promoted rural development through infrastructural development (banks, modern transport and health facilities, departmental stores, tarred road networks and even modern food outlets, enhanced agricultural diversification and increased employment opportunities and creation), all of which had been the preserve of towns and cities.

Facilities for processing of agricultural products, such as cotton ginneries, were established at most growth points, further increasing employment opportunities, availing markets for agricultural productions and reducing transport costs to rural farmers. Despite the mentioned improvements in other facets of agricultural activities, food security levels still suffered major blows. Poulton *et al.*, mentions that although after 1985 compulsory acquisition of land was allowed, there was still not great increase in redistribution. By end of the 1980s less than 20% of the land controlled by the commercial interests had been redistributed to small-scale producers. The Five Year Plan 1986-90 had stipulated that 150,000 families were to be

resettled every year but only 51,000 families were resettled in 3 million hectares. This means that the bulk of the rural black people remained food insecure at household level. This is due to the government failing to meet its target in land redistribution, which is a variable closely linked to food security. Again, the 1986-1987 droughts coupled with minimum government investment in small-holder farmers and communal farmers also disturbed the agricultural production dealing a blow to rural food security levels. The first three economic policies that Zimbabwe embarked on the first decade after independence are summarised on the table below:

TABLE 2.5: ECONOMIC DEVELOPMENT FOR THE FIRST DECADE (1980-1990)

PLAN	ORIENTATION	PERFORMANCE
Growth With Equity	-Social rhetoric combined with conservative policy on the ground -Welfarism and limited redistribution	-High growth of 11% and 10% in 1980 and 1981
Transitional National Development Plan	-Economic growth of 8% -Low inflation rates of around 15%	-Critical issues of land redistribution were not addressed -Growth rate target was not achieved
First Five National Development Plan	-Emphasis on economic growth, employment creation and poverty reduction	-Economic decline of growth rate by about 3% -Productive sector growth of 1.7%

Adapted from Kanyenze (2007) in Sibanda and Makwata (2017)

2.14.4. ECONOMIC STRUCTURAL ADJUSTMENT PROGRAMS (ESAPs)

In the 1990s, many African countries –along with the rest of the world- adopted Economic Structural Adjustment Programs (ESAPs) in line with International Monetary Fund (IMF) and World Bank prescriptions. In a nutshell, ESAPs are neo-liberal market driven policy measures, which were embraced as dogmatic solutions to the economic crises of the 1980s. Such advised policy measures called for the reduction of government spending by introducing user fees in the health and education sectors, considerably reducing the civil service establishment, commercializing and privatizing some state owned companies, withdrawing subsidies, among others. In Zimbabwe, The Economic Structural Adjustment Policy Document (1990: 36) pursued to “de-emphasize its expenditure on social services and emphasize investment in the material production sectors such as agriculture, mining and

manufacturing”. ESAP specific targets included: the achievement of an annual GDP growth rate of 5% during the period 1991 –1995; the increase of savings to 25% of GDP; the increase of investment to 25% of GDP; the export growth rate of 9% per year during the period 1991-1995; the reduction of budget deficit from 10% of GDP 5% by 1995; and the reduction of inflation from over 17% to 10% by 1995.

The ESAP policy document also stipulated particular measures for accomplishing the above-mentioned goals; these include financial sector reform, domestic market deregulation, trade and exchange liberalization, and other institutional reforms. Nevertheless, the experience of Zimbabwean with ESAP policy recommendations draws attention to processes that were generally troubled by situational and structural constraints. The impact of such recommendations on the economy was minimum as it was recorded an annual growth rate of less than 1% (ZIMPREST, 1998). Moreover, the budget deficit stayed high. Actually, the budget deficit had increased to 13% of the GDP while inflation levels also worsened in by the 1994/95 fiscal year, going outside set targets. Parastatal losses kept on escalating rather than declining becoming a major ditch on the fiscus (Zhou, 2001). In addition, progress in the privatization front was very low note; conversely there was some noticeable progress in the area of commercialization. It is worthy of note that by closure of the ESAP, no parastatal in Zimbabwe has been fully privatized (Zhou, 2000). The lack of legislation to guide the privatization of state companies further compromised the implementation of policies.

Furthermore, the enforcement of cost recovery measures in the health and education sectors had an extremely substantial levy on the welfare of the population, particularly the rural poor. It jeopardized the access health and education facilities of the poor segment of society since most people are not able to pay the compulsory user fees (GoZ MDGs Report, 2009). Programs meant to cushion the suffering and vulnerable social segments –for instance the Social Dimensions of Adjustment (SDA) Program and the accompanying Social Dimensions Fund (SDF)-, were swamped by the uncontrolled structural poverty in both rural and urban areas. According to TMSA (2011), the minimalist reform program of 1990 –2000 negatively impacted on social welfare in the nation.

Food security wise, the liberalized policies meant a cut down of subsidies on farmers as has been the case in the previous years where communal and small-scale farmer support schemes were promoted albeit at minimum levels. ESAP brought with it the Zimbabwe Agricultural

Model with a focus on increased food production, restructuring of the agricultural finance system and land reform that ensure productive use of the land. However the model remained a pie in the sky as the government was cash strapped hence Agribank had to delay its operations up to year 2000 to finance the targets of the model. (Progressive Zimbabwe Report, 2012) This meant that the only alternative for the farmers was to turn to other commercial banks, but those other banks regarded land as a “dead asset” which could not be relied on as collateral security.

Inflation also got worse and it eroded people’s purchasing power (ZIMPREST Document, 1998). The table below summarizes some of the key performance indicators during the ESAP period.

TABLE 2.6: SELECTED ECONOMIC INDICATORS DURING ESAP

Year	Real GDP Growth Rate (%)	End Period Inflation Rate (%)	90 – Day NCD Rate (%)	Commercial Bank Lending Rate (%)	Budget Deficit (% of GDP)	Broad Money Growth (%)	External Debt Service Ratio (%)	Current A/C Deficit as % of GDP
1991	5.0	30.2	22.5	14.6	-7.6	20.4	24.0	-5.3
1992	-4.8	46.4	37.0	34.6	-8.9	22.1	13.0	-8.9
1993	2.9	18.6	29.0	37.9	-5.4	43.8	30.0	-2.1
1994	4.2	21.1	30.3	36.4	-9.7	33.8	25.0	-2.0
1995	-0.2	25.8	31.0	35.1	-12.6	30.0	20.0	-5.0

Source: Reserve Bank of Zimbabwe and Central Statistical Office in Sibanda and Makwata (2017)

2.14.5 MODEL FOR ECONOMIC REFORM

As a follow-up to full adoption and implementation of the SAPS in 1991, a Model for Economic Reform (1991-95) was announced. It aimed at the privatization of state-owned enterprises; according to World Bank data the economy achieved an average annual GDP growth of 1,39% between 1991 and 1995. The Model document states that:

“This transformation entails moving away from a highly regulated economy to one where market forces are allowed to play a more decisive role, while concurrently taking steps to alleviate any transitional social hardships which may arise from this transition.” (Sibanda and Makwata 2017:23)

It is critical to note that the decade of the 1990s generally witnessed a sharp regression in economic development and further down turn of the structural problems of inequality and high poverty. Results from the first Poverty Assessment Study Survey (PASS I) of 1995, highlight that extreme poverty drastically increased during the ESAP period, a consequence of this is that in 1995 45% of households lived below the food poverty line (FPL) while in 1990 26% of the households lived in such conditions (Mumvuma *et al.*, 2006). Regarding general poverty, this increased from around 40% in the late 1980s to 61% by 1995 as measured by the total consumption poverty line (TCPL). Such a situation entails that the food security levels at the household environment were low. The bulk of the rural folk had to rely on food from work programs and food handouts from organizations like WFP, especially during the 1991-92 and 1994-1995 drought seasons, which worsened the food security position.

2.14.6. ZIMBABWE PROGRAMME FOR ECONOMIC AND SOCIAL TRANSFORMATION (ZIMPREST)

Having noted the challenges faced through ESAP and the Model for Economic Reform, the ZIMPREST program was crafted to be commenced in 1996 but was postponed by two years. As indicated before, after observing the shortcomings and weaknesses of ESAP, ZIMPREST looked into restoring poverty alleviation, macro-economic stability, as well as facilitating private and public investment and savings. ZIMPREST prioritized employment creation as its strategy to eradicate poverty; the goal was to create an empowering programme for entrepreneurship, develop human capital and involve different stakeholders in the process.

The inauguration of ZIMPREST came at a time when funds had already been assigned within the three-year rolling budget structure. Moreover, there was a mismatch about the demand and supply of foreign currency. After two years into the ZIMPREST, inflation was above 50%, unemployment was around 60%, and the budget deficit was still at 10% of GDP (GoZ, 2009). The exportation sector performed weakly in terms of the US dollar: exports collapsed from around 12% in 1996 to around 20% in 1999 (Zwizwai, 2007). International financial support to fund program implementation never reached ZIMPREST although it really needed

it. In addition, a big number of goals were to be achieved: institutional reforms, land reform, poverty reduction, employment creation, decentralization, and others, without clearly indicating the budgetary repercussions of each one of these policy objectives, which was obviously too ambitious.

With regards to food security, the ZIMPREST failed to contribute meaningfully towards this cause. During the ZIMPREST period the fast track land reform program was launched and this program greatly retarded agricultural productivity for Zimbabwe. According Kanyenze (1993) about 50,000 hectares of national irrigation land of some 186,590 hectares existing prior to the FTLRP had been made inoperable due to vandalism, theft and neglect. This was because the program was politically motivated and in 2 years alone 7,3 million hectares had been taken. These criminal elements severely reduced agricultural production and the government had to rely on donors like WFP to feed its people.

The targets of ZIMPREST are as summarized on the table below:

Table 2.7: ZIMPREST TARGETS

Economic Indicators	Target
Annual Growth Rate	6%
Employment Creation	42 000 jobs per annum
Budget Deficit	Decrease from 10% to less than 5% of GDP
Inflation Rate	Decrease from 20% to single digit
Savings and Investment Levels	23% of GDP
Export Growth	9% per annum

Source: Central Statistical Office, 2016

ZIMPREST was supposed to ride on the achievements of ESAP but this plan performed poorly and the economy collapsed dismally. During the same period of 1996-2000 government embarked on programmes, which worked against the objectives of the envisaged reforms of ZIMPREST (Sibanda and Makwata, 2017). The Zimbabwean government in 1997 decided to provide once-off payments of Z\$50,000 dollar (then worth \$1 315) and long-term pensions to 60,000 veterans of the nation's liberation war (Madise, 2009). Notwithstanding the noble intentions, the fact is that this was not budgeted for, and dramatically increased

government expenditures, costs that could not be met through increased income or reductions to other programmes (Wharton, 2014). The government of Zimbabwe did not involve the general public in policy implementation. However, it can be further argued that, the government was reluctant and lacked prioritization of programmes when it paid war veterans at the expense of the economy or even invest in food security initiatives. It is the thrust of this study to develop a people driven food security Implementation Model which values community participation to increase ownership of programmes in Matabeleland South Province of Zimbabwe.

2.14.7. MILLENNIUM ECONOMIC RECOVERY PROGRAM (MERP)

The ZIMPREST having marred by the infamous Fast Track Land Reform Program did not live to celebrate its fourth anniversary as it was abandoned for another program known as the Millennium Economic Recovery Program (MERP) launched in August 2001. MERP was touted as a short-term economic program to restore economic vibrancy and address the underlying macroeconomic fundamentals. However it was rendered ineffective, largely due to the withdrawal of international donor support in February 2003 citing gross human rights abuses both during the on-going Fast Track Land Reform Program and the period running to 2002 elections. According to Progressive Zimbabwe Report of 2016 the economy of the country since 2000 can only be described as disastrous because output of major crops collapsed and between 2001 to 2005 average annual Gross Domestic Product (GDP) and employment growth rate collapsed to minus 5,5% and minus 7,5% respectively. Thus such a low GDP and employment growth for an agro based economy points to the fact that the MERP did not do much to promote food security at national and household level.

2.14.8. THE TEN POINT PLAN

The ten point plan which had a thrust on promoting an agro based economy had its roots on the on-going Fast Track Land Reform Program which had seen more than 1400 farms seized from commercial white farmers in less than two years. The plan sought to complete the on-going land reforms in the double dimension of A1 and A2 schemes. On one hand, there is an agriculture-led economic growth and development thrust whose principle is to stimulate small-scale agriculture by means of larger input and extension funding. On the other hand, there is an industrialization program that establishes projects and processes within particular levels of agricultural outputs (Chitsike, 2003). Further domestic indigenous capital, which

increases local ownership of the economy and associates with friendly capital from non-traditional investment markets, expanded the role for indirect or direct State involvement in the economy. It was emphasized the instigation of investments in precise strategic areas for specific strategic outcomes and focus on medium and small-scale businesses and larger backing from the State. In order to create wealth for the country, it is necessary to renovate the ownership structures in the mining and tourism sectors, with special focus on programs that generate employment for the youths; for instance the resuscitation of enterprises that got closed. Part and parcel of the ten-point plan included greater food supply, the sustenance of the financial institutions as the funding basis of the economy, as well as security and relief to beat the current and future droughts.

Noble as it looked on paper, food production and security still suffered from lack of proper funding and the newly resettled farmers lacked farming expertise to undertake meaning full production on the acquired farms. According to Progressive Zimbabwe Report 2016, the period after 2000 saw Reserve Bank of Zimbabwe involvement with farm mechanization initiatives but these did not yield much because of misappropriation and misuse of equipment by the beneficiaries of the mechanization programs and default in the repayment of extended loans.

2.14.9. NATIONAL ECONOMIC REVIVAL PROGRAM (NERP)

In February 2003 the Government of Zimbabwe launched the National Economic Revival Program (NERP), which anchored the sectoral and macroeconomic policies into the year 2004. The 2003 National Economic Revival Program borrowed from the “Ten Point Plan” but in this case the emphasis was in agriculture-led economic revival strategy. The NERP 2003 had concentrated on the main defies that the economy encountered: reversal of de-industrialization; inflation reduction; support for the productive sector; support for agriculture; development of tourism; increased mining production; foreign exchange generation; improving the supply of energy and transport; and effective use of public resources.

Agriculture productivity still suffered in this phase due to a compound of issues, which among others included lack of funding and inadequate farming skills by the newly resettled farmers. The proportion below the total poverty line had risen to 80%, with 59% of the population also being below the Food Poverty Line (FPL), (Zimbabwe MDGs Progress

Report 2004). Judging from these figures, the NERP therefore failed to promote food security as more than half the population remained food insecure having the option to rely on food handouts from NGOs, especially the inhabitants of regions 4 and 5, where less rainfall is received annually.

NERP was reinforced by the aspiration of embarking on sectoral led economic revitalization and enunciated sectoral policies with recommendations to revive as summarised below:

TABLE 2.8: SECTORAL REFORMS

SECTORIAL POLICY	RECOMMENDATION
Agriculture	<ul style="list-style-type: none"> -Secure land tenure through land reform -Producer pricing should be increased to ensure viability and stimulate production -Encourage contract farming -Development programmes in dairy, livestock and irrigation to boost dairy products, national herd and winter cropping respectively
Manufacturing	<ul style="list-style-type: none"> -Increased value addition -Promote diversification of exports -Attract foreign investments -Promote technological linkages -Set up productivity centre to come up with benchmarks, and standard to enhance productivity
Mining	<ul style="list-style-type: none"> -Increased old production -Increased value addition -Setting up of Mining Industry Loan Fund -Amendment of Mining Fiscal Regime
Tourism	<ul style="list-style-type: none"> -Intensify marketing activities and broaden tourist -Boost public relations campaigns to improve country image -Invest in tourism infrastructure

Source: Sibanda and Makwata (2017)

It is of paramount importance to observe that the broad based macroeconomic policies failed dismally and it was very difficult for sectoral policies to perform well. Furthermore, it should be noted that, there was no significant agricultural output from land distribution.

2.14.10 THE MACRO ECONOMIC POLICY MODEL (2005-2006)

The Macroeconomic Policy Model 2005 -2006 “Towards Sustained Economic Growth” was launched in November 2004, and it contained the key features of the Zimbabwe’s macroeconomic policies. This Model outlined the vision of Zimbabwe’s economic development programs -in line with Zimbabwe’s MDGs- to improve the standards of living of the people by reducing poverty, This included directing the present-day macroeconomic stabilization struggles that aimed to reduce inflation, by the end of 2004 to below 200%, in 2005 to double-digit levels and thereafter to single digit inflation. The particular sectoral

goals of the Model were infrastructure development, agriculture development, investment promotion, industrialization, poverty reduction, social services delivery, youth development and gender, economic empowerment, strengthening institutional capacity, and macroeconomic stability.

The Model was formed on the Ten Point Plan of the NERP; its goal was to consolidate the benefits accomplished throughout the implementation of that program as well as to strengthen policy coordination and implementation. By the time the macroeconomic model was conceived, Zimbabwe continued to encounter defies in the areas of foreign currency generation, inflation reduction, infrastructure, capacity utilization, and public service delivery. The new Model recognised macroeconomic stabilization as one of the essential challenges that needed to be focused on. Various measures were scheduled for implementation in meeting these challenges, to meet the goals as set out. To guarantee prudent fiscal policy, the government decided to continue to strengthen and implement measures that focus on matching expenditures with revenues, develop further the Public Finance Management System (PFMS), develop a financial management legal model, and to ameliorate financial management of parastatals and keeping their debt portfolio under systematic review.

These above-mentioned measures were expected to improve financial management in all government departments, keep the budget deficit low, and avoid expenditure overruns. The Government was to appeal to the Audit and Exchequer Act for all Ministries that made unauthorized expenses. Emphasis was also placed on revenue resource mobilization through widening of the tax net, enhancing revenue collection and minimizing revenue leakages, strengthening the Zimbabwe Revenue Authority (ZIMRA), introducing strategies to get revenue from the informal sector, updating the registration of businesses for all enterprises to pay tax, and limiting tax exemptions to social needs.

Despite these presumed measures, the economy still suffered under this policy. The policy makers wanted to drive the economy into a full scale agricultural economy but this was never realized because by 2007 the GDP per capita was 47% below the level at independence, and 53% below the peak value in 1991. Vusani (2008) projected that inflation levels would raise to 7221% per year by 2007, an indication that the policy failed to stabilize the agricultural led economy. Given such high inflation level there is no doubt that food security levels at

household levels remained low and the masses continued to sink into the vortex of economic oblivion, hence reliance on donor aid and food for work programs.

2.14.11. NATIONAL ECONOMIC DEVELOPMENT PRIORITY PROGRAM (NEDPP) AND THE ZIMBABWE ECONOMIC DEVELOPMENT STRATEGY

The year 2007 brought the National Economic Development Priority Program (NEDPP) which sought to promote agriculture growth and productivity, ensure food security and improved marketing, research and extension services. The policy failed to work mainly due to diverging political stances, as there was constant reshuffling of ministers at the time. Almost at the same time, the Zimbabwe Economic Development Strategy (ZEDS) was adopted and soon aborted at conception in 2008. DBSA (2012) found that between 2001 and 2008, GDP declined at an average of 7.59% per annum. The African Development Bank (2010) calls the period between 2000 and 2008 as “the Lost Decade” of Zimbabwe, as the country experienced “a sustained and broad-based decline in economic activities”.

Food insecurity was worsened during this period as maize production fell to a little less than half a million tons (0,54 million tons) down from its 10 year average of 1,6 million tons in the previous decade. Given such a scenario, one can assert that the dwindling agricultural economy of Zimbabwe meant that food security levels continued to negatively sink during the phase of these failed and short lived economic policies.

2.14.12. SHORT TERM EMERGENCY RECOVERY PROGRAM (STERP)-2009

Short Term Emergency Recovery Program (STERP) (Feb-Dec 2009), which was initiated on the back of the Global Political Agreement signed on September 15, 2008, was focused on “getting Zimbabwe moving again”. It was meant to reverse negative growth rates, devaluation of the currency, low productive capacity, job losses, food shortages, poverty and massive de-industrialization. The STERP brought dollarization, and the Zimbabwe dollar was demonetized; hence, South African Rand, United States dollars and other identified convertible currencies became legal tenders. According to DBSA (2012), in the 4 years between 2009 and 2012, the annual average GDP growth was an impressive 8.65%; still off a low base of the “Lost Decade” period.

The STERP saw a slight improvement of agricultural productivity and its contribution to GDP. Between 2009 and 2011, the agricultural production grew by 2% to 9%, and contribution to GDP was between 13.1% and 13.7%. While the growth can be applauded on

the basis of a stable political environment the improvement was so minimal to warrant and guarantee Zimbabwe as a food secure economy.

STERP had significant positive benefits as summarised on the table below:

TABLE 2.9: SECTORAL STERP ACHIEVEMENTS

ECONOMIC SECTOR	ACHIEVEMENTS
Economic growth	<ul style="list-style-type: none"> -Inflation reduced due to the adoption of multicurrency which helped ease inflationary pressures, i.e. from 230 million % in July 2008 to -7% by December 2009 -Price distortions in goods and foreign exchange markets were removed -Introduction of cash budget for Government to operate within available resources restrained expenditure overruns
Agriculture	<ul style="list-style-type: none"> Liberalisation measures led to stimulus and empowerment for small scale farmers e.g. in the tobacco sector
Manufacturing	<ul style="list-style-type: none"> -Utilisation levels of over 70% were realised by October 2009 -Food industry capacity utilisation increased to around 30% due to a backdrop of increased domestic demand and stable macro-economic environment
Social Sector	<ul style="list-style-type: none"> -Health and education sector benefited immensely from donor funding arranged by cooperative partners -There was smooth administration of the schooling activities though education fees increased and reduced the 'O' and 'A' level sitting

Source: Sibanda and Makwata (2017)

The short-term nature of STERP meant that some programmes and projects would not be fully implemented within the time frame of nine months. Since there was little support on donor funds to implement the programmes, hence the launch of STERP II to consolidate gains from the initial recovery efforts under STERP (Sibanda and Makwata, 2017). However, STERP did not contribute meaningfully to agricultural production as it left many communities food insecure. It was a top down type of a blue print. The study seeks to address the problem of community participation and bring communities on board when it comes to decision-making especially on problems that affect them and their environment.

2.14.13 MEDIUM TERM PLAN (MTP)

The STERP was succeeded by the five-year Medium Term Plan (MTP), which was supposed to run up to 2015. The plan was set to articulate government's intentions in the medium term

and this would ease the speculation of investors eager to see how the environment would be improved for investments.

According to Dr. Desire Sibanda, Economic Planning and Investment Promotions (2016) permanent secretary at the time of its adoption, the plan was home-grown unlike other previous documents such as the Economic Structural Adjustment Program (ESAP), which was foisted on the country. The plan was also coming hard on the heels of STERP, which had stabilized the economy as an emergency program to revive an economy that was emerging from a decade of recession.

The economy, according to projections, was to have an average growth of 7.5% for the next five years above Africa's average of 6% (TMSA, 2011). The plan was to act as an investment handbook for investors directing them towards where to put their money. MTP envisaged raising investments up to 25% of the Gross Domestic Product (GDP) in an economy where investments accounted for less than 10% of GDP at the time.

However, despite the MTP, the economy though stabilized by the dollarization, nonetheless still struggled as unemployment levels rose to more than 80%. The agricultural sector still suffered from lack of funding, hence low levels of output and food security against an increasing population. According to Kanyenze (2016), agricultural mechanization and irrigation development received 8.3% in 2014, 5.3% in 2015 and 3.6% in 2016 against an international standard (Maputo Declaration) of 10% towards agriculture. This low level of the financing of the agricultural activities foretells a society characterized by low food security levels. Maize output remained at 700-800 kg per hectare instead of the usual 1.5 tons per hectare.

2.14.14 ZIMASSET

Zimbabwe experienced a deteriorating economic and social environment since 2000 after initiating a fast track land reform program, which was marred by gross human rights abuses thereby attracting economic sanctions imposed by the Western countries such as Britain and France. The development resulted in a deep economic and social crisis characterized by a hyper inflationary environment and low industrial capacity utilization, leading to the overall decline in Gross Domestic Product (GDP) by 50% in 2008 (ZimASSET, 2013). After the

disputed landslide victory by the ZANU PF Party in the 31st July 2013 harmonized elections, the Party had a mandate and responsibility to govern the country for a five year term. In order to guide national development for these five years, the Government under ZANU PF, crafted a new economic blue print known as the Zimbabwe Agenda for Sustainable Socio- Economic Transformation (ZimASSET), which is the most recent economic policy for Zimbabwe.

For its successful implementation, ZimASSET is underpinned and guided by the Results Based Management (RBM) System and is also used as a basis for the macroeconomic budgetary model by Treasury, commencing with the 2014 fiscal year. ZimASSET is a cluster based Plan, reflecting the strong need to fully exploit the internal relationships and linkages that exist between the various facets of the economy. The four clusters of the ZimASSET are: i) Food Security and Nutrition; ii) Social Services and Poverty Eradication; iii) Infrastructure and Utilities; and iv) Value Addition and Beneficiation. To buttress the aforementioned clusters, two sub-clusters were also developed, namely Fiscal Reform Measures and Public Administration, Governance and Performance Management. Again, to ensure the successful implementation of ZimASSET, key strategies, success factors and drivers have been identified as implementation pillars. This means that the blue print has set targets measured by indicators by 2018.

The progress of the ZimASSET so far is a mixed bag posting a few positives and a lot of negatives given that the blue print is only left with one year to fulfil its obligations. The policy has failed to attract meaningful Foreign Direct Investment (FDI) due to the indigenization and empowerment policy, which calls for 51% share ownership in multinational companies by locals. The look East policy has not lived up to its billing as most of the mega deals signed between the president and the Chinese are yet to be fulfilled or commence 4 years into ZimASSET implementation. Given such a scenario, it can be safely concluded that the ZimASSET suffers from financial resources to realize its set targets.

In the area of poverty eradication, the situation is pathetic as more than 90% of Zimbabweans live below the poverty datum line of \$508 per month for a family of five, and services in the health sector and education remain beyond the reach of many. In terms of employment, 98% of productive Zimbabweans are unemployed and this is against the set target of creation of 2 million jobs by the ZimASSET. Thus the blue print can be labelled as an ambitious document with impractical targets.

Infrastructure development is key in ZimASSET. While some efforts have been made to achieve this goal, the successes remain minimal. So far only one major highway has been resurfaced (Plumtree-Bulawayo-Harare-Mutare). Of the 7 earmarked water sources only the Tokwe-Mukorsi has been completed. Given the time left for the ZimASSET, it is clear that the government will not be able to accomplish its set targets by 2018.

Value addition and beneficiation is also a thrust of the ZimASSET. There have been calls to uphold this cluster, especially in the mining and minerals industry, where the produce is largely exported in its raw form, thereby losing out on full benefits associated with value added mineral products. To this cause, the Zimbabwe diamond industry has been established but is yet to declare dividends to the treasury, although the ZimASSET is nearing the end of its term. Other minerals like platinum have been placed on the cards to process and add value to them before exporting them, but currently this remains on paper as no platinum processing industry has been established so far. In light of this slow development in value addition and beneficiation initiatives, it can be asserted that ZimASSET is deemed to miss out on its targets to promote economic growth through value addition and beneficiation. For this to be achieved there is need to attract foreign direct investment, and invest heavily in modern and sophisticated machinery rather than relying on obsolete machinery.

Promotion of food security and nutrition is crucial to the success of ZimASSET. Efforts have been made to oversee this cluster with the parliamentary portfolio, which was created to specifically deal with the problem of food insecurity, to this cause, led by the then vice president Emerson Dambudzo Mnangagwa. The presidential input scheme has been in place, but in most instances this has been limited to 4 bags of fertilizer and 10 kg maize seed per farmer. The command agriculture has been put in place to promote bumper harvest and the Vice president has predicted a yield of 4 million metric tons of maize for the 2016/17 agriculture season. If this prediction is anything to go, this will be a milestone achievement in food security promotion because at most Zimbabwe has produced around 2.7 million metric tons in previous good seasons.

2.14.14.1 THE NEXUS BETWEEN ZIMASSET AND FOOD SECURITY

2.14.14.1.1 What is ZimASSET?

The Zimbabwe Agenda for Sustainable Socio Economic Transformation (ZimASSET) policy document (2013) is a results-based policy, which seeks to address the country's socio economic challenges. As described before, ZimASSET is a policy that is divided into four main clusters that seeks to address on issues that pertain to the socio-economic challenges being faced by the country. These clusters are grouped as follows: i) social services and poverty eradication, ii) Food and nutrition security, iii) infrastructure and utilities, and iv) value addition and beneficiation. The objective of the policy according to the GoZ, ZimASSET (2013) is to enable Zimbabwe to achieve economic growth and become one of the strongest economies in the region, and in Africa. According to ZDI (2013) ZimASSET policy was born out of an election campaign manifesto. ZimASSET was used by the ruling ZANU PF to charm the electorate in the 2013 harmonized elections, and after winning the election, the manifesto was subsequently made a national policy by the ruling party.

2.14.14.2 ZIMASSET CLUSTERS

2.14.14.2.1 Food Security and Nutrition

According to GoZ, ZimASSET (2013), the aim of the Food Security and Nutrition Cluster is to create a food surplus and self- sufficient economy that will see Zimbabwe re-emerge as the “Bread Basket of Southern Africa”. Zimbabwe has faced low rainfall for the past decade or so and the policy seeks to provide counter strategies to make sure that people won't die from hunger and starvation. The cluster programs are aligned to and informed by the Common Market for Eastern and Southern Africa (COMESA) and SADC Food and Nutrition Models, the Draft Comprehensive Agriculture Policy Model, Comprehensive African Agricultural Development Program (CAADP), the Zimbabwe Agriculture Investment Plan, and the Food and Nutrition Security Policy. As such the aim of this thesis is to develop an Implementation Model to address food shortages in Matabeleland South Province within the context of ZimASSET.

2.14.14.2.1 Social Aspects of Food Security

The highest state of food security requires not just secure and stable access to a sufficient quantity of food, but also access to food that is nutritionally of adequate quality, culturally

acceptable, procured without any loss of dignity and self-determination, and consistent with the realization of other basic needs. Therefore, food insecurity is not an objectively defined level of access to food or quality, but rather the level or quality that people perceive to be inadequate (Maxwell and Smith 1992: 41). For example in India, subjective questions have been included in the national survey to ask whether respondents consider their food intake adequate. Results showed that 18.5% households on average in India, self-reported chronic and/or seasonal food inadequacy. This compared with figures of 14.6% according to food behavioural thresholds, and 50.2% according to caloric norms (Minhas 1990, reported in Gillespie and Mason 1991:31). It is important to find out if the population recognizes that they are food insecure and then it can be easy to convince them to take part of the strategies in place aiming to fight food insecurity among them. In addition, Mudimu (2008) says that food security in Zimbabwe is mainly defined in the context of availability or access to cereals, particularly maize as a staple food crop. This is because cereals such as maize, sorghum, pearl millet, finger millet and wheat, make up the traditional food grain crops at the expense of horticultural products, which are essentially for direct consumption. Food security also touches areas such as consistency with local food habits and cultural acceptability (Oomen 1988; Oshaug 1986; Eide *et al.* 1985, 1986; Teller *et al.* 1991 cited in Maxwell and Smith 1992: 39). In particular, Oshaug (1986: 5-10) says that efforts to direct changes in food patterns for optimal nutritional conditions should always take the indigenous food culture and food production pattern of a society as a starting point. Therefore, a country and people are food secure when their food system operates in a way that removes the fear that there will not be enough to eat. In particular, food security will be achieved when the poor and vulnerable, particularly women and children and those living in marginal areas, have secure access to the food they want.

2.14.14.2.2 Nutrition Security

A household is said to be food secure “if it can reliably gain access to food in sufficient quantity and quality for all household members to enjoy a healthy and active life” (Gillespie and Haddad, 2001: 45). It is possible, however, for individuals in food-secure households to have deficient or unbalanced diets. (Benson, 2004: 33). As a result, malnutrition takes place if an individual’s diet falls short of providing adequate calories and protein necessary for growth and maintenance. To capture more fully the nutrition aspects of food security in terms of micro-nutrients deficiency, a number of nutrition-based indicators are analysed here. These

are the prevalence of anaemia among children under 5, and the prevalence of anaemia in pregnant women (FAO, 2014). The prevalence of anaemia in pregnant women has steadily decreased by around 16% over the period 1990-2011 to as low as 43.1%, on average, in African countries. However, the prevalence of anaemia in pregnant women in Africa is still significantly high in comparison to Asia's 32.5%. Similarly, the prevalence of anaemia among children has significantly fallen from as high as 70.8% to as low as 58.3%, though still unacceptably elevated, compared to Asia's 36.1% or even of North Africa's 34.5%. The disparity is also observed from one country to another with the prevalence of anaemia among pregnant women and children ranging between 28.4% and 63.5%; and 29.5% and 86.1%, respectively.

Stunting, underweight and wasting remain very prevalent among children under five in Africa, particularly from Southern Africa to Sahara where they represent, respectively, the highest (39.6%) and the second highest (21.4%) worldwide in 2011 (UNICEF, WHO and World Bank, 2012). Recent data demonstrates that Africa is the only continent with minimal changes in the prevalence of stunted children since 1990. The proportion of stunted children under 5 in Africa has decreased from 42% to merely 35%, compared to 40% to 25% at the global level, between 1990 and 2012. Despite drop in the prevalence, the number of stunted children has increased from 46 to 59 million over the same period. Large variations in prevalence in child stunt between countries exist, ranging between 15% and 58%. Recent data shows that there are 16 countries in the continent with stunting rates above 40%; 21 countries with stunting rates in the range of 30% to 39.99% and 6 countries with stunting rates between 25%- 29.99% This numbers reaffirm the fact that a large proportion of Africa's population does not have access to food containing the essential vitamins and minerals required for optimum health and nutrition (UNICEF, 2014).

TABLE 2.10: A SUMMARY OF ZIMBABWE'S ECONOMIC BLUE PRINTS 1980- 2013

Name of Blue Print	Major Thrust	Success Stories	Challenges/Gaps
Growth With Equity Policy (1981)	To address social economic disparities inherited from the colonial era. Guided by socialist and democratic principles in the allocation and distribution of	Improvements in access to health and education by the previously marginalized black majority as well as marked improvement in	The policies adopted were not Sustainable as they drained the fiscus. Masunungure (2006), the socio-economic development

	<p>resources.</p> <p>Characterized by land resettlement on a willing buyer willing seller basis.</p>	<p>resource allocation.</p> <p>Life expectancy and infant mortality improved</p> <p>A rapid growth in schools and enrolment, in both primary and secondary schools by 1990</p> <p>Zimbabwe had achieved universal primary education for all (Shizha & Kariwo, 2011).</p> <p>The economy experienced very high growth rates of 10.7% and 9.7% in 1980 and 1981 respectively engineered by external factors on growth, fiscal driven redistributive programmes and the return of access to external markets (Mzumara, 2012).</p>	<p>goals could only be achieved through a subsidy policy that enabled parastatals to undertake and provide affordable services to the public.</p> <p>Barett (2005) observes that, by the late 1980s, the price control regime was inhibiting the dynamism of the domestic economy and generating structural problems that were systematically undermining its economic and political sustainability.</p> <p>The rapid growth in civil service employment and</p> <p>Spending on social services, drought relief, and parastatals generated a chronic budget deficit, a high tax regime, and a rapid increase in public debt.</p> <p>Minimum citizen engagement and participation</p>
<p>Transitional National Development Plan (TNDP) (1982-90)</p>	<p>Focused on achieving social justice and equity</p> <p>Deducing racial inequalities, poverty and create employment especially for the rural folk</p> <p>Desire to accelerate economic growth through promotion of productive sectors</p> <p>Government had a leading role to provide services and redistribution of resources to redress inherited inequities and imbalances and access to basic needs. Black people had limited capacity to meet these needs themselves.</p>	<p>Major successes of this era were on social services where primary education for instance was provided for free while secondary schooling was heavily subsidized with many schools being constructed.</p>	<p>Employment and business opportunities were restricted, few people could develop the skills needed to prosper through own enterprise hence the state felt compelled to actively assist in the allocation of resources.</p> <p>The plan failed to address issues like; equitable land redistribution, indigenization and empowerment, product beneficiation, fiscal restraint among other measures.</p> <p>Land distribution remained slow until 1985 due to the willing seller willing buyer at Lancaster House Conference.</p> <p>Government failed to purchase, develop and distribute land for the landless citizens.</p>
<p>The First Five Year National</p>	<p>Targeting an average GDP growth of 5.1% per annum</p>	<p>During the period 1980 to 1985, the economy</p>	<p>Limited resources being available for productive public</p>

<p>Development Plan (FFYNDP) 1986-1990</p>	<p>during the life span of the plan.</p> <p>Control and transformation of the economy as well as economic expansion.</p> <p>Land reform and efficient utilization of land.</p> <p>Raising the standards of living of the entire population, in particular, the peasant population;</p> <p>Enlargement of employment opportunities and manpower development;</p> <p>Development of science and technology;</p> <p>Maintenance of a correct balance between the environment and development</p>	<p>registered an average growth rate of around 5% compared to the target of 8% largely due to low levels of investment in the productive sectors.</p> <p>Irrigation schemes in rural areas were introduced</p> <p>Prioritized the development of industries that were involved in production of agricultural inputs;</p> <p>Increased the number of state farms.</p> <p>Government intensified education of communal farmers in modern agricultural practice.</p>	<p>investment.</p> <p>Public investment expenditure as a proportion of GDP stagnated at less than 1% and was thus largely recurrent, with salaries and wages, interest on debt and transfer payments accounting for over 90% of total government expenditure.</p> <p>Capital expenditure only accounted for 5% of total government expenditure.</p> <p>Bulk of the rural folk remained food insecure.</p> <p>Policy did not address the issue of land inequalities as 51000 households out of 150 000 households were resettled.</p>
<p>The Economic Structural Adjustment Programme (ESAP) (1991-1995)</p>	<p>To transform the economy from being heavily regulated to liberalization.</p> <p>Reducing deficit from 10% of GDP to 5% by 1994/5.</p> <p>Reforming public enterprise to eliminate large budgetary burden caused by subsidies.</p> <p>Civil service reform to reduce number of civil servants in noncritical areas.</p> <p>The plan was to cut the wage bill while properly paying those retained workers.</p> <p>Labour law reforms through amending the labour act to streamline hiring and firing, facilitate quick retrenchments and to replace direct intervention in wage setting by collective bargain.</p> <p>Monetary and fiscal reforms- It was necessary to strengthen monetary management, slow credit creation to reduce</p>	<p>Commercialization was successful on SEs like Dairy Marketing Board, Cotton Marketing Board and Cold Storage Commission which went on to become prosperous commercial entities before some like CSC and Cottco encountered problems later.</p> <p>Removal of barriers of entry resulted in more new merchant banks, discount houses and commercial banks, which were started by black Zimbabweans.</p>	<p>Lack of compliance to government policy by both ministries and SEs management.</p> <p>This was to be expected since senior civil servants in Zimbabwe are not usually appointed on merit but through political patronage.</p> <p>SEs continued to make losses which drained the fiscus while profitable SEs were not paying dividends to government and were misusing the profits.</p> <p>Inflation also got worse and it eroded people's purchasing power (ZIMPREST document, 1998).</p>

	<p>inflationary pressures, and liberalize the financial sector to encourage savings and improve intermediation efficiency.</p> <p>Trade and exchange market liberalization to create market based foreign exchange systems and shift to a tariff based systems of protection. This was meant to encourage exports and allow competition for local industries.</p> <p>Liberalize investment and deregulate prices and agricultural marketing.</p> <p>Implementation of a social dimension of adjustment programme to protect the poor and vulnerable groups from the negative transitional effects.</p>		
<p>Zimbabwe Programme for Economic and Social Transformation (ZIMPREST) 1996-2000</p>	<p>To continue the unfinished business of ESAP i.e. parastatal reforms, financial sector reform, civil service reform and aimed at overcoming the constraints to economic growth, employment creation and poverty alleviation as well as facilitating public and private savings and investment.</p> <p>To "...provide a firm basis for sustainable growth, greater employment and equitable distribution of incomes."</p> <p>Grow the economy by 8-10% in non-drought years.</p> <p>Urgent restoration of macroeconomic stability through low inflation and interest rates, stable exchange rate.</p> <p>Reduce deficit from 10% to 5% and inflation from 20% to single digit by 2000.</p>	<p>The exchange rate was fixed.</p> <p>The highest growth rate was achieved in the first three years at about 7% in 1997 and deteriorated in the following years.</p> <p>Reduction in budget deficit from 12% in 1994 to 7% in 1997/8</p>	<p>Plan fared poorly and the economy got worse.</p> <p>1996-2000 government embarked on programmes that worked against the objectives of the envisaged reforms of ZIMPREST.</p> <p>Then, in the wake of political setbacks in 1998, the government announced the seizure of white-owned farms even in violation of bilateral investment promotion and protection agreement (BIPPA), which exacerbated the instability (Madise, 2009).</p> <p>The fast track land reform resulted in massive displacement of white commercial farmers, violence and general lawlessness, which drew wide condemnation from other countries with Western countries imposing sanctions on the country's political leadership.</p>

	<p>Promote the public and private savings and investment needed to attain growth.</p> <p>Pursuing economic empowerment and poverty alleviation by generating opportunities for employment and encouraging entrepreneurial initiatives.</p> <p>Investing in human resources development.</p> <p>Providing safety nets for the disadvantaged.</p>		<p>Policies under this period lacked local ownership.</p> <p>It was too ambitious to cover a host of goals.</p>
<p>Zimbabwe Millennium Economic Recovery Programme (MERP) (2000-2001)</p>	<p>This was a continuation of the commitments and targets of ZIMPREST.</p> <p>To “fight spiraling inflation” which was cited as a major cause of macroeconomic instability.</p> <p>To rebuild mutual trust and confidence among citizens and also reducing budget deficit to 3.8% of GDP through mobilization of all stakeholders i.e. government, private sector, labour, civil society to implement measures that would restore macroeconomic stability.</p> <p>Aimed to restore vibrant economic growth by removing causes of inflation, achieve sustainable investment capacities, stable real incomes and improve living standards.</p> <p>To restore normal cooperative relations with the international community.</p>	<p>The policy achieved nearly nothing</p>	<p>However, MERP failed to revive the economy mainly as a result of non-implementation of recommended policies and loss of macroeconomic balance due to the size of the budget.</p> <p>Rendered ineffective due to withdrawal of international donor support.</p> <p>It was later succeeded by the National Economic Recovery Plan (NERP).</p>
<p>The Ten Point Plan</p>	<p>A thrust on agro based economy.</p> <p>Stimulation of small-scale agriculture through</p>	<p>Introduction of small-scale irrigation schemes.</p> <p>The government trained para- professional/</p>	<p>Lack of proper funding by Government.</p> <p>Newly resettled farmers lacked expertise to undertake</p>

	extension support.	extension workers	meaningful production. The Reserve Bank of Zimbabwe (RBZ) could not fund adequately farm mechanization initiatives. Misappropriation of farm equipment by beneficiaries. Default by beneficiaries in the repayment of loans.
The National Economic Revival Programme (NERP) 2003	To respond to 'hostile' external and domestic environment; 'sanctions' and "vibrant opposition politics". NERP focused on macroeconomic stability. Reduce inflation and increase aggregate supply. Improve foreign currency supply and reverse deindustrialization. It also focused intensely on land reforms; through giving input support to farmers and announcing attractive producer prices.	Agriculture, Secured land tenure through land reform. Producer pricing reduced to ensure viability and stimulate production Encouraged contract farming. Development programmes initiated in dairy, livestock and irrigation to boost dairy products, and national herd	Since the prior broad based macroeconomic policies were not successful it was difficult for the sectoral policies to be successful and there was no agricultural output reaped from the land redistribution. Communities remained food insecure and depended on food handouts.
Macro- Economic Policy Framework (MEPF) (2005-2006)	Aimed at reducing inflation and increase capacity utilization with concessional funding becoming even more available as the RBZ just printed currency for it. Outlined Zimbabwe's economic development programs to reduce poverty and increase standards of living of people. Objectives were to increase agricultural development and industrialization. Strengthen policy implementation and coordination.	Policy succeeded in enhancing the provision of financial support to agriculture and other key sectors though most of the objectives were not met prompting the formulation of a new short-term policy.	Policy failed to stabilize the agriculture led economy. GDP per capita was 47% below the expected level.
National Economic Development Priority	This was launched to restore economic stability through the implementation of quick –win strategies during the	The policy achieved nearly nothing as the government came up with yet another policy.	NEDPP died a natural death as it was rolled out in place at a time when the Government was working on a new five-

<p>Programme (NEDPP) (2006-2008)</p>	<p>last half of 2006.</p> <p>The specific objectives of NEDPP were to reduce inflation and stabilize the local currency, mobilization and stabilization of foreign currency, food security, grow output and productivity, generate foreign exchange, enhance expenditure and revenue management, remove price distortions and effective policy coordination and implementation, reduction of both internal and external debt to sustainable levels maintaining infrastructure, improving delivery of public services and building business confidence and lastly, restoration of a positive image of the country hence economic empowerment (Macro-economic Convergence Report, 2006).</p>		<p>year development strategy. Thus before NEDPP could be implemented, the government came up with yet another programme, the Zimbabwe Economic Development Strategy (ZEDS) which was billed to run from 2007 to 2011.</p>
<p>Zimbabwe Economic Development Strategy (ZEDS) (2007-2011)</p>	<p>To achieve sustainable, balanced and robust economic growth and development that was oriented towards poverty reduction.</p>	<p>The policy was never implemented formally.</p>	<p>On the economic front, the country experienced an unparalleled hyperinflation year after year, with a rate of 7982 % in September 2007 (MDGs Report, 2009:3).</p> <p>There was also an acute shortage of basic commodities, which included maize meal, drugs, fuel, electricity and foreign currency.</p>
<p>Short Term Emergency Recovery Programme (STERP) (2009)</p>	<p>Programme was focusing on political and governance issues, social protection programmes, supply side reforms and macro-economic reforms.</p> <p>Focusing on getting Zimbabwe moving again.</p> <p>Stabilization: i.e. involve implementation of a growth oriented recovery programme, restoring value of local currency, increase</p>	<p>Inflation reduced due to the adoption of multicurrency, which helped ease inflationary pressures i.e. from 230 million % in July 2008 to -7% by December 2009.</p> <p>Price distortions in goods and foreign exchange markets were removed.</p> <p>Introduction of cash</p>	<p>The short term nature of STERP meant that some programmes and projects would not be fully implemented within the time frame of nine months and little support on donor funds to implement the programmes, hence the launch of STERP II to consolidate gains from the initial recovery efforts under STERP.</p>

	<p>capacity utilization in all sectors.</p> <p>Labor Market and National Employment Policy: i.e. people centered, nurture the basis of people driven development agenda.</p> <p>Economic stabilization; revive industry capacity utilization from below 10% in 2008.</p> <p>Ensure availability of fuel, food and electricity.</p>	<p>budget for Government to operate within available resources restrained expenditure over runs.</p> <p>Liberalisation measures led to stimulus and empowerment for small-scale farmers e.g. in the tobacco sector.</p> <p>Utilisation levels of over 70% were realised by October 2009</p> <p>Food industry capacity utilisation increased to around 30% due to a backdrop of increased domestic demand, and stable macro-economic environment.</p> <p>Health and education sector benefited immensely from donor funding arranged by cooperative partners.</p> <p>There was smooth administration of the schooling activities though education fees increased and reduced the 'O' and 'A' level sitting.</p>	
<p>STERP II: The Three Year Macro-Economic Policy and Budget Framework for the years (2010 – 2012)</p>	<p>Sustaining macro-economic stabilization and consolidating STERP;</p> <p>Support for rapid growth and employment creation.</p> <p>Ensuring food security.</p> <p>Restoring basic services.</p> <p>Encouraging public and private investment</p> <p>Promoting regional integration.</p>	<p>After embracing STERP II, inflation dramatically fell to single digit levels and stabilized at below 5% by the end of the year of 2010.</p> <p>Capacity utilization in the manufacturing sector increased from about 10% to 40% and GDP per capita increased from US\$403. 1 in 2007 to USD\$499 in 2010.</p> <p>There was improved macroeconomic stabilization, and improved socio political system.</p>	<p>Unfortunately, this was short lived as politics started to interfere with economics again as parties in the government tried to outshine each for political gain in the process somewhat sabotaging each other.</p> <p>The development strategy should have provided a guiding and all encompassing framework of where the country was going.</p>

<p>Medium Term Plan (MTP) (2010-2015)</p>	<p>This was launched in July 2011 by the Ministry of Economic Planning and Investment Promotion with a view to guide all Government plans and programmes beyond short term stabilization and build foreign exchange reserves sufficient to cover at least three months imports by 2015.</p> <p>Its objectives (Government of Zimbabwe, 2010) were among other things; infrastructure development with emphasis on rehabilitation and completion of outstanding projects, employment creation, human-centered development, entrepreneurship development, macroeconomic stability, ICT and science & technology development, good governance, investment regulation, coordination and promotion, resource utilization and poverty reduction, gender mainstreaming into economic activities all focusing on promotion of programs that endure gender parity in access to education, health and other social services.</p>	<p>Interest rates that promote savings and investment were slightly noticed.</p> <p>Average annual jobs creation rate of 2% instead of 6%.</p> <p>Sustained Poverty Reduction in line with MDGs targets was partially achieved;</p> <p>Foreign Exchange Reserves of at least 3 months import cover by 2015 was partly covered.</p> <p>Double-digit savings and investment ratios of around 20 % of GDP was partly achieved;</p> <p>Reduced sovereign debt to at least 60 % of GDP by 2015.</p>	<p>MTP required approximately \$9.3 billion for full implementation, which was a very big resource constraint to the country. It lacked consistency and donor support on which the blue print was underpinned hence it failed to meet its target between 2011 and 2012. This was hastily abandoned when ZANU PF won the 2013 elections paving the way for the ZimASSET Programme.</p> <p>Maize production remained at 700-800kg per hectare instead of the usual 1.5 tons.</p>
<p>Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET) 2013-2018</p>	<p>Following the end of the Government of National Unity (GNU), the Government launched the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZimASSET).</p> <p>According to Government of Zimbabwe (2013) this economic blue print was developed through a consultative process involving political leadership in government,</p>	<p>Strong collaborative partnerships among Government agencies, the private sector, citizens and other stakeholders were evident.</p> <p>Total commitment and the strong desire to meet the people's development expectations were realized.</p> <p>Continued use of the</p>	<p>ZIMASSET being the current socio economic development plan does not in any way provide reference to Vision 2020 nor link its development aspirations to the country's' vision (Matutu, 2014).</p> <p>The Government has since independence, reduced development to five year blocks defined by various economic blue prints at different epochs explained above.</p>

	<p>private sector and other stakeholders.</p> <p>ZIMASSET is built on four strategic clusters envisaged to enable the country to achieve economic growth and reposition itself as one of the strongest economies in Africa.</p> <p>ZIMASSET was crafted to achieve sustainable development and social equity anchored on indigenization, empowerment and employment creation which will be largely propelled by the judicious exploitation of the country's abundant natural and human resources.</p>	<p>multi-currency regime to consolidate macroeconomic stabilization.</p> <p>Introduced Special Economic Zones.</p> <p>Created special funding vehicles such as, acceleration of the implementation of PPPs.</p> <p>Establishment the Sovereign Wealth Fund.</p> <p>Institutionalized RBM across the public sector (civil service, parastatals, state enterprises and local authorities).</p>	<p>Five years is too short to transform even the smallest economy or community in the world.</p> <p>ZIMASSET lands itself in a country with serious challenges on transparency, accountability and corruption, which are one of the country's challenges. The prevalence of corruption in</p> <p>Zimbabwe has increased over the last decade. According to the Transparency International</p> <p>Corruption Perception Index (CPI), Zimbabwe's score declined from 3.0 out of 10 in 2000 to 2.2 in 2011(Matutu, 2014).</p> <p>Kanyenze (2014) further argues that the ZIMASSET blueprint would not succeed due to the fact that its position is more of a party manifesto and not necessarily a consultative and all-inclusive framework.</p> <p>Failed to attract Foreign Direct Investment (FDI) due to the indigenization policy, which called for 51% share ownership.</p> <p>No clear implementation matrix which is community driven.</p>
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In summary, the policies crafted by the Government of Zimbabwe in 1980 were imperative so as to address the disparities, however the manner they were implemented was not sustainable. Socially, the policies were so meticulous, except economically they were far-fetched and not sustainable. The TNDP was largely a failure, but to its credit, it created over 150,000 jobs and enhanced agricultural production of small-scale communal land farmers (Mapuva, 2015). The TNDP failed to fulfil its objectives and this forced the government to embark on another policy to try and remedy the TNDP failures. In Makwata (2013) Mushayakarara identified two mistakes or omissions at implementation, which negatively

affected the ESAP Programme. The first one was lack of full commitment by some people in government suspicious of the IMF (Mumvuma *et al.*, 2006). These were the very people who were supposed to work hard towards the fruition of these economic development policies. The second mistake, he added, was the failure by the work stream task force to bring on board tariffs to protect the local manufacturing sector from import competition. The programme was of course also affected by exogenous factors, in particular the devastating 1991/2 drought. By the end of ESAP in 1995, the deficit had worsened to 13% of GDP and government funded this gap through domestic borrowing in the process, (Mumvuma *et al.* 2006). In terms of lack of consultation: Mumvuma *et al.* (2006) noted that, the failure to consult with stakeholders was a mistake since there was no awareness about the policy reforms, hence resulting in ignorance and lack of ownership on the part of many relevant interest groups. It is imperative, however, to note that policy ownership is the bedrock of policy implementation.

Realising that the public was not satisfied with ESAP due to its failure to meet its objectives, the government then decided to focus on fiscal discipline on its own (Sibanda and Makwata, 2017). It launched the ESAP successor in the mould of Zimbabwe Programme for Economic and Social Transformation (ZIMPREST). Policies under this period lacked gross local ownership. They were viewed as IMF and World Bank imposed measures, as access to balance of payment was on condition of compliance with these measures (Zhou, 2009). They also carried high political and social costs for society and political leadership (Sibanda and Makwata, 2017). The authors agree on the fact that, the success of policy implementation lies in the people. Therefore, the power of local communities should never be underestimated. Sibanda and Makwata, (2017) further assert that, there was also absence of enabling legal and institutional frameworks, hence policy implementation under protest. To a greater extent, ZIMPREST suffered largely from lack of international financial support to fund programme implementation. It can also be argued that, it was too ambitious encompassing a host of goals to be achieved: poverty reduction, land reform, employment creation, institutional reforms, decentralization, and others, without clearly spelling out the budgetary implications of each one of these policy objectives (Sibanda and Makwata, 2017). Its architects opined that, Zimbabwe had to forget the sad memories of a myriad of other past failed programmes as NEDPP, considered a panacea meant to reverse the severe effects of ten years of recession within nine months (Chikukwa, 2013).

Kadenge (2009) argues that, STERP was only a short-term economic revival document and it did not address the structural development challenges inherent in the economy. STERP contained no specific measures to deal with the structural distortions and rigidities arising out of the dual and enclave economic structure (Sibanda and Makwata, 2017). The demise of the formal sector coupled with the adverse impacts of the global financial crisis and anti-inflation measures, resonates the decent work deficits that characterize the economy and entrenches poverty and its feminization will abound (Sibanda and Makwata, 2017).

More importantly, STERP failed to provide stimuli for a new paradigm that is pro-poor and inclusive, failed to promote the integration of marginalized groups (women, youths, people with disabilities and people living with HIV/AIDS) and sectors, especially the informal and rural economy, and unleash a more employment-intensive pathway out of poverty (Kadenge, 2009). Some of the major reasons that resulted in the failure by the government to achieve the goal of STERP are: political disagreements or lack of progress in constitutional reform leading to policy reversals within the inclusive government (African Development Bank, 2009). Revenue or budget shortfalls had an immediate impact on expenditure, thus aggravating social and humanitarian problems for the government (Sibanda and Makwata, 2017). The inclusive government also received inadequate support from the international community, and lack of visible improvement in day-to-day conditions for most Zimbabweans, called into question the rigor needed for effective change and reform. The government also did not make meaningful progress on property rights and the rule of law, and the rehabilitation of physical infrastructure and the related systems (Kadenge, 2009). Moreover, private sector confidence was lost. In short, STERP did not make it in turning around the country, had the factors discussed above been implemented it would have been better. MTP required approximately \$9.3 billion for full implementation, which was a very big resource constraint to the country (Sibanda and Makwata, 2017). It lacked consistency and donor support on which the blue print was underpinned; hence it failed to meet its target between 2011 and 2012. This was hastily abandoned when ZANU PF won the 2013 elections paving the way for the ZimASSET Programme.

From the above analysis, it can be concluded that, ZimASSET remains far away from being a reality in the lived realities of Zimbabwe due to key issues noted above which are related to its successful implementation (Kadenge, 2009). The blue print is projected to have little positive impact on the lives of Zimbabweans though it will record a significant economic

growth whose dividends shall remain marginal to the poor people of the country (Chikukwa, 2013). ZimASSET will, however, remain a framework that will continue to guide various socioeconomic efforts by the government and non-state actors who believe in it. In a nutshell, Zimbabwe's economic blue prints are generally good, but they lack ownership by the grassroots for easy implementation. A number of discussed policies had a very good language and objectives but they were lacking a clear implementation matrix. It is the thrust of this study, to develop an Implementation Model that addresses food shortages in Matabeleland South Province of Zimbabwe. This model must not be exogenous in nature but rather endogenous and have total ownership by the people.

2.15. RURAL POVERTY AND A WEAK AFRICAN PEASANTRY: THE LEGACY OF DISCRIMINATION POLICIES IN SOUTH AFRICA

South Africa is one of those countries with a lower middle-income in which agriculture accounts for a particularly small share of Gross Domestic Product, compared to most other countries of its category, such as Zimbabwe, Zambia, Mozambique just to mention a few. Although it has a better-performing commercial sector, agriculture represents less than 4% of Gross Domestic Product, and 14% of the labour force. Government Communications and Information Systems-GCIS (1998), have it that irrigated agriculture and stock watering use about 52% of the total water usage. The population in rural South Africa is composed of approximately 1.5 million households living on commercial farms and this is mainly whites. It is estimated that, half the country's population lives in rural areas, where food insecurity is higher than anywhere else. Poverty is race-related because some 61% of black people are poor, compared to 1% of whites. Research has shown that, three out of five children in South Africa live in poor households.

These persistent disparities have several causes; the first one directly derives from the past Apartheid policy. It excluded black people, who represent 76% of the population, from owning or renting land outside the 14% of the country that was delineated as reserves known as Bantustans or homelands. Moreover, today land still remains mostly in the hands of the state, and is granted to users through traditional authorities and regulations. These areas are typically backward rural areas, where many people live under conditions of deprivation as harsh as elsewhere in poorer African countries. Lipton *et al.*, (1996) postulate that, Apartheid involved some among other things, incentives, laws and institutions that favoured large farms and discriminated against smaller, labour intensive farming systems.

Apartheid also gave large white farms an upper hand to access natural resources, agribusiness facilities, and financial and rural infrastructures. Black dominated areas still suffer severe backlogs in all the above-mentioned fields. Kirsten *et al.* (2000), states that considering resource-related issues, 83% of agricultural land is in the hands of white farmers, and about 96% of irrigation water is controlled by private and co-operative schemes, and irrigation boards (Hamann & O’Riordan, 2000). The per-capita consumption of domestic water in black rural area is less than a twentieth of that consumed in typical white areas. Low (1986), propounds that a second factor in the weakness of African small-scale irrigation farming is equated to South Africa’s relatively well-developed non-agricultural labour market which comprises of mines and industries; which has, for a long time, provided higher paying opportunities than farming for rural black labour force. However, this off-farm market dominates labour allocations and generates adult male migration. The remaining labour in the rural areas is first assigned to production for home consumption, and, only at last, to production for sale. This clearly indicates that, off-farm employment opportunities seriously deplete the available labour supply for farming. Therefore, in a nutshell, workers who remain on the farms are those with the lowest opportunity costs as defined by the external labour market. The off-farm labour market favors men. Perret *et al.* (2000), says that this is the main reason why most, rural households are de facto headed by women or pensioners, for whom household and child rearing responsibilities exclude them from intensive field labour in agriculture. The conditions that South Africa went through during the apartheid are similar to what Zimbabwe underwent through the Ian Smith colonial regime before 1980. However, this implies that, the strategies adopted by South Africa towards its journey to food security can be replicated in Zimbabwe.

2.16. INDIGENOUS KNOWLEDGE AND FOOD SECURITY

Indigenous knowledge has come to occupy a privileged position in discussions about how development can best be brought about so that finally, it really is in the interests of the poor and the marginalised (Agrawal, 2002). To ignore people's knowledge is almost to ensure failure in development (Brokensha *et al.*, 1980). Since indigenous knowledge is essential to development, it is often suggested that it must be gathered and documented in a coherent and systematic fashion (Brokensha *et al.*, 1980; Warren *et al.*, 1989). With the sudden rise of

studies of indigenous knowledge, literature becomes available; its relevance on the development terrain will become self-evident.

Shepherd (1998) postulates that food security does not depend on crop production alone, whether at household, region or country level. It depends to a greater extent on people's ability to command the resources to acquire the food they need; whether this is through production, farm production of cash crops, other income-earning activities, employment or remittances (Ponge, 2011). The major impediment, however for crop production is confined in the farmers' use of high-level chemicals, reduced diversity of the cropping systems, taking livestock out of the system and controlling nature to a high degree. It appears that Shepherd (1998) is faulting the over-reliance on the modern scientific knowledge only to the exclusion of the indigenous knowledge.

In an analysis of peasant crop production currently in the sustainable agriculture movement, Shepherd (1998) maintains that sustainable agriculture should focus on developing crop production firstly for consumption by the peasant family, secondly for the local market and preferably not for export, because export agriculture is naively understood to be against the interests of the rural peoples' food security. This position however, seems to contradict the very purpose of the Zimbabwe's agriculture policy, which advocates for the exportation of surplus grain to other countries.

Lalonde (2005), points out that some of the positive traditional management practices in rural Africa, which have been adapted and passed down over countless generations, have been found to be in harmony with the short and long-term carrying capacities of the local ecosystem. Since the 1960s scientists have recognized the validity of the traditional bush-fallow system, associated with shifting cultivation or slash-and-burn agriculture (Ponge, 2011). Farmers have since adopted a wide range of indigenous knowledge strategies on agricultural practices based on previous experiences, informal experiments and intimate understanding of their environments. The application of indigenous agricultural farming for example has reflected in the following:

- Indigenous soil preparation and planting materials
- Indigenous methods of controlling pests and diseases
- Indigenous methods of maintaining soil fertility
- Indigenous methods of controlling weeds
- Indigenous methods of harvesting and storage (Abioye *et al.*, 2011: 3).

2.17. FOOD SECURITY IN A NUTSHELL

The Food and Agricultural Organization (1996), posits that at the 1996 World Food Summit, one hundred and eighty two nations agreed to the definition of food security as “access by all people at all times to enough nutritionally adequate and safe food for an active and healthy life”. Different scholars have put heads together worldwide embarking on a rigorous research of trying to understand household food security, food insecurity and hunger. This meticulous work was carried out by some experts working in the American Institute of Nutrition (AIN).

The Food and Agricultural Organization, the American Institute of Nutrition and the World Bank came up with the following definitions: According to Monde (2003) and Food and Agriculture Organization (2006), ‘food security’ refers to the availability of enough food in order for all people to live a healthy, active and productive live at all times, across all countries and regions, across all income groups, and across all members of individual households. According to this definition emphasis on availability of food at all times not only to a selected few, but also to everyone else, and this food should not cause harm to people. FAO, (2012) resonates that, household food security is attained when household members are able to acquire and ensure adequate safe and nutritious food to meet their nutritional, social and psychological requirements.

‘Food insecurity’ is “limited or uncertain availability of nutritionally adequate and safe foods, limited or uncertain ability to acquire acceptable food in socially acceptable ways”. FAO (1996) argues that, food insecurity and hunger are conditions resulting from financial resource constraint. ‘Hunger’ is the uneasy or painful sensation caused by lack of food or the recurrent and involuntary lack of access to food. This definition clearly spells out that hunger is a product of food insecurity, which will cause pain to human kind and people do not choose but it just happens like a natural phenomenon. Hunger may produce malnutrition over time. Hunger is a potential, although not necessary, consequence of food insecurity.

Household food security accounts for the consumption levels of all members of a household population. Farm household production and food security analysis at the household level requires understanding of the household’s ability to either produce enough food or generate enough income to purchase food. Kandoole and Msukwa (1992), posits that policies and

measures, which have been implemented by most countries to ensure food security, include encouraging increased agricultural production to maintain food self-sufficiency.

Zimbabwe, through its presidential support scheme has managed to give farmers seed and other inputs to boost agricultural productivity in rural areas. Rohrbach (1989) interprets food self-sufficiency as the ability of a country to meet all its staple food requirements through domestic production. Masomera (2009) resonates that in relation to crop production, a household is regarded as self-sufficient if it produces enough for its needs. In contrast to the food self-sufficiency notion, we have the concept of food security. Amin (1989) has it that, this has been widely accepted to mean the ability of individuals and households located in specified geographical boundaries, to meet staple food needs on a year round basis from their own enterprise production or through purchases from domestic markets. This definition from Amin, leaves a lot to be desired since it is not accepting that food security can be obtained through working in exchange of food and through inheriting.

There are two sides to the food security equation: food availability and food access. Rukuni and Bernstein (1988), argue that in some cases food might be available in the shops but it can only be accessed by people who have money. This is a typical situation, occurring in Mangwe district. The only solution is for the people to engage in agricultural activities to run away from the problem of food insecurity. Many households simply lack the means to secure consistent access to food, which will allow them to live active and healthy lives. This study assesses food security status at household level. It looks at the ability of the household to produce its own food to meet food requirements.

As a result of food availability and food access issue, the perception of food security has changed significantly. In the 1970's, the conventional wisdom was that food insecurity was caused by the decline or failure of aggregate food availability either at local level, regional, national level or global level. In other words, food insecurity was conceived primarily as a supply issue at an aggregate level because of the significant short falls in food supply and high food prices in the world market in the early 1970's.

Sachikonye (2001) propounds that despite the favourable supply conditions and low food prices after the mid 1970's, the incidence of food insecurity remained high in many developing countries. In the early 1980's, a paradigm shift occurred in the field of food security following Sen's claims that food insecurity is more of a demand concern affecting

the poor's access to food, than a supply concern affecting availability of food at the national level. Since then, accepted wisdom has defined food security as being a problem of access to food. At the same time, this analysis shifted from global and national level to the household level.

Food security has been conceived as a function of entitlements, which includes a set of all alternative bundles of commodities that a person can obtain legally by using his or her endowments. Food and Agriculture (1996), postulates that people may suffer from food insecurity because of a lack of "entitlements" or access to food, implying that food insecurity should be analysed in terms of the decline or failure of food entitlements of different socio-economic groups. In other words, there can be food insecurity even without any fall in food availability, due to a variety of other variables such as loss of endowments, loss of employment, a fall in wages, or unfavourable shift in terms of food exchange for assets.

2.17 SCHOLARLY DEBATE ON FOOD SECURITY IMPLEMENTATION MODELS

A number of scholars have written intensively and extensively about food security issues with regards to availability, vulnerability, accessibility, utilization and stability across continents. However, indications are that, while there is a lot of literature on the food insecurity, many scholars has not been able to develop and prescribe food security models unique and specific to a given area in relation to its geographic setting and available resource. That is the reason why many poor communities continue to suffer from food insecurity. This section analyses scholarly articles by other authors on food security and identifies gaps, which this thesis intends to grapple with.

Gillo *et al.* (2017) in "Farmers' Awareness on Climate Change and Adaptation Practices in Mpwapwa District, Dodoma-Tanzania" talks of food security in the context of climate change awareness and effects on food production. As indicated by the abstract and introduction of the article, the thrust of this research is to find out if farmers are aware of the effects of the climate change and how these affect food production and availability. This research, which uses both primary and secondary sources of data, also aims to establish the copying mechanisms which farmers are employing to curb the effects of climate change on farming and food production. The article was prescriptive in nature; it did not come up with climate change intervention strategies, which were sustainable. The study seeks to address

this gap by embarking on a robust intervention strategy, which is people driven, to counter the effects of climate change on food security.

It can be asserted that Gillo *et al.* (2017) largely managed to cover the objectives of their study as indicated in the body of their article. The article managed to establish the awareness rate of climate change on farmers, aggregated by age, sex, level of education, etc.; and this is illustrated by means of tabulations, charts and statistical descriptions. The effects of climate change on food production that has overly led to decline in production levels are brought out in the article. The coping strategies, which the farmers are employing to avert the effects of climate change, are also clearly brought out in the article and these include crop diversification including adoption of drought resistant crops and irrigation schemes.

However, the article does not cover much ground on what needs to be done to address the problem of climate change on food production. The article ends by a paragraph of recommendations and conclusions without giving in-depth solutions to this topical problem or issue. This is a gap, which this research tries to cover by means of developing a model addressing cross cutting issues affecting food security for Matabeleland South Province in Zimbabwe.

Munyati and Chitongo (2017) in “Irrigation Schemes and Poverty Reduction in Zimbabwe: The Case of Musena Irrigation in Chirumanzu District, Zimbabwe”, analyse food security in the context of poverty eradication and livelihood outcomes before and after implementation of the irrigation scheme in the case study area. Issues of food availability and accessibility in connection to irrigation development are at stake in this article. The set out objectives of the study are well brought out in the abstract and well developed in the body of the article. The research indicates an improvement of the food security situation and the general standard of living in terms of ability to pay hospital bills, ability to buy groceries and ability to pay school fees, and asset ownership emanating from irrigation development. The research findings, which were collected through focus group discussions, come from key informant interviews; questionnaires are presented in the form of narrative descriptions; and charts and graphs showing trends of the levels of production before and after inception of the irrigation scheme are part of the methodology. From the observed trends, farmers have been able to realise better yields in terms of beans, wheat, maize, and potato tonnage, and this all feeds to an improved food security situation at household level in Chirumanzu.

Munyati and Chitongo (2017) in their paper further discuss about the challenges affecting the farmers to realise their full potential in terms of production, such as pests and diseases, and lack of financial and human capital. Nevertheless, the paper lacks enough coverage on what really needs to be done for irrigation development in Chirumanzu. There is mere mention of the need for government support and farmer capitalization in the abstract, but there is no specific section covering recommendations needed for improvement of the Musena irrigation scheme in Chirumanzi in the body of the article. For food security interventions to yield measurable results, there is need to develop specific models unique to a given case study. This is precisely what this thesis tries to address in Matabeleland South Province.

Anderson (2009) in his article “Food Security: Definition and Measurement” grapples with the definition of food security in the context of household food security and vulnerability indicators, estimation of food security and magnitude of food security. The article manages to articulate various definitions, which have been attached to the concept of food security, and goes on to suggest that it can be a useful measure of household and individual welfare, particularly if combined with estimates of household food acquisition and allocation behaviour. Anderson (2009) indicates that, if nutritional security is the goal of interest, estimates of access to food should be combined with estimates of access to clean water and good sanitation to make the definition and measurement of food security wholesome or complete. It is imperative to highlight that Anderson’s assertion might not be complete if access focuses on food and water access only. It is the thrust of this study to look at the concept of food security taking into consideration, food access, food availability, stability and utilization.

While it can be acknowledged that the article wholesomely defines the subject matter, it is rather limited in citation of specific examples or case studies to support the discussion. There is no attempt by the author to zero down to a specific case study area in equating his definition of food security and its measurement. Thus, food security issues need to be discussed area specific as in most instances each area or geography, presents its own specific challenges which need specific interventions.

Gupta and Wright (2017) in their article “ Situational Nutritional Analysis of Idumishmi Tribes of Arunachal Pradesh, North-East India”, bring out the issue of nutritional balance as an important aspect of food security. The article, which is exploratory in nature, employed structured interviews, focus group discussions and key informant interviews to gather data on

dietary patterns and nutrition adequacy, cultural beliefs surrounding food and impact on nutritional health. In terms of its findings, the research managed to establish that, tribal people were consuming a two-meal pattern diet with high carbohydrate, low fat content, poor in vitamin A, thiamine, riboflavin, niacin, B12, vitamin C, calcium, and iron. Anthropometric analysis showed that one-fourth of children 2-9 year old were underweight, and 7% were stunted. This means that deficiency in some nutrition values points to a situation of food insecurity even when there is abundance of a certain line of a food commodity.

In this regard, it can be asserted that the work by Gupta and Wright (2017) is essential in bringing out the various facets of food security with regards to nutrition and health of the people in communities, as this is depicted in the article through graphical presentations tables and charts, as well as narratives. However, the paper does not give much insight on what needs to be done to promote a balanced diet as an important aspect of food security. The authors only mentioned the importance of nutritional health education in their concluding paragraph without giving a detailed picture of a model to follow in promoting nutritional balance as an important aspect of food security.

Nantale *et al.* (2017) in their study “Prevalence and Factors Associated with Food Insecurity among Women Aged 18-49 Years in Kampala Slums Uganda; A Mixed Methods Study” take a gendered approach to food security issues. The study, which used a mixed method approach in gathering data made use of interviewer-administered questionnaire, key informant interviews and focus group discussions to gather evidence. The study managed to serve its purpose and established a high prevalence of food insecurity among women aged 18-49 years in an urban slum of Kampala, thereby bringing out vulnerability issues. Factors leading to high prevalence of food insecurity among women in slums are well articulated in the body of the article and presented in tables, charts and descriptions. For example the increased household expenditures such as having more than one school going child coupled with low earning, were associated with food insecurity.

The paper ends by making recommendations on what needs to be done to empower women living in slums to overcome the problem of food insecurity. It cites that, in order to reduce the proportion of food insecurity and the effects of food insecurity on maternal child health, there is need to set up economic empowerment programs for women in slums. Other studies are needed to create sufficient evidence to influence urban policy makers so that appropriate

interventions against food insecurity are initiated. Thus the article brings about an interesting aspect of inclusivity in dealing with food security problem.

However, despite the paper being on spot in pin pointing the prevalence, the factors influencing such prevalence and recommending the involvement of vulnerable women in solving the food security equation, there is need to further develop models or working platforms or action plans which can help to promote such inclusion of all vulnerable communities and individuals such as women and children.

Mbuthia *et al.* (2017) take a look at food security with reference to environmental changes and how these affect food security at household level. In the article entitled “Environmental Determinants to Household Food Security in Kyangwithya West Location of Kitui County” the authors made use of key informant interviews and focus group discussions in the extraction of data. The authors established that, high temperatures, recurrent droughts and inadequate rainfall greatly affect food security at household level. The situation becomes worse when the farmers are not able to take note of the weather changes timely. The study also managed to rank the weather determinants of food security with regards to severity, and established that inadequate rainfall was the main cause of food insecurity in the study area. Variations are drawn using tables, data grouped into thematic areas and statistical narratives to paint a clear picture of the effects of environmental patterns on food security in the Kyangwithya, which is the case study area. Thus, environment is a key factor in determining food availability and as such, food policy planners need to pay attention to environmental issues in dealing with food security problems.

Albeit, the authors managed to identify the environmental determinants of household food security in the case study area, recommendations as to how these can be dealt with are limited in the article. The article only points to the need for timely communication of weather forecast in a single statement as a remedy. The issue of weather changes is taking precedence in affecting food security and as such it is high time that authors need to wholesomely recommend ways and come up with models and action plans to combat the effects of weather patterns on food security in communities.

Nakasone and Suvedi (2017) in “Small Farmers and Market Economy: A Case Study of Dagomba in Northern Ghana” take a look at how the economic system of a society affects food production on small farmers. The paper traces the development of the agricultural sector

from the government of Gerry Rawlings in the 1970s before the Saps took centre stage in Ghana, and how the Saps and current policies have affected agriculture in small farmer holder communities. This is done by analysing trends in economic growth, farming systems and land tenure systems. The market economy development has seen the farming of cash crops, like cocoa, taking centre stage and this in a way has dealt a blow to the production of food crops. The market economy has also seen movement or migration of young productive individuals to cities, in search of jobs thereby putting pressure on the remaining elderly to produce food for the families. Consequently, the type of the operating economic structure affects agricultural productivity in a greater way.

Nakasoke and Suvedi (2017) through the use of household surveys collected between 2005 and 2017, managed to show the trends and changes that have been brought by the market economy in Ghana and how it has affected the food production. The authors indicate how an economic system can create disparities between a country's regions, as is the case in Northern Ghana where cash crops cannot be produced, and Southern Ghana where cash crops can be produced. Thus, the effects of the market economy on agricultural production is well articulated by the authors when they point out that the position of agriculture as a source of income in rural areas has declined rapidly in the past few years since the weight of agriculture as an income source has been rapidly decreasing. The research further forecasts the possibility of de-agrarianization, due to the market economy in the Northern Ghana where cash crops are not viable. The article ends by making recommendations for new production techniques and crop diversification in order to improve agricultural productivity.

In a nutshell, it can be viewed that food security and economic systems feed into each other, and as such, policy makers should take into consideration the disadvantages and advantages an economic system can bring to agricultural productivity in terms of food production. There is need to develop food security models which ensure that, the food production do not suffer at the hands of prevailing economic systems.

Nyaguyo (2012) in a thesis entitled "The Impact of Disasters on Rural Households Livelihoods and Food Security Situation: Case of Muzarabani Rural District" is concerned with the effects of flood disasters on rural households livelihoods and food security in the Muzarabani district of Zimbabwe. The research highlights the history of disasters in Zimbabwe, how they affect communities before zeroing in to Muzarabani flood disasters and

their impact on the community. Through the use of both qualitative and quantitative data techniques, the researcher manages to extract valuable information on the subject matter *i.e.*, the impact of flood disasters on Muzarabani community with regards to livelihoods and food security. Information on the trends and changes on asset based in terms of livestock like chickens, goats and cattle is well articulated through use of graphs, tables and narrative descriptions of percentages and other statistics. The impact of the floods on the food reserves is well depicted and pictured in the research. The overall observation is that, floods severely and negatively affect food security status of poor and female-headed households in Muzarabani due to lack of timely responsive measures to eminent floods.

The research concludes by running through a list of recommendations for addressing flood disasters and their impact on the livelihoods and food security situation in terms of early warning systems, creation of a community food reserve and relocation of people to high ground level. However, while the research can be applauded for bringing out the issue of flood disasters as one of the major factors affecting rural livelihoods and their food security situation, there is a need to take a step further to design strategies and models to address the problem at hand. The model should be specific to a given area and should be designed together with the people affected, and should also aim to use available resources to make it sustainable and workable. The researcher points more to what the government should do instead of what the affected people themselves should do or initiate to curb the effects of flood disasters on them. In many instances, researchers have been able to bring out or unravel a problem but they have not been able to prescribe specific solutions to the problem in terms of an action plan.

Muchadeyi (2013) in a thesis entitled, “Aid Agencies and Sustainable Livelihoods in Rural Communities: Case of Zaka District” grapples with the work of donor agencies and how they have affected rural livelihoods in the drought prone areas in Zimbabwe. The food security situation in the Zaka district is unravelled by the researcher; she describes how the donor agencies and food relief programs have come at hand to avert the dire health and life-threatening situation on the vulnerable community. In this regard, the work of development agencies in promoting accessibility of food in vulnerable communities is brought out.

The research objectives are covered as set out by the research in the introductory chapter. The research, which was qualitative in nature employing focus group discussions, key informant interviews and self-administered questionnaires while acknowledging the noble work being

done by donor agencies in vulnerable communities, managed to establish that the development agencies have created a serious dependency syndrome on the communities as some have shunned working in their own fields even in better seasons banking on food handouts from donors. The research also established that, donor agencies programs are not home grown as the respondents to the study questions indicated that, they have not participated in designing of programs which are brought by donors to them. This creates a serious and unsustainable food security situation, which would leave the beneficiaries of the programs in poverty and acute food shortages upon donor exit.

Although the research was able to establish the negative impact of donor agencies food handouts on vulnerable food deficit areas in this case Zaka District of Masvingo Zimbabwe, there are limitations to the study: the researcher did not manage to prescribe a strategy or action plan to address the problem in the Zaka district specifically. The recommendations made by the research are rather too general and do not take into cognizant of resources available in Zaka, and how these resources can be specifically used to address the problem of livelihoods and food security in the area.

Muzerengi and Mapuranga (2017) in an article named “Impact of Small Scale Irrigation Schemes in Addressing Food Shortages in Semi-Arid Areas: A Case of Ingwizi Irrigation Scheme in Mangwe District, Zimbabwe”, establish the effects of irrigation development in addressing food shortages in semi-arid regions of Zimbabwe. The research managed to serve its purpose to establish the extent to which Ingwizi irrigation scheme has managed to address the problem of food shortage in Mangwe District. Thus bringing to the fore if it follows that there is always a connection between irrigation development and food security or not.

The researchers, in a study that is exploratory and qualitative in nature used focus group discussions, key informant interviews and observation to gather evidence from respondents; and this augers well with the subject matter under discussion. Key issues were well brought out in the discussion through the thematic approach in data analysis. The research established that, there is increased food insecurity in Mangwe district despite the presence of the Ingwizi irrigation scheme. The challenges affecting the scheme are well articulated and these include lack of government support, poverty and increased food imports. Thus, the article is able to address its key objective that is bringing out the impact and the challenges of the irrigation scheme on food security situation in Mangwe district.

However, the article as it is largely qualitative, does not point out much to trends in food production in terms of statistical narratives. There is no supporting numerical data to maintain how agricultural production at household level from the respondents in Mangwe district has been faring before and after the establishment of irrigation scheme in order to make comparisons based on statistics or figure. Furthermore, the research as an impact study ends by making a set of recommendations in the concluding paragraph; the key one is government support and subsidization. While this is noble, this in itself is not enough as the problem of food insecurity needs to be approached with well-developed work plans unique and specific to the problem area. In this research, the study will develop a food security model specifically for Matabeleland South, taking cognizance of the geography, population, culture, politics and social dispensation of the area.

In conclusion, it can be asserted that, various scholarly researches have been able to establish key factors contributing to food security or insecurity in various communities, such as droughts and changing weather patterns, and the role played by donor agencies in critical food situations. However, the bulk of the literature available from scholars, besides running through a set of recommendations to the food security problem, does not provide specific and unique solutions to a given problem area. Most of the recommendations made are rather general and may not apply to a given or other areas because of various factors, ranging from difference in the geographical nature of an area and resources available in an area both human and non-human resources, as well as the economic and political dispensation of the day. It is the aim of this research that a model is developed to address the food security challenges in Matabeleland South Province of Zimbabwe, basing on the available resources and the economic structure that supports it.

2.17.1 GAPS IDENTIFIED IN LITERATURE REVIEW

A number of scholars have written intensively and extensively about food security issues with regards to availability, vulnerability, accessibility, utilization and stability across continents. However indications are that, while there is a lot of literature on the food security problem, the bulk of the scholars have not been able to develop and prescribe food security models unique and specific to a given area in relation to its geographic setting and available resources hence the reason why many poor communities continue to suffer from food

insecurity. This section analyses scholarly articles by other authors on food security and identifies gaps that the thesis intends to grapple with.

The study uses pragmatic ways of involving the community affected to solve the problem of food insecurity by developing a province specific food security implementation model to address food shortages. The study intends to broaden the understanding of food security by incorporating all the four dimensions of food security, that is, access, availability, stability and utilization. When the four dimensions are understood hence, addressing the problem of food insecurity becomes easy.

2.17.2 CHAPTER SUMMARY

The chapter mainly highlighted the definition of food security paying special attention to access, the concept of food security and the evolution of food security, giving special emphasis to its historicity, and the misconceptions of food security on a worldwide perspective. The chapter further deliberated on the nexus between agriculture, community participation in policy implementation and food security in order to derive lessons, which are relevant in the contemporary world. The chapter looked at length the marriage between policy implementation and food security whether it was a marriage of convenience or not. Land ownership was historically polarised based on racial divide favouring the whites; that is how land was owned during the colonial era up to modern day Zimbabwe indicating efforts by Zimbabwean government to address food security. The economic policies from the colonial era up to date were also examined. It has been observed that, the literature is strong on adequately unpacking the nature of food (in) security globally, continentally, regionally, nationally and locally. Intervention strategies to address food insecurity were also highlighted in the literature. However, the literature reviewed was silent on bottom up approaches on implementing policies to address food shortages. The literature was not vivid on the context specific type of models rather it provided a homogeneous approach to implementation models. Above all, the main reason of reviewing related literature was to establish the epistemological value of the study. The literature influenced policy contributed to the existing body of knowledge and largely to community development.

CHAPTER THREE

“The opening of public discourse to multiple voices and perspectives calls into question the very notion of a single standpoint from which a final overriding version of the world can be written.” Smith (1989)

3.0 RESEARCH METHODOLOGY

3.1 INTRODUCTION

Purely qualitative data collection methods were used in this research, premised or anchored on the Grounded Theory approach. This type of research methodology permits researchers to find out a problem that they can infuse easily with the data collected from the field. Qualitative methods were suitable to explore food (in) security within the context of the Zimbabwe Agenda for Sustainable Socio Economic Transformation (ZimASSET) blue print in Matabeleland South Province. The chapter looked at research design, sample, and population of the study and data mining instruments. Focussed Group Discussions (FGDs), Key Informants Interviews (KII) and content analysis were employed in the data collection phase. The sample was derived from the population of settlers in Matabeleland South Province, Provincial AGRITEX Officer, Provincial Administrator, District Administrators from four districts and four non-governmental organisations. The research used purposive sampling, that is, critical case and expert sampling where subjects were selected from the most affected districts, and those who were resourceful to the study. The study further highlighted that data was analysed manually using the Thematic approach, which squarely fits qualitative research because the analysis brings out themes and a theory at the end. The chapter acknowledged the importance of ethical considerations to come up with accurate data.

3.2 RESEARCH DESIGN

Silverman (2006:209) propounds that a research design is a, “master plan specifying the methods and procedures for collecting and analysing the needed information.” In the same vein, Saunders *et al.* (2009), concurs that, it is a general plan on how the study will answer the research questions. Creswell (2010) posits that, the phenomenological design is a method of enquiry in which the researcher explores the reason of human experiences as defined by the research participants. Phenomenology places emphasis on unpacking the experiences and

perceptions of research participants to the open expressing their point of view. The aim of this design is to enable research participants to express their perceptions rather than impose pre-conceived ideas of them. The research is deeply rooted in qualitative research methods, which do not alter a situation, event or phenomenon; the community on its own was taken as a laboratory.

Polit and Beck (2012: 487) suggest that, “the research question should be the guide to determine the inquiry, designs and methods.” The research question, “Which food security implementation model can be developed to address food shortages in Matabeleland South Province?” directed this study. Qualitative research methods fit well with the topic under study because they are explanatory; they can probe further and allow contextual data analysis. With qualitative research, because of its interactive nature, the researcher is able to hold discussions with respondents in order to obtain credible research findings. It well connects data in relation to feelings, attitudes, opinions and the social context of population under study.

3.3. STUDY AREA

The research was conducted in Matabeleland South Province in Zimbabwe. The area was chosen due to the ever increasing number of people in need of food aid. ZimVAC (2018), the number of food aid beneficiaries have increased from 61% in 2014 to 71% in 2015. It falls under Zimbabwe’s semi-arid areas. Its provincial capital is Gwanda, which is located 124Km South of Bulawayo the second capital city of Harare. For further details refer to the inserted 3D Map.

Map 1: Zimbabwe Agro-Ecological Zones

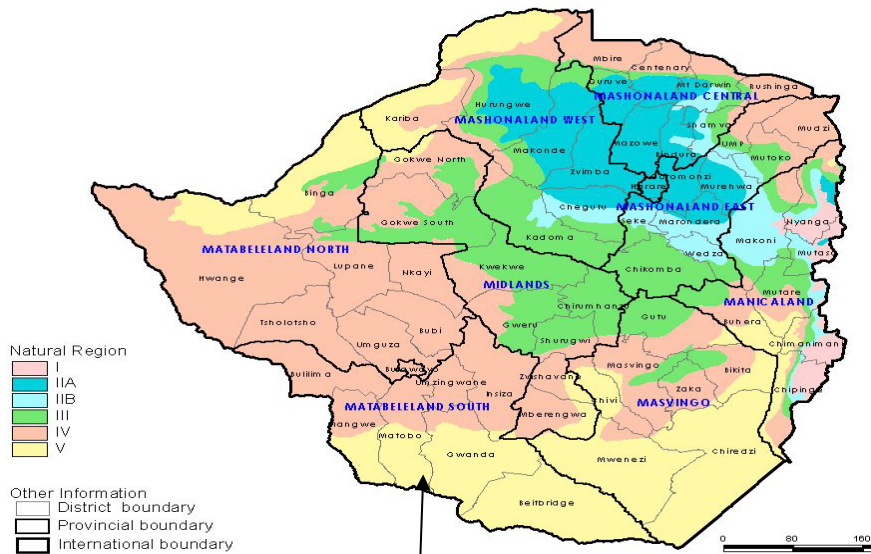
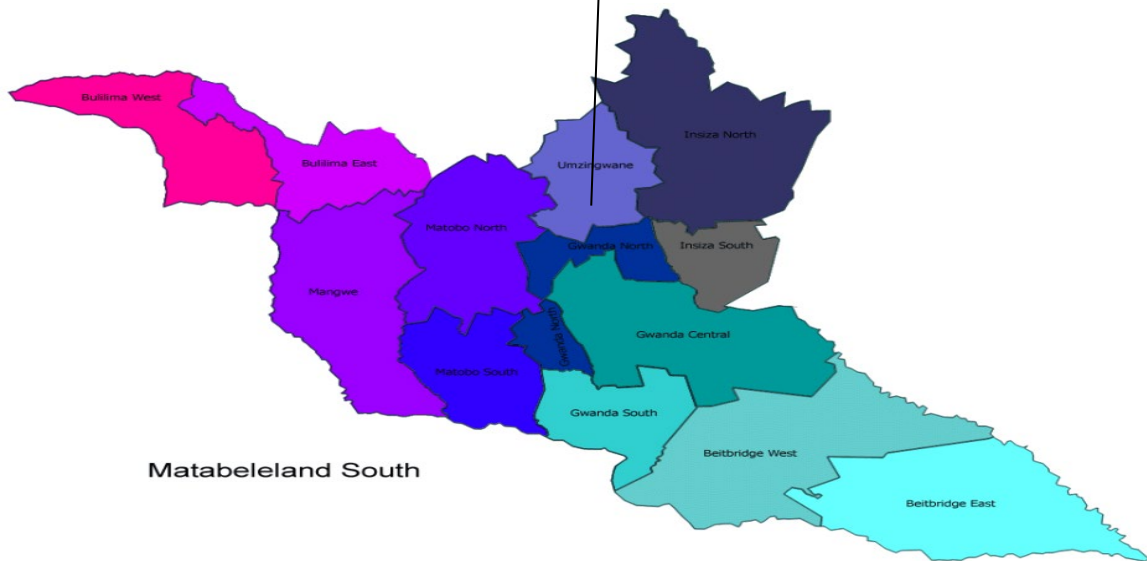


Fig 2.4



3.4. ETHICAL CONSIDERATIONS

Studies must be directed or guided by clear set standards with the view to protect the rights of the respondents in the study. Safeguarding against immoral research activities (e.g. personal gain of the researcher at the expense of the participants), and conducting a proper scientific investigation, are prerequisites in carrying out an objective and rational research. Some ethical principles that are used to reflect validity and reliability of the research outcome are:

voluntary participation, anonymity, confidentiality, honesty and continuity. This study is grounded in the mentioned ethical principles. Previous studies show that, some respondents wrongly perceived the studies and also linked the studies with the food aid programs while others were suspicious about the studies hence the need for a clearly defined informed consent.

In this regard, the study initially prepared informant's consent forms in the local language (iSindebele) that fully brief the participants about the purpose so as to avoid erroneous discernment of the work. The procedure and the total duration of the interview were also clearly explained. It also informed participants of the freedom to withdraw at any time when felt inconvenienced. The consent encouraged respondents to positively cooperate and give honest and unbiased answers. Their answers were kept in strict confidence. Therefore, the study believes that the information gathered was correct and relevant. University of KwaZulu-Natal, through the Ethics Committee, the Provincial Administrator, and the Department responsible for Research and Development in the President's office granted ethical clearance for this study. No participant was remunerated for partaking in this study, and in no way was any participant or respondent solicited to be part of the research.

Poverty or food insecurity makes a person to be vulnerable. An individual who has been diagnosed of any illness which makes him or her not to perform daily duties is regarded as vulnerable. (Keogh & Daly 2009: 277). People suffering from food insecurity were part and parcel of this research, and were regarded as vulnerable people. Food insecure and secure people as defined in the inclusion and exclusion criteria mentioned in this chapter were selected for interviews.

Ethical considerations, that is, value for people, the steps followed to get informed consent, justice, beneficence and confidentiality were dealt with in each and every phase of the research. Adhering to the ethical requirements for research presented no major challenges as the provincial task force was aware of the research intentions and proper channels were followed.

3.4.1. INFORMED CONSENT

Grove, Burns & Gray (2012: 180), informed consent can be best defined as, “the participant’s confirmation that he or she wants to participate in the study and getting consent is mandatory in research”. The consent was first explained to all the participants who participated in this study that is what exactly the study is all about and their role in the participation. No participant was forced to partake in this research study as all agreed. The respondents were also informed that, they are free to withdraw at any stage when answering questions whenever they feel to do so. Every participant filled the consent form administered by the researcher before participating in the interviews. The researcher read loudly the consent form to every participant. Not even one participant was involved in this study without his or her own consent. The validation of the implementation model was done together with the participants as a form of providing general research findings and its implications.

3.4.2. PROTECTION OF THE VULNERABLE PARTICIPANTS

If a respondent is unable to grasp and keep information pertaining the study, it means the participant cannot utilize that information to reach a decision regarding participation or cannot convey that decision. Such participants did not have the ability to consent to participation and were not included in the study. Johnson & Christensen (2008:109) consider that written informed consent is vital; in the case of this research, it was obtained from each respondent before participation. Transparency was upheld since the objectives of the study, benefits of the study and the type of data to be collected was communicated well before to the respondents.

3.4.3. BENEFICENCE

According to Polit and Beck (2012: 152), “it is best described as the obligation not to cause damage to the respondent and maximise benefits to him.” The main purpose of the researcher was to protect the respondents from harm and discomfort. The researcher realised that, there are various risks that are attributed to beneficence such as physical, emotional, social and financial. Building rapport with the respondents is very crucial in research, hence the researcher tried to be open to divergent views from respondents and using interactive dialogue with participants. No participant was forced to contribute and those wanted to withdraw could do so without penalty. Nevertheless, the study contributed to the generation

of a more transparent food (in) security Implementation Model that would improve food security in Matabeleland South Province of Zimbabwe.

3.4.4. JUSTICE

Each person has the right to fair treatment. Justice also incorporates the right to privacy, which can be alternatively expressed as confidentiality expressed as confidentiality (Grove *et al.*, 2012: 159; Polit & Beck, 2012: 155). Justice was observed throughout the study to ensure non-infringement of individual participant's rights. All research participants were treated as equal beings.

3.4.5. THE RIGHT TO FAIR TREATMENT

Sticking to rigorous procedures was a way of making sure that fair treatment was observed and guaranteed. The researcher made sure that, the respondents' contributions were handled with utmost professionalism and respect without any violation of human rights. The researcher had an opportunity to inform the respondents of the right to get professional assistance if need be, and to elucidate what the participants would not have understood.

3.4.6. THE RIGHT TO PRIVACY

Polit and Beck (2012: 156), note that, "a researcher must make sure that, there is limited intrusion and the privacy of respondents throughout the study is maintained." With reference to this particular study, it showed that, the researcher related well with the participants with no disturbances and maintained privacy by keeping all details surrounding the interviews. The right to privacy in this study was observed by using codes instead of participant names. Privacy was again further demonstrated by having Key Informant Interviews in the office where there was minimal intrusions and/or interruptions. Participants, were made alert that all the information they gave was gathered, collected and stored within a system that would operate in the strictest of confidence.

3.4.7. CONFIDENTIALITY

All the respondents participating in the study have the right to confidentiality. This is supported by (Polit & Beck 2012: 158) when they say, " the information shared by participants should be kept strictly confidential. The participants were assured of confidentiality when the researcher agreed with them that the information shared is not going

to be shared in any way to the public and even amongst the participants. The tape recorder and the notes collected from the field were kept under lock and key in the researcher's office. The personal computer of the researcher was used to keep identifiable information such as interviews transcripts. It is anticipated that, the data stored will be destroyed after five years after this study is published when it is no longer of functional value. It is the obligation of the researcher to destroy all the audio recordings produced during data collection phase. The research will further discard all the information in the hard drive using state of the art commercial software. The mass storage device will be then discarded as well. A detailed record indicating what, how, when and which information was destroyed by the researcher is going to be kept.

3.5 GROUNDED THEORY APPROACH

Martin and Turner (1986: 141) describe this approach as, "a methodology that enables researchers to find out a problem that they can confine and link directly to the data collected from the field." Jones and Alony (2011:1) support this description. In another view, after data collection, that data is analysed after that a theory is developed which will be grounded in the data. (Johnson & Christensen 2008: 411; Strauss & Corbin 1994: 46). It is, however, imperative to note that, the Grounded Theory Approach supported by this study was the Charmaz inspiration riding on a pragmatist underpinning with a social constructivist/interpretivist orientation. Nevertheless, whilst concurrent data collection and analysis was done, the importance was on the problem of interest (the development of an Implementation Model to address food (in) security in Matabeleland South Province) rather than on the methods used to study it.

Debates pertaining research were underway to the effect that qualitative methods can be infused in pragmatism. This idea therefore marries the Grounded Theory Approach in finding out the current trends and realities of food (in) security in Matabeleland South Province. The reason why the research chose the Grounded Theory Approach was that, the study was an exploratory qualitative method research study. This gave sense to the idea that, it was appropriate to embed it to the Grounded Theory Approach because of its constructivist orientation which is regarded to be applicable for a qualitative epistemology (Johnson et al 2010: 68). The researcher's major thrust was to have a comprehensive, rigorous insight into the development of an Implementation Model that addresses food (in) security in Matabeleland South Province of Zimbabwe. The research therefore indicated that the

explained combinations would assist to comprehend the research findings and results of the study to come up with a clear picture.

Bowen (2005: 217) concurs by saying that, “the epistemology and ontology of the constructivist Grounded Theory research is that knowledge is fluid because it keeps on evolving”. However, the transformation of this body of knowledge can be interpreted by the participant and the researcher only. In this particular study, Grounded Theory offered the researcher the capacity to deduce meaning from the issues and constructed experiences of the participants. It enabled the researcher to put together and sort evolving concepts into patterns and saturations right through to abstraction (Jones & Alony, 2011: 97). Systematic data collection and analysis informed the development of an implementation model to address food (in) security in Matabeleland South Province. The insight then assisted in developing an Implementation Model to address food (in) security in Matabeleland South Province.

3.6. QUALITATIVE APPROACH

This study is entirely premised in a constructivist, interpretive and qualitative stand-point of the study process. Patton (2002: 39) sees qualitative research as, “a methodology that which finalises its findings from real world situations where a problem of interest occur in a natural setup instead of using statistical packages.” In this study, the qualitative methodology managed to immerse in the participants’ lived experiences. The researcher wanted to make sense of the participants’ experiences, views and beliefs (Shank 2002: 25). The merit of using this approach was that, it informed food security Implementation Model practice that has been rejected by major research proponents in Zimbabwe. The motive for accommodating qualitative data collection and analysis was that, it authorized the researcher to pursue and delve into unexpected routes of facts that came out from the study. The researcher allowed the information to verbalize as he unearthed and acquiescent the significance of the development of an Implementation Model to address food (in) security in Matabeleland South Province, since this has not been understood before in the Province.

The loom offered the researcher positive reception of insider’s perspective as he gathered special skill of the community, District Agriculture Extension Officers, District Administrators, ARDA officials, World Vision, Amalima, Chief Executive Officers and Farmer organisations. Getting a further perceptive understanding of the partakers’ individual practices allowed the researcher to build up an implementation model to address food (in) security in Matabeleland South Province, Zimbabwe. The Model was understood from the

viewpoint of these respondents instead of trying to develop it from those that stayed outside the named province. This was probable because the qualitative methodology enabled the researcher to appreciate how the respondents interpreted the constructs.

Of significance was the qualitative approach for the analysis of concepts and themes derived from the exploration of the food security Implementation Model procedures, related to the implementation process followed during the colonial era. The concepts that informed the stakeholders' recommendations for the development of the food security implementation model could be analysed because of this approach. The loophole of a qualitative approach to the study is that, findings cannot be general beyond the population with which the research was done. It is also argued that researcher idiosyncrasies and bias may affect the study outcomes (Johnson & Onwuegbuzie, 2004: 19). These weaknesses were addressed by triangulation of data mining instruments as propounded by Creswell & Plano Clark (2011: 211).

3.6.1 POPULATION AND SAMPLING

According to Johnson and Christensen (2008: 223), a population is a typical element or individual. Polit and Beck (2012: 273) further break down the concept 'population' to say that the target population is the aggregate of cases about which the researcher would like to make generalisations. Further to that, the population that is accessible is defined as the part of the target population that is accessible to the researcher (Grove *et al.*, 2012: 351). For this study, the population consisted of the members of the Provincial Food and Nutrition Task force, policy makers, Local Authorities, Farmers and Farmer organisations. A sample is a subset containing the characteristics of a larger population (Grove *et al.*, 2012: 364).

Another key concept is sampling, which is a procedure of choosing events, a group of people or other same elements that can be utilised to carry out a study (Grove *et al.*, 2012: 364). Purposive sampling is whereby the researcher distinguishes the attributes of a population of interest. Furthermore, the researcher then locates the individuals who have those characteristics (Johnson & Christensen 2008:239; Polit & Beck, 2012: 515). The major thrust of purposive sampling is to discover information-rich individuals that will be very useful in bringing out pertinent manifestations of the phenomenon of interest (Johnson & Christensen, 2008: 393). The study employed purposive sampling and critical sampling, targeting office

bearers who are saturated with information and hit the hardest by food shortages. The sample size consisted of 200 participants. The composition was as follows:

- four District Agricultural Extension Officers,
- one officer from farmer organizations,
- the Provincial Administrator,
- four Chief Executive Officers,
- two representatives from a local Nongovernmental Organization,
- two representatives from an international organization,
- two officers from Agricultural Rural Development Authority,
- four District Administrators,
- four Members of Parliament,
- sixteen councillors,
- four officers from Grain Marketing Board,
- four officers from the Social Welfare Department,
- eight traditional leaders, and
- one hundred and forty four farmers.

The research study employed theoretical sampling of other stakeholders and experts. This was done when the study was evolving. Glaser and Strauss (1967), define theoretical sampling as, a process of data collection for generating theory whereby the analyst jointly collects codes and analyses data and decides what data to collect next and where to find it, in order to develop a theory as it emerges.

Validation of the food (in) security model included a mixture of participants and experts. To illuminate further, there were three levels of participation from the food security stakeholders. Firstly there were participants from the Provincial Administrator's office who first participated when addressing this objective: "To explore food (in) security within the context of the Agenda for Sustainable Socio Economic Transformation blue print in Matabeleland South Province." Secondly, there were members of the District Food and Nutrition Committee. Thirdly and lastly, the farmers that is both communal and commercial.

3.6.1.1 PURPOSIVE SAMPLING

The researcher clarifies the attributes of a population of interest. The researcher then tries to identify the respondents who have those characteristics (Johnson & Christensen, 2008: 239; Polit & Beck, 2012: 515). The major thrust of purposive sampling is to identify respondents that are saturated with information that is useful to the phenomenon of interest (Johnson & Christensen, 2008: 393).

Purposive sampling in this particular study carries three dimensions that is, expert, typical and critical case sampling. Typical sampling defines typical attributes that are important to the study. The sampling criteria clearly defines the participants who should be included and not to be included. Inclusion criteria are those characteristics that make the respondents eligible to participate in the study whilst the exclusion criteria makes respondents not eligible to participate in this particular study (Grove *et al.*, 2012: 364).

After the initial transcripts and notes from the field were generated in this particular research study, the preliminary analysis was integrated back into the collected data in a manner that, purposive sampling changed to theoretical sampling. The sole purpose was to consolidate any ends that are loose identified in the initial stages of the research study (Gilbert, 2008: 85). Theoretical sampling was employed during the research study for easy continuous comparison of evolving data.

Charmaz (2006: 95; 2014: 26) indicates that, “as these categories surface the researcher has to flash back and revisit the real world to harness rich data that confirms the evolving themes and categories.” Nevertheless, the above sentiments by Charmaz, respondents who were not initially sampled for this study were later incorporated because they wanted to shed more light on some pertinent grey areas that were regarded as contentious by other participants. The participants that were theoretically sampled incorporated the Minister of State for Provincial Affairs, Provincial Social Services Officer and Provincial Head of the Agricultural Rural Development Authority (ARDA).

Inclusion criteria for the food security stakeholders comprised:

- They had to be directly involved in the farming or doing any other related activity that is food security centred.
- They had to be able to be eloquent in Shona, English and IsiNdebele.

The criteria for exclusion included:

- Any other government departments and non-governmental organisations, which are neither directly nor indirectly related to offering services that are food security related.

3.6.2 QUALITATIVE DATA COLLECTION

Key Informant interviews were used to mine data and the utilization of facilitative skills was used to mine the needed data. Other methods of data mining were employed such as the

content analysis and Focussed Group Discussions. Firstly, the role of the researcher in qualitative research was deliberated on and this was followed by methods of collecting data. Data was collected and analysed after a theory grounded in the data was developed. Grounded Theory was supported by Carthy Charmaz inspiration, riding on a realist foundation with a social constructivist / interpretivist orientation.

3.6.2.1. THE ROLE OF THE RESEARCHER IN QUALITATIVE DATA COLLECTION

In qualitative research the researcher is the primary instrument of data collection (Creswell 2013: 45). For the investigator to contribute significantly to the research, it is essential for her or him to recognize individual values, assumptions and biases at the commencement of the research (Creswell & Plano Clark 2011: 267). This researcher's insight of food (in) security was shaped by individual experiences. From 2013 to 2015 was a Community Development Officer at in Bulawayo. From 2016 to current is a District Administrator coordinating different developmental programs, of which in Tsholotsho food (in) security is a cause for concern. In 2015 he had a four-month relationship with food security experts at one of the two ARDA irrigation Schemes in Matabeleland Province of Zimbabwe. Furthermore, the researcher was on food security attachment as a Master's student from the Midlands State University in Zimbabwe.

The researcher assumes that, this deep perceptive of the background and the roles he performed, boosted his awareness and sensitivity to issues faced in the existing study. This assisted him to grapple with information that unfolded in this current study. At the same time, it also translates that he perhaps brought biases to the research study that might have affected the way he understood, interpreted and perceived the data. Nevertheless, every effort was guaranteed to make sure that there is objectivity. Objectivity was ascertained through a bracketing interview (Polit & Beck, 2012: 532) before the phase of data collection, and a debriefing interview (Onwuegbuzie, Leech & Collins 2010:706) after the initial collection of data and analysis. The two interviews mentioned above were carried out by the supervisor of this research. It should be noted that, the study employed a constructivist approach, which on its own brought about investigator reflexivity. The investigator however kept notes from the field and a diary which is reflective in nature that helped in the co-construction of his truth and that of the respondents as referred to by Polit & Beck (2012: 533) and Gardner *et al.*

(2012: 67). The investigator was also open to different opinions and reflected respect and trust to the respondents.

3.6.2.2 KEY INFORMANT INTERVIEWS

Green and Thorogood (2009: 94) and Bryman (2008: 192) argue that, an interview is a face-to-face interface in which the investigator looks at verbal responses from respondents. Qualitative interviewing can be regarded as a purposeful strategy of finding out how people think and feel about their exact world including their knowledge of such world. According to Creswell (2013: 173), specific areas are explored during this kind of interviews hence the research is able to get in-depth information.

Key Informant Interviews were carried out with individual respondents and the interviews were recorded using an audio recorder as defined by Charmaz (2006: 26) and Creswell (2013: 168). The investigator had a set of questions inform of an interview guide. An interview guide can be best viewed as a set of questions on specific topics that the investigator wishes to employ in the interview session. The interview guide usually consists of questions that are open-ended in nature directed to the respondents (Johnson & Christensen 2008: 208). The investigator sometimes could not bother to follow the sequence of questions on the interview guide because the responses given by some participants led to new ideas that led to different all together. For instance, from time to time the participants would respond the question during the narration of their lived experience before it could be asked. Furthermore, some questions that were not even incorporated in the interview guide might be asked to select relevant and pertinent aspects that were said out by the respondent. This is a recommendation from authors like Bates, Droste, Cuba & Swingle (2008: 2); Bowling (2009: 285); Creswell (2013: 163); DiCicco-Bloom & Crabtree (2006: 315), who advise that the researcher should ensure flexibility to even generate new questions during interviews to save the objectives of the research if the need arises.

When conducting a Key Informant Interview, the researcher remains guided on the particular information that is necessary without imposing a hard structure to the interview (Turner 2010:757). In this study the investigator endeavoured to get insight into the views and knowledge of the respondents' world as is recommended by Charmaz (2014: 57) and Bowen (2005: 217).

However, Key Informant Interviews have their merits and associated with them. They have merits in the sense that, they are pertinent for exploring the topic of interest and giving the

investigator with prospects to investigate further for required gen and to elucidate ripostes. Detailed information was mutual in this research study because open-ended questions were employed (Polit & Beck, 2012: 13). The semi-structured interviews in the study allowed the gaps in the data collected to be anticipated and dealt with accordingly (Johnson & Christensen, 2008: 205). At the onset, freestyle memorandum writing was also employed (Charmaz, 2014: 186). The original memorandums engrossed on the series and style in which the investigator captured emerging from the data collection. Later on, the memorandums were generated to spot salient, luminal cues and nuanced statements that mirrored deeper difficulties in the process of developing a food security Implementation Model in the province of Matabeleland South Province. Memo writing was unrelenting right through out to the data analysis.

The restrictions of using Key Informant Interviews in this research encompassed the idea that some respondents failed to reply or changed their current enthusiasm if emotional questions were asked. The researcher handled this restriction through being cautious, self-introspection and by being delicate and cautious when asking such questions. Another shortcoming of Key Informant Interviews is that, “salient themes may be missed during the investigation process” (Johnson & Christensen, 2008: 205). However, the investigator concentrated on listening attentively to what was said and employed facilitation techniques in communication.

3.6.2.3. FACILITATIVE COMMUNICATION TECHNIQUES

Johnson and Christensen (2008: 203) resonate that, “an interpersonal meet and as such facilitation skills are employed when the investigator conducts semi-structured interviews.” The purpose is to embolden the respondents to relax and without being forced give as much data as possible about their opinion and lived experiences without feeling pressured or judged (Bowling, 2009: 411). During the structured interviews, the investigator recorded and noted proxemics, kinesic, chronemic and paralinguistic non-verbal communication modes that were planned by the respondents (Onwuegbuzie *et al.*, 2010: 700). Following Charmaz, the investigator often asked questions in a modus that did not impose him preconceived ideas about developing an Implementation Model that addresses food (in) security in Matabeleland South Province. He therefore, employed the facilitative communication techniques described in the subsequent section.

3.6.2.4. ESTABLISHING RAPPORT

Indispensable to mining quality data is the creating a platform of good trust and rapport. Unconditional acceptance, respect, empathy, openness, honesty and modesty was established and maintained up until the end of the interview process (Bowling, 2009: 340). Interference in the interview milieu was avoided through asking quotations in a secluded area with a poster put affixed on the door that read ‘Silence Interviews in Progress’. At the commencement of the interview process the investigator elucidated the aim and anticipated time the interview was going to take and discussed confidentiality concerns. The respondents however were not judged and were guaranteed that there were no wrong or right answers.

Kvale (1996: 133-135) propounded nine types of questions that defines a qualitative interview. The researcher was principally guided by these nine examples. This progression of questioning was useful in getting class information. Kvale’s proposition is seconded by Berg (2001: 70), Johnson and Christensen (2008: 207), Turner (2010: 758) and Bowling (2009: 414). Instances provided in this text points to any of the respondents namely; the District Administrators, Chief Executive Officers of local authorities, as well as the community members.

The kind of questions suggested by Kvale, are described as follows.

1) Introduction of questions:

These are questions that permit to instigate the dialogue between the researcher and the respondent. For instance: “Tell me what you understand by the term food insecurity”.

2) Follow-up type of questions

Type of questions predestined to give confidence the participant to elucidate especially on the particular point that they are trying to explain. For example: “What worries you as parents when there is no food in the house? or “What does it resemble? Can you further explain?”

3) Asking questions

Refers to a gesture, phrase or neutral enquiry that triggers respondent to illuminate the how and why of their responses. For instance: “you have endorsed the home grown food security Implementation Model, what are your anticipations?” The use of direct probes, silent probes, indirect probes and echo probes, was incorporated into the interview process when the researcher was using this line of questioning.

4) Questions Specification

These are type of questions that clears an equivocal reply that would have been provided by a respondent. For instance: “As an Agricultural Extension Officer, what mitigation strategies are in place to address food (in) security?” or “When a food security implementation model is in place, what are your anticipations?”

5) Questions that are Direct

These are straight forward type of questions and were administered towards the closure of an interview. The reason why these questions came at the end of the interview was that, if they are administered early they pre-empt and over-shadow other pertinent issues in the interviewing process. For instance: “What is the community doing to ensure food security in the province?”

6) Indirect questions

These are pertinent questions because they provide the respondent more free play for answering questions. However, some other important questions that would have been omitted by other types of questions could possibly surface. This might be an example from this research study: “What do most of stakeholders linked to food (in) security do to address the problem of food insecurity?”

7) Structuring of questions

Structuring of questions helps the researcher to re-focus and progress. For instance, “Let us go through the procedures that you do when implementing a food security policy.”

8) Silences

It is an indication that interconnects the researcher’s wish to allow the respondent reflect and enhance more on the already given answers.

9) Interpreting questions

These are succinct questions that show that the researcher is following and understanding the respondent’s line of dialogue. This is an instance of an interpreting type of question employed in this research study: “Please elaborate what you denote by indicating that, it is just work that needs to be done?”

3.7 DATA ANALYSIS

This segment of the research presents the data analysis processes that the researcher followed for the qualitative data. Saks and Allsop's (2007: 410) definition describes the data analysis as "what is completed with qualitative and quantitative research information once it has been gathered".

3.7.1 QUALITATIVE DATA ANALYSIS

Polit and Beck (2012: 556) highlight that qualitative data analysis encompasses combining data together; making perceptible what is not understandable linking and attributing consequences to previous circumstances. The qualitative data analysis process copied the grounded theory doctrines focused and theoretical coding, open coding and transcription.

3.7.1.1 RIGOUR IN RESEARCH

A systematic manner of handling the research process is referred to as rigour. It encompasses the thorough and careful collection, interpretation and analysis of the data in such a manner that a sovereign researcher ought to be able to re-analyse the collected data using the similar processes and generate the same findings (Bowling 2009: 152). Rigour is achieved through trustworthiness of the qualitative collected data, validity and reliability of the quantitative data (Lincoln & Guba, 1985: 231).

3.7.1.2. TRANSCRIPTION

In this study at hand, a word for word transcription preceded the analysis of data and the researcher attempted to ascertain that the transcriptions were an exact indication of what had emerged during data collection. This carried out by thoroughly listening to the audio-tape joined with on-going feedback from other students and the research supervisor (Polit & Beck, 2012: 534).

The research employed a grounded theory method and hence grounded theory analysis was pragmatic to the qualitative data. The interview analysis of transcriptions and notes was rooted on an approach looking at descending patterns in the data by means of thematic codes. Bowen (2005: 218) and Johnson, and Christensen (2008: 413), resonate that, the analysis of data in grounded theory is carried out through the invariable relative method, and involves regular interaction among the data, researcher, and the developing theory.

In this particular study, the method involved paragraph, line and sentence pieces of the transcribed interviews. Bowen (2005: 217) argues that, inductive analysis is the themes, patterns and categories of analysis come from the data.

The coding was done manually in this study. This simplified manage and possession of the data. Being close with the data through coding manually allowed mini-analysis in that, the information could be seen, and codes could be allocated at the same time (Bazeley 2007: 92; Saldana, 2009: 22).

3.7.1.3 OPEN CODING AND FOCUSED CODING

Charmaz (2006: 50), preferred line by line coding which made probable for the researcher to contrast new data with was already coded. A Grounded Theory that incorporated social constructivism was used in this research. The two concepts are endorsed by Charmaz (2014: 16). It was imperative for the researcher that he must not lose direction of the concealed and less understandable networks that concurrent the data. The use of themes managed to extract the hidden systems or luminal and nuanced reports, which were the intrinsic reality of the data.

A specific phenomenon was picked during coding, and was recognised through the utilization of explicit indicators in the collected data. This indicator was generated out of a code label allotted to items, situations or incidents, in the data. The emerging problem from the data was then analysed for frequent themes. Themes were rearranged and preoccupied to a higher level; hence, a sophisticated order tag was allocated to these themes. This process went on until a sub-category of data emerged (Walker & Myrick 2006: 549). The sub-categories materialised into main categories. The categories then were incorporated into major theme from which the fundamental storyline emerged. This was made for each respondent category the extension officers, ARDA officials, District Administrators, GMB officials, Chief Executive Officers of local authorities, community members, Provincial Administrator, Provincial AGRITEX Officer) Coding strategies will be explained in detail in the next chapter.

3.7.1.4 AXIAL CODING

The major themes and central story lines from each respondent group were abstracted to create codes that constituted what Strauss (1987: 64) views as “a thick texture of associations

approximately the ‘axis’ of a class”. Axial coding was consequently created around the chief themes from each respondent group. The texture of relations merging from the results was supported on, or created around Pierre Bourdieu’s ideas that were associated to the findings. Bourdieu’s (1991a: 502) ideas indicated to unswervingly speak to the evolving research findings, for example:

- ❖ Incongruous commitment of food security stakeholders or participants that are directly linked to food security in the province.
- ❖ Dichotomous actuality in which farmers’ accountability is abdicated.
- ❖ Prohibitive processes negatively affect overall community participation in the implementation of various food security policies.

The above-mentioned themes centred on Bourdieu’s idea of representational power (Bourdieu, 1991a: 502).

3.7.1.5 THEORETICAL CODING

Theoretical coding suddenly led to the building of the axial codes to mirror the combined association between these codes and the previous family codes (Charmaz, 2006: 63). The central subject that progressed from the theoretical coding was the web of complicated relationships that centre on power issues, which was characterized by dominant system. Contextualising the associations was further demonstrated by using notes from the field, and reflections from the researcher as he interrelated with both the respondents and the data. This study used Gwirayi’s Systems Theory, and Sen Armartya’s Entitlement Theory as theoretical underpinnings. The analysis of data was weaved and dimensionalised to form an appreciation of the intricate truths of the present food security model, and was then utilised as a bedrock for coming up with a substitute to the status quo. The researcher understands of the information which was in abstract hence created the context that will eventually favour the future Implementation Model for addressing food (in) insecurity in Matabeleland South Province of Zimbabwe. The data was coded together with the research supervisor following a harmonious argument which was carried out to authenticate the connotations.

3.7.2 TRUSTWORTHINESS

According to Polit and Beck (2012: 268), finding out the believability of the research, the researcher was guided by the standards for trustworthiness of the qualitative research. These are; dependability, credibility, confirmability, transferability and authenticity

3.7.2.1 CREDIBILITY

How congruent the results are in tandem with reality is what is called credibility (Morrow, 2005: 252; Shenton, 2004: 63). In the current study credibility was safeguarded by familiarization of the Ndebele culture well before data collection commenced. A preliminary visit of the study area was done. Recurrent debriefing meetings together with the research supervisor were mandatory. This was done to make sure that the research findings are credible and well as promoting professionalism, participation and also increasing confidence in the researcher (Maritz & Jooste, 2011: 974). The study supervisor was utilised as an instrumental floorboard to test emerging interpretations and ideas to help bracket bias of the researcher bias. Other doctoral students scrutinised the researcher through conferences such as the one the College of mentors held at Kenyatta University in Kenya, and the one that the Climate Change institute held in Maputo, Mozambique. Both conferences were organized by the Council for the Development of Social Science Research in Africa (CODESRIA).

The accuracy of data was done through member checks whereby transcripts of dialogues were read in haphazard manner (Bloor cited in Emerson 2001: 393; Creswell 2009: 191; Fielding & Fielding 1986: 43; Patton 2002: 561). This was done proximately after the phase of analysing of data, also at the end of the study. Deliberations with the respondents gave them a chance to add their views, make adjustments and provided possible dissimilar interpretations if essential. Deliberations with the research supervisor and colleagues were carried out as a form of member checking. The researcher was assisted to establish the extent to which the research findings were in line with those past studies through literature control of previous studies (Creswell & Plano Clark, 2011: 209; Charmaz, 2014: 289; Green & Thorogood, 2009: 255; Shenton, 2004: 69).

Protracted commitment incorporated spending adequate time in data collection to understand the opinions of the various stakeholders and to examine distortions and misinformation. Elongated commitment also guaranteed fullness of pertinent categories. Building hope and founding relationship through having time with the respondents participants was element of the motive for lengthy commitment. Engagement with respondents for ten months also guaranteed data saturation (Krefting, 1991: 217; Lincoln & Guba, 1985: 301; Loh 2013: 5; Shenton 2004: 73).

Data sources triangulation involved the respondents themselves, these incorporated Agricultural Extension Officers, ARDA officials, GMB officials, District Administrators,

Chief Executive Officers of local authorities, farmer organizations, community members and artisans (during the validation phase) with whom key informant interviews were carried out; also field notes were taken, as well as an insightful diary. Evidence from the respondents was confirmed by documents review from the Grain Marketing Board and World Vision between 2012 and 2016.

3.7.2.2 DEPENDABILITY

The ability of the study to be repeated and bring the same findings in the similar research context is what is called dependability (Gasson cited in Whitman & Woszczyński 2004: 92; Lincoln & Guba 1985: 317; Morrow, 2005: 252; Patton, 2002: 546; Shenton, 2004: 71). The use of three methods of data mining, focus group discussions, key informant interviews, and a document analysis in the current study guaranteed dependability.

To guarantee dependability, the study also reported the steps within research in detail, in an endeavour to bring up to date the subsequent researcher to redo the research. Furthermore, in this particular research study, for instance, the implementation and research design, the operative particulars of data mining, and a thoughtful consideration of the research were also incorporated.

3.7.2.3 CONFIRMABILITY

Gasson (cited in Whitman & Woszczyński 2004: 93), Morrow (2005: 252), Lincoln and Guba (1985: 318) and Shenton (2004: 72) tie the same knot on the fact that, a research study's results should reflect the experiences and ideas of respondents instead of the preferences and characteristics of the researcher. Confirmability was guaranteed through triangulation of data mining methods. The trails of audit were instituted to find out the progression of this research. Of importance to recognize is that, a bracketing interview was carried out with the research supervisor to guarantee confirmability.

3.7.2.4. TRANSFERABILITY

The extent to which the research findings of a particular study can be applied to other situations is called transferability (Gasson cited in Whitman & Woszczyński 2004: 94; Morrow 2005: 252; Lincoln & Guba 1985: 317; Shenton 2004: 69). The research findings of this study were particular to one province in particular, that is Matabeleland South in Zimbabwe. To ascertain an element of transferability, purposive sampling of respondents and critical case sampling of ZIMVAC reports were employed. The outcomes were re-contextualised in the review of literature. Nevertheless, notwithstanding this attempt, it might

be problematic to indicate that, the findings are appropriate to other circumstances. Nonetheless, concerned parties who would want to appeal the transferability of this research study should consider the quantity of institutions that participated in the study, the number of respondents participated, and also time spent on data collection (Morrow 2005: 252).

3.7.2.5. AUTHENTICITY

Authenticity can be viewed as a qualitative research approach that confirms the trustworthiness of research findings in that it shows the degree to which the researcher precisely reflected respondents' experiences and feelings as they are lived (Onwuegbuzie *et al* 2010: 706; Polit & Beck 2012: 582). Authenticity is ensured when a researcher gathers information from respondents and keeps trails of audit of respondents' lived experiences. Debriefing interviews, narrating the empowerment and growth of the respondents during the data collection process, and recording the researcher's continuous subjectivity were approaches used to generate an audit trace (Onwuegbuzie *et al.*, 2010: 709).

The following five aspects best describes authenticity. These five aspects are; tactical authenticity, catalytic authenticity, educative authenticity, ontological authenticity and fairness (Onwuegbuzie *et al.*, 2010: 705; Qazi 2011: 15). The veracity component of research is anchored in fairness, which dictates the researcher to find out and give respect to various constructions. The researcher aimed to maintain impartiality by element checking the respondents' constructions. Contradictory experiences presented by the Agricultural Extension Officers, District Administrators, Chief Executive Officers of local authorities, Community members and ARDA officials were recognized and elucidated with a dissimilar participants group. Contentious issues were dealt with in debriefing interviews (Guba & Lincoln cited in Denzin & Lincoln, 2005:207).

The level to which the respondents' are aware of their real world that has been fractured by their participation in the research study is called Ontological authenticity (Qazi, 2011: 15). The audit trails of participants' intuitions in their lives were kept by the researcher for the purposes of the impact estimation. For the purposes of estimation of this impact, the researcher kept audit trails of the participants' intuitions into their own lives. The trails audit were built from debriefing interviews that facilitated the researcher to find more from the participants' lived experiences. As the respondents recounted their lived experiences, sentiments and stories, their awareness levels were revealed.

(Onwuegbuzie *et al.*, 2010: 708) sees educative authenticity as, “the level of awareness of difference in the respondents’ constructions and how the stakeholders involved see these variances”. The exploitation of debriefing interviews was useful in order to show the extent to the respondents were conscious of these variances.

The best definition of Catalytic authenticity is the level at which a specific participant group has established new constructions pertaining the position of another group that is equally involved in the study (Morrow 2005: 253). The researcher endeavoured to evaluate catalytic authenticity by mining lived experiences from community members, agricultural extension officers and District Administrators to document the determination on the misunderstandings that they portrayed in discharging their roles. One example that can be encountered in this study would be that of lack of a vivid way of coordinating food security programs by government departments and other development actors. This group would be held responsible for delaying the implementation of food security programs in the province. However, the Agricultural Extension Officers were pointing out that the delay was exacerbated by chaotic implementation of food security intervention strategies by various stakeholders in the Province of Matabeleland South. It is germane to highlight that, to ameliorate catalytic authenticity in groups of stakeholders, debriefing interviews were employed.

Onwuegbuzie *et al.* (2010: 706), state that “tactical authenticity can be viewed as those levels of integrity in research that bedrock on the research findings and on the level of empowerment given to the participant during the study.” The researcher handled the authenticity issue through debriefing interviews that recorded the empowerment level confirmed by respondents during the research. The researcher decided to further make a critical analysis in order to establish what the Local authorities, local government, ARDA, Farmer organisations, Development actors and Community members have done to improve the implementation of food (in) security model in the Province of Matabeleland South.

3.8 CHAPTER SUMMARY

The chapter discussed the research design that this study employed to come up with credible results. The research is buttressed by research instruments namely, Focus Group Discussions and Content analysis. The chapter cited and justified why the mentioned research instruments were adopted by citing advantages and disadvantages in each method. The chosen methods when used holistically are a pillar to rely on, since the weakness of one method is tackled by

another meaning that they complement each other. The chapter highlighted the population of the study and justified why purposive sampling that is critical case and expert sampling were employed. The methodology was largely or thoroughly inclined to a qualitative one, therefore data presentation and analysis was done using the thematic way since the research was contextual in nature. The chapter also acknowledged the professional guidelines used by the researcher during the research and outlined their significance in the study.

CHAPTER FOUR

DATA PRESENTATION AND DISCUSSION OF FINDINGS

4.0 INTRODUCTION

This chapter is a presentation and analysis of data extracted from the study population, that is all respondents ranging from communal farmers, commercial farmers, peasant farmers, representatives of farmer organizations, Administrators, Agriculture Extension workers and Officers, Chief Executive Officers from Rural District Councils, Non-Governmental Organizations and government departments that are in the District Food and Nutrition Committees (DFNSC). All these respondents make a District Food and Nutrition task force, which combined make the Provincial Food and Nutrition Security Committee (PFNSC) task force. The thematic approach was used to present data for this study where the main responses were grouped into themes. The themes presented in this study dwell much on the general trend of food security situation in Matabeleland South Province. This investigation also looked into factors affecting food security in Matabeleland South Province against natural and man-made aspects; these factors are: inadequate rainfall, poor governance and limited agricultural resource base, copying strategies at household level and government food security initiatives, as well as prospects for a sustainable Implementation Model.

4.1 PRESENTATION OF RESEARCH FINDINGS

As indicated above, the presentation of our data is made through the thematic approach; data was grouped into themes, which were derived from research participants in the study and documents review. The findings and analysis cover current trends and realities on the food security situation in Matabeleland south Province, factors militating against food security and general copying strategies at individual household level, Government yesteryear initiatives on food security, and prospects of a sustainable food security model in line with the Zimbabwe Agenda for Sustainable Socioeconomic Transformation (ZimASSET). All these themes were discussed so that a common trend and understanding is reached and more sustainable food security model is developed and validated for Matabeleland South Province.

4.2 GENERAL TRENDS OF FOOD (IN) SECURITY ACROSS DISTRICTS IN MATABELELAND SOUTH PROVINCE

The food (in) security situation continues to worsen on a daily and yearly basis in parts of Matabeleland South Province. This was supported by various research participants across the districts in the Province of Matabeleland South. According to the Agricultural Extension Officer for Mangwe District:

“the issue of food insecurity is escalating day in day out, I don’t want to lie...this has been discovered when we were doing crop assessments for the past ten years I joined AGRITEX. Out of every five households, one could have a harvest provided the farmer grows small grains which are drought tolerant”

The District Agricultural Extension Officer for Mangwe however, had this to say:

“the problem of food insecurity started in the 1980s, the rains have never been good in this district, whether you grow small grains or any type of crop, the chances to have a good harvest is very minimal”

The Extension Officer and the District Agriculture Extension Officer agree on the point that, in Mangwe District the food insecurity situation has never been good, however, they differ on the solution. The Extension Officer has recommended that, the growing of the small grains in the district might be a panacea to address food shortages; while the District Agricultural Extension Officer says the district is not suitable for crop production. Furthermore, it can be concluded that, this difference in opinions may be based on the number of years each have been working in Mangwe and the level at each one is operating at.

The same sentiments of food insecurity in the province were echoed by the District Administrator for Insiza, who said:

“there have been perennial food shortages in this region owing to persistent droughts caused by lack of enough rainfall and failure by local people to fully embrace adaptive measures like growing of small grains on a large scale”

The Provincial Administrator (PA) for Matabeleland South was also of the same sentiment by saying

“unless the government and concerned stakeholders like Non-Governmental Organizations join hands to address this long standing crisis situation, which has affected us over and over, the province will remain in dire situation in as far as food security is concerned.”

The Provincial Agriculture Extension Officer for Matabeleland South Province also supported the Provincial Administrator saying:

“the problem of food insecurity has been evident in 1992, there was serious drought in the province and a lot of livestock died. Since then, the province has not yet recovered fully from that problem.”

The Provincial Head for the Zimbabwe Farmers Union (ZFU) also pointed out that:

“farmers in Matabeleland South Province have never produced substantial harvest for both household consumption and commercial, except those using irrigation.”

The expressions above indicate general concurrence that, the people in the province have over time suffered from food insecurity. The District Administrator pointed out that, the farmers in Insiza District should embrace small grains as an adaptive strategy to address food shortages, but the Provincial Head for the Zimbabwe Farmers Union sees it differently when he advocates that, only farmers under irrigation are able harvest. This shows that, rain fed agriculture is not reliable in the province of Matabeleland South; which means the level of people vulnerable to food insecurity is increasing and will continue increasing day by day, year by year unless necessary strategies are adopted to address the food security situation in the province.

4.2.1 MATOPO DISTRICT

Matopo district is synonymous with food security threats that are traced way back before independence in 1980. The people in the district have largely survived from food handouts from the department of Social Welfare, donors such as World Vision, Plan International and Care International, because the general trend is that they have very little food from their fields to take them throughout the year. One of the chiefs in Matopo said:

“our community has been a land of hunger for a long time...we survive through the hand of well-wishers...we hardly has enough rains and at times floods affect our crops too bad. It has been long, chiefs with nothing in our isiphala senkosi a grain reserve for the chiefs to help the poor.”

A local peasant farmer and resident also emphasized this dire and calamitous situation when he said,

“we work hard in our fields in trying to produce enough food for our families...but nature is not always on our side. It is very rare to have enough rainfall to see our crops through. I do not remember the last time my family had enough to feed for the whole year...such is life here.”

The above sentiments by the Chief and the local farmer in Matopo District are an indication that food security problem has affected the Matabeleland South communities over a long period of time. However, it can be argued that, most traditional leadership do not want to work as a result of the dependency syndrome generated by donors when they give handouts to vulnerable households. This came out when the District Administrator says: “most of the Traditional Leadership through my office looking for donors to help them with food handouts.” The people have learnt to live with or co-exist with this sad and pathetic situation. The donor community should however invest in sustainable initiatives that bring food on the table even if they leave the district.

Availability of food in Matopo District is generally unstable. The level of availability depends on the time of the season. Rains are scarce, and as such people are not able to produce enough in order to take them throughout the year. According to the District Administrator:

“...soon after the agricultural season some households will be having some food harvested from their fields...the food reserves are however not enough to take them throughout the year.”

The Agricultural Extension Officer pointed out to the same situation, although she indicated that in situations where timing of the agricultural season is strictly adhered to harvests maybe better; she said:

It is undeniable that some few families who give much attention to the agricultural season and pattern can have better yields to take them even up to three quarters of the year, especially those who include small grains in their farming... But most people here have not enough yields even for a quarter of the year.

A local communal farmer during focus group discussions said:

In a good year, I can have enough to feed my family for up to maybe six months. The remaining months will mean starving if these organizations do not come to our rescue with food hand outs.

Thus, as indicated above, there is concurrence that food availability in Matopo district is erratic; although there are times of the year when people will be having some food in their granaries, albeit not enough to take them through to the next farming season. This means that a sustainable food security model inspired by the ZimASSET is critical to arrest food shortages throughout the year.

There was an indication that food can be available in local shops in Matopo District; this district is in close proximity to Bulawayo province, which has constant supplies, meaning that availability issues in Matopo District are not as severe as compared to other districts in Matabeleland South Province. According to a local communal farmer during focus group discussions:

It is very rare when there is no food available in our local grocery shops, but money will always be the limiting factor to acquire food... if you have no children or relatives working in the city and sending you money to buy food that is it.

Another local subsistent farmer and resident said:

Yes, our fields always fail us and we have no[t] enough, but in the local shops and other surrounding areas like Bulawayo, people can go and find food there. If you have something to sell, you can sell maybe a cow and purchase food.

This means that although food can be available in the district through other alternatives like local shops, the means with which to acquire food remain menaces in this highly dollarized economy. As such, most of the households in the district will continue to face scourge of food insecurity calling for the need to develop a vibrant and sustainable food security model for the community.

Accessibility and utilization of food in Matopo is a challenge. This is because there are limited food reserves at household level, and the only option will be to buy from local shops.

According to the headman in Matopo:

Those with cash can always access and buy food from the shops or can travel to Bulawayo to access food at any given time...the problem comes when you have no source of income and have no children who can give you the money. Thus, for the poorest members of society people cannot access food even through other alternative channels available to them.

On accessibility and utilization issues in Matopo district, the World Vision Field Officer commented:

It is one thing to understand utilization even in situations when there is any food available. The people here suffer from both lack of access and utilization as they have limitation of means to access and knowledge of utilization. When something comes their way, utilization of such food is not well understood as evidenced by cases of malnutrition, especially among children.

The above sentiments point to a common understanding and situation: food is not easily accessible in Matopo District, neither is it utilised. This situation therefore calls for the

development of a food security model, which can avert the food security situation in Matopo district and Matabeleland South Province at large.

4.2.2 BEITBRIDGE DISTRICT

Beitbridge District is also characterised by severe or critical food shortages. As is the situation in Matopo, this sad state of affairs is a historical phenomenon that has been witnessed over a long period of time since the initial years of Zimbabwe's independence. One elderly respondent who is also a peasant farmer in the district noted:

This problem started long back, just after independence. The people of this area never harvested a better harvest since then. Long back during the Smith regime we used to have better yields though.

It is critical to note that, the situation has been worsening over time further plunging the people of Beitbridge into more suffrage and food misery. This is evident when one of the local farmers also said:

This problem, yes it started just after independence in 1982, but it was worsened in 1992 and 2012, now it is very severe may be it is because of climate change, which is worsening. To have even two 50kgs of maize per season is not so easy these years.

The timelines in the above statements indicate a situation that has been neglected and not given concerted effort to address over time. The remarks above, point to a situation where despite the area's natural challenges, it has taken more than too long for the responsible authorities to come up with sustainable and permanent remedies to avert the situation.

Food unavailability in Beitbridge is even more critical if compared to Matopo District. Beitbridge is even drier and the soils are highly infertile, which this makes crop farming difficult. According to an extension worker in the area:

The people here have no food throughout the year... there is never a time when people will be having any food reserves in their granaries... no cereals no vegetables through and through

The District Administrator also retorted:

Our district is a far worse situation in terms of lack of food for both our people and our livestock. The soils are barren. The pastures are so dry that nothing can be scavenged out of them.

In this situation it is therefore clear that, the general trend of availability of food in Beitbridge is more critical and as such more robust strategies need to be mooted and developed in order to deal with the problem of food insecurity in the Beitbridge District.

Food in Beitbridge can be available through food handouts from non-governmental organizations, such as Care International and World Vision. The NGOs usually come with their assistance at the most critical times of the year. According to a Member of Parliament:

Non-governmental organizations give us food here especially cereals and beans as well as cooking oil when a critical need arises, otherwise we would have starved to death in this community, my son.

On that same note one local chief was quick to point out:

Yes, we know there are people receiving food through the generous hand of some non-governmental organizations in this community, but if the truth be told, most of us fail to get such food handouts. It is for a few chosen people.

The sentiments by the chief bring in the politics of local participation. The District Social Welfare Officer argues that, the selection criteria for the beneficiaries for drought relief is crystal clear, she says: “the selection criteria is very transparent, the village heads choose the beneficiaries then the department of social welfare does the verification.” The dependency syndrome was noticed across the districts when some of the participants thought that the purpose of the study was to bring food aid in the near future. However, it can be argued that, the advent of the donor community in the District further exacerbates the problem of food insecurity. This is substantiated with the continuous shortage of food in the province, yet there are so many non-governmental organizations that offer temporary solution to the problem. Hence this creates space for a robust sustainable bottom up food security Implementation Model that should be used in the province to address food shortages.

The World Vision Officer in a statement confirming the limited availability of food through food handouts from NGOs said,

Our budget is limited and we cannot reach out to everyone with our food assistance. Normally we rank our beneficiaries according to level of vulnerability and obviously child headed households, elderly and chronic ill persons will have first preference.

Thus, availability issues are critical in Beitbridge because reliance on non-governmental organizations for food is highly unsustainable, given that they do not make the food handouts available throughout the year and to everyone. This makes people suffer from starvation in Beitbridge for the greater part of the year. People in Beitbridge need a constant supply of food and this can only be achieved through development of more sustainable, well defined food security model for the area.

Since Beitbridge community largely depends on food handouts from non-governmental organizations and social welfare department in times of critical need, the issue of accessibility is even more critical for the greater part of the Beitbridge community. According to the Social Welfare worker,

The number of people we are able to reach out with food assistance is small as compared to the actual number of people in need... Our coffers are dry... resources are limited and we end up selecting extremely vulnerable populations as our target groups like orphans, elderly people and people living with HIV/AIDS.

Such a scenario, as indicated above by remarks from respondents, means that the bulk of the people in Beitbridge cannot access adequate food even in situations when other players are providing food in times of critical need.

For some people in the Beitbridge district, food can be accessed from Musina in nearby and neighbouring South Africa, here prices are relatively low. However this channel of accessing food is only open to better off members of the community. According to one local resident:

Well up families can send their family members to Musina in South Africa to buy cheap food, rice and mealie meal... it just takes a single day to go and come back with the food provisions... but it is becoming difficult to cross the border with food stuffs these days.

Thus accessing food from South Africa is a preserve for the rich and again it is now hampered by strict border controls. The government of Zimbabwe of late pronounced the statutory instrument 64 of 2016, which prohibits the importation of mealie-meal. In this regard it is a strategy that can be banked on but rather more sustainable home-grown strategy needs to be explored for the district and the province at large.

4.2.3 MANGWE DISTRICT

Just like in Beitbridge, the problem of food insecurity in Mangwe has been persistent over years. There was consensus amongst respondents that the food insecurity problem has haunted the communities over a long period of time as well. One of the residents, who is a subsistent farmer and Councillor in the district noted:

Yes, I agree there was a problem of food insecurity, because the rainfall sometimes are [sic] not dependable... this problem of food security started during the liberation struggle, when so many people lost most of their livestock.

The District Administrator also cemented that:

The potential to do better is there especially in areas of livestock because history tells us that the district used to be a livestock hub... but over a long period of time now the situation has been that food availability remain[s] critical to locals here, more specifically since independence. The people here lost their cattle during the armed struggle and have failed to recover since then.

This situation indicates that solutions to food insecurity in Matabeleland South Province have been long overdue. It has taken too many years for responsible authorities to come up with sound and sustainable strategies for food security in Matabeleland South Province.

Availability of food in Mangwe District poses a serious challenge to the local community. The situation in Mangwe district is however better as compared to that of Beitbridge. As the situation or trend in Matopo District, the people in Mangwe district have some food in their granaries in the first few months after harvesting. According to the AGRITEX Officer:

After harvesting in a better season, the people will be having a few bags of grain to take them through three or so months of the year... after that, they will have to look for other alternatives to save food on their tables.

The food security situation in Mangwe is better than Beitbridge because in Mangwe there is Ingwizi small-scale irrigation scheme where Trek petroleum partnered with the Agricultural Rural Development Authority (ARDA) and the irrigation is regarded as one of the major partnerships which is fruitful in the Southern part of Zimbabwe.

Another local subsistent farmer also said:

It is a sad situation my child, having to wake up for the greater part of the year not knowing how you are going to fend for yourself and family. Food is so difficult to come by here. We survive on one indecent meal for the greater part of the year.

Thus, the general trend of food availability in Mangwe District is a few months of availability at household level through own farming activities, followed by unavailability once the small harvest is exhausted.

Accessibility of food in Mangwe District is not constant due to heavy reliance on donor agencies for food. Donor aid is never able to reach out to all the people in need in the district. According to the Care International worker:

We assist in any way possible but our hands are tied and our feeding bowl is so small that we cannot be able to feed everyone...we rank our target groups according to their level of vulnerability.

Given that Mangwe District is a drought prone area, it therefore follows that the generality of the people in the district are left with nothing to feed on during critical food shortage times. Only a few lucky individuals are able to access food through donors but generally almost all the people will be in need of food assistance.

As is the situation in Beitbridge, where certain individuals access food in Musina, South Africa, people in Mangwe District also access food through Botswana, where food stocks can also be relatively low in price as compared to local prices. People can illegally cross the border into Botswana to purchase food and other requirements. According to one local councillor:

Prices in Botswana are lower than here... you can sell one cow to go and buy food in Botswana when the situation comes to worse... our local dealers here take advantage and charge exorbitant prices.

Further, another local woman resident said:

Given the means Botswana has all our food requirements, but for some of us we cannot even afford a 1 kilometre journey from our homesteads what more to Botswana. We have no travelling documents and any source of income; neither do we have any assets to convert to money to buy our households food requirements.

Given such a scenario, it becomes apparent that people in Mangwe district can utilize other channels to access food but it remains and there is concurrence that some of these channels can be hectic and not friendly to the rest of the residents in the districts. Travelling across borders needs travelling documents and money and this makes accessing food through these channels a preserve of the rich members of the community.

4.2.4 INSIZA DISTRICT

The trend of food security situation in Insiza district is characterised by lack of enough food for the people, just like the other districts discussed above. The people in Insiza indicated that they do struggle a lot to feed their families due to a number of challenges. The Agricultural Extension Officer for the district said:

We are in a position of lack of food during the greater part of the course of the year because our soils cannot grow crops anymore...in the early years of independence, we used to have almost enough food from our own fields but it has changed.

Thus, like all other districts, Insiza is also in dire need of a robust food security model inspired by the ZimASSET, which can help to ease the problem of food insecurity in the area.

Availability of food in Insiza district is highly unreliable at household level. The general trend is that their granaries will be empty for the greater part of the year. The poor soils and inadequate rainfall makes it difficult to make food available at household level. According to the Village Head:

Lack of inputs and good soils is one of the obstacles to making food available at household and community level... some can have a few wheel barrows of grain as their total harvest in a season.

One local councillor retorted during focus group discussions:

It is prone to waste of time trying to do farming around here over the years. Even if you sweat blood the yield will still be small like anyone else. You will never have enough food for your family.

Thus, food availability is a challenge in Insiza just like other districts as is evidenced by the above responses hence the need for the development of a sustainable food security model able to cushion people from starvation.

Accessibility and utilization of food in Insiza District is also low. Just like what has been pointed out in other districts above, in a better season people access food from their fields during the first few months after harvesting, but accessibility dwindles thereafter because they will not be having much food to carter for the whole year. Sometime people can be having a bit of cereal-based foods but with no vegetable and protein based foods. The other alternative to access food in Insiza District is through donor agencies who cheap in with food handouts. As was pointed out by one Village Head:

Donors are our saviours... we can get maize, flour, wheat, beans and cooking oil from these donors like World Vision, Christian Care... they always come to our rescue

Another local resident indicating and concurring that there are food distributions by donors, but disputing the fact that all people get the food aid said:

... as for me I have never accessed food through these donors... my name is always skipped in those registers. I do not know how they choose people because I feel like I am being side lined.

This means that the level of food accessibility is low or small in Insiza district. While there are efforts by donors to feed the people in need, the food is not enough, hence the general discontentment in terms of selection criteria for food beneficiaries This calls for development

agencies and the local community to design and implement food security strategies and model which can save the people from the menacing and devastating effects of food insecurity.

4.3 EFFECTS OF FOOD INSECURITY ON HOUSEHOLDS IN MATABELELAND SOUTH

The effects of food insecurity in Matabeleland South have had more rippling and devastating effects on the most vulnerable members of the community, mainly the elderly and children.

According to a care worker:

I as the Community Care Worker in Mangwe ward 5, I feel sorry for the households that have elderly people. These households have children also who are very young and not able to work for themselves. So they cannot go to the fields and food insecurity has nested in such households. So I can say food insecurity prevails in ward 5 and I propose that, these vulnerable groups are helped by the Presidential input scheme.

Thus, food security models for them to be more sustainable need to consider the severity of the food insecurity impact on different groups of people within a community and how this can be addressed according to specific needs of each group.

4.3.1 LOSS OF LIVES

The situation in Beitbridge has been so dire that even human lives have been lost due to malnutrition related ailments at some instances. Families go for days without food, as they have virtually nothing in their granaries. The situation of total lack of food and people dying is highlighted by one resident of Beitbridge:

...in our granaries there is nothing to depend on... people can actually be found dead in their homesteads. This has happened in some instances. People die after consuming poisonous wild roots due to lack of food in households.

A village health worker in Insiza concurred that that lives are lost due to lack of food when she said:

Children are the most victims of lack of food. Those under five years develop malnutrition related diseases like kwashiorkor and some mortality has been recorded in some instances, and this is so sad.

Judging from the above responses and comments from the study population, it becomes critical to have a food security model to ease the situation of food insecurity in Beitbridge, and this will promote the aspirations of the ZimASSET under the food and nutrition cluster.

Not only human lives are lost due to food insecurity. The people in Matabeleland South have constantly lost their livestock due to lack of enough pastures. This situation worsens the food security issue on human beings as livestock like cattle provide both foods like milk and meat as well as draught power. One of the local farmers in Beitbridge said:

During dry spells, all the land is dust and with no sign of vegetation... our cattle die from lack of food and this make us poorer... we end up with virtually nothing to fall back on.

According to the veterinary officer:

When it comes to worse, a household can lose an average of four to five cattle in a bad season, and this affects the food security situation of a household because it's common sense that cattle can be converted to money for other food requirements.

Thus, the food security issue is not only a human life threatening issue but also a livestock life threatening issue as livestock is also affected, thereby worsening the food security situation in Matabeleland South Province. It is only through development of a sustainable food security model, as is done in the following chapter of this research document, that the situation has greater chances of being corrected and improved.

4.3.2 MALNUTRITION

Cases of malnutrition are common on families with zero copying strategies in times of severe food shortages. Children and the elderly people are the most affected by malnutrition.

According to the Provincial Education Officer:

Some children drop from school, which are a long distance from their homesteads because they would have been weakened by malnutrition... whenever there is shortage of food, you find out that school attendance drastically drops to very low levels in our community... children cannot afford to walk long distances to school on empty stomachs.

The same sentiments were echoed by one local resident in Insiza District, who said:

Sometimes we let our children stay at home, especially those in primary school because they may fall and die in the bushes cause of this scourge of hunger... the distances are too long for these little ones. They are too weak. I think its kwashiorkor affecting them.

A nurse from a local clinic in Mangwe indicated that despite some efforts on feeding schemes by some NGOs and the Social Welfare Department, malnutrition was raking havoc:

Feeding schemes have been run for children in severe situations to avert the problem of malnutrition, culminating into killer diseases for children especially those in primary school level and those in ECD less than 5 years. The truth is, we still experience the same problems as evidenced by records at clinics. Malnutrition is a reality in our children.

Judging from the above expressions this means that food insecurity is a serious challenge in the community, which has multiplier effects that include affecting children's right to health and education. Unless corrective measures are taken, food security and other facets of human development will continue to lag behind.

4.3.3 ILLICIT BEHAVIOUR AND IMMORALITY

For child headed households, the lack of food has prompted them to engage in illicit behaviours. As they try to fend for their young siblings and themselves, children are exposed to abuse and diseases perpetrated by older men. One concerned resident in Beitbridge reported,

I feel sorry for these young girls who head families... the situation become[s] unbearable such that they fall into the trap of prostitution for very small amounts of money. We have Beitbridge boarder post, where some of these girls fall prey to truck drivers plying international routes.

Another respondent from Mangwe echoed similar concerns when she said,

Go to Plumtree boarder post and look at the age group of our sons and daughters loitering there, with nothing to eat here they just go there for anything, they abuse drugs, they are involved in prostitution and they only come back here when they fall ill of AIDS.

Thus, the young generation has no option whenever they are faced with severe food shortages but to engage in prostitution and other risk behaviors in order to eke out a living. Thus, the food insecurity situation is pushing the young girls into more risky behaviors, which end in unwanted pregnancies and diseases like HIV/AIDS.

4.3.4 DESTRUCTION OF THE SOCIAL FABRIC

Family disintegration is also noticed in the community when young boys and men are migrating or skipping boarders running away from hunger. According to one headman in Mangwe District:

These young men often skip into neighbouring Botswana, where they are exploited and tortured because they have no proper travelling documents... some of them end up in jails in those countries because they begin to engage in criminal activities.

We can see that the problem of food insecurity in Matabeleland South is so critical that it leads to disintegration of families, due to improper and unwell planned migration without necessary and relevant documents. This is more prevalent amongst the younger generation.

Marriages are destroyed in most parts of Matabeleland South due to food insecurity. Most husbands, mainly young men have to move away from their families in search of greener pastures. The husbands stay away for very long time and on return they normally bring diseases to their spouses. According to one of the respondents in Matopo District:

They disappear for a long time and they come back ill with HIV/AIDS... there is usually violence, which usually erupts due to suspected infidelity on the part of the wives... sometimes it ends up in brutal killings.

Similar views were also portrayed in Beitbridge District when the Christian Care worker said:

Because of this hunger scourge, disease has also set in especially among young female-headed households and the youths. New infections of STIs and HIV/AIDS have been on the rise in this District as these youthful age groups try to make ends meet.

Thus, food insecurity is a serious threat to family set up as it stirs problems and behaviors that destroy families through migration. The expressions above posit a situation going out of control if the problem of food insecurity is not addressed in the province.

4.4 GENDER DIMENSIONS ON FOOD (IN) SECURITY IN MATABELELAND SOUTH

The situation of food insecurity is hard pressing for women in Matabeleland South Province who find it even more difficult to access food as compared to their male counterparts. As was reported in Beitbridge, women are not able to compete with men for menial jobs, which can help them access little food. One woman resident in Beitbridge noted:

It is very difficult for me I don't want to lie. I am a woman and my husband passed away in 2000, I have three children going to school and they also need food... as a woman, I find it difficult because I cannot compete with men on menial jobs, this gives me a lower position in getting peace jobs.

Thus it can be observed female-headed households are more prone and vulnerable to food insecurity, a situation that places them at more risk. Therefore, a gendered approach is necessary in the development and initiation of a sustainable food security model.

While it was noted that both men and women work in the fields to fend for the families, it was evident that women and children provide the bulk of the labour in the farming activities in Matabeleland South. One of the female respondents in Insiza said:

With our spouses, we work together even when it comes to both cattle and poultry rearing, but I don't want to lie, the truth is, since I was married I was using my hands to fend for the family. I never relied on my husband.

Thus the women continue to play a pivotal role in farming activities, and as such, any food security Implementation Model should have a gendered approach in its design and implementation stages. More often than not, women are not recognized in decision making for developmental strategies, which greatly impact their daily lives.

Although women provide the bulk of the labour in farming activities, it is the men who decide distribution and allocation of produce upon harvest. Traditionally and culturally, the husbands assume the role of the head of the homestead and as such have control over both assets and food reserves. According to the Community Development Officer for Insiza District:

This traditional man's role, which places a woman at a marginalized or subordinate position, leaves her more vulnerable and with less access to means of production, although she provides manual labour on the means of production.

The same sentiments were echoed by a woman farmer in Mangwe:

As for me, farming has been and is still the back born of my family, I grow vegetables, sweet potatoes and potatoes so that I earn a living, but the problem is my husband assumes control once the harvest is ready to be disbursed.

Thus, it was noted that the exploitative nature of men is still rampant amongst the rural folk. The situation becomes more disturbing in this province where food is naturally scarce and characterised by such social imbalances. Any developmental model needs to account for the issue of empowerment of the female folk to ensure food security across all corners and members of the community.

4.5 CHALLENGES TO FOOD SECURITY IN MATABELELAND SOUTH

The food security situation in Matabeleland South is affected by a complex of challenges ranging from man-made to natural factors. Maladministration and neglect of programs on food security has greatly affected food availability and access; as there is no meaningful production in the area. For example, respondents noted that the irrigation schemes in the

Matabeleland South have been existent but are not operational as there is no servicing of equipment and supply of raw materials like fertilizers and seed. In the face of these challenges, a multi-sectoral approach is needed in the province to design and implement a sustainable food security model taking cognisance of the available resources in the province, both human and non-human. Community participation will be vital in undertaking such developments, without it there will not be any progress and food stability to talk about.

4.5.1 UNAVAILABILITY OF CATTLE OR DRAUGHT POWER

In Mangwe, Ingwizi, the loss of cattle was sighted as a major obstacle to farming activities in the area. The people lost most of their cattle during the liberation struggle and they have not recovered from the loss since then. One of the local farmers in Mangwe said:

To tell you the truth my son, the death of our cattle had a negative bearing on our agricultural activities in this community since we were using cattle as draught power.

Thus, in Ingwizi it is not just predominantly the water problem affecting food security, but lack of draught power is also a serious problem. The people have no means to till the land since they have no cattle.

In Beitbridge, another of the respondents said:

... we used to use cattle as draught power so that we speed up our communal agriculture... for agriculture to improve there is need for restocking in terms of draught power.

The people in Matopo district, specifically those at Matopo irrigation scheme, indicated that before the death of their cattle, food production was good in the area as long as they received enough rainfall. One local farmer said:

The harvest was good provided that season we received enough rainfall. Now it is difficult to produce on our farms with no cattle to do the ploughing. Using hoes is not feasible as you can imagine the hard labour associated.

The issue of cattle as integral in agricultural production continued to be emphasized throughout the interviews, indicating that for all the communities, draught power unavailability has been a major setback to their food production activities.

4.5.2 LACK OF ADEQUATE RAINFALL

Natural factors heavily impact on food production, especially in Beitbridge. The area receives very minimal or little rainfall, yet the farmers are depending on rain fed agriculture. The District Extension Officer said:

The problem that we have with our farmers is that, they only want to depend on rain fed agriculture of which in this region it is a non-event. There is need to supplement the rains with irrigation facilities if at all hunger is to be decisively dealt with.

However it was also noted that although the area is a low rainfall area, the zone is also affected by periodic flooding which submerges their crops, hence producing no yield. The Chief Executive Officer said:

We have had to contend with periodic flush floods in this province affecting peoples' livelihoods in terms of their livestock and crops. We have a disaster management committee in place, but with very limited resources to deal with the problem.

Thus, any food security model for Matabeleland South Province needs to take cognizance of both natural factors like flood disasters and man-made factors which cause food security in the area.

Erratic rainfall patterns were also cited as a serious threat in Mangwe district as was reported in Beitbridge and Matopo districts. One local farmer in Mangwe noted, "The major problem was that of erratic rains" and another went on, "I agree that, poor rains are a major contributory factor". The sentiments on poor rainfalls were also echoed by the agricultural extension worker who emphasized that the region is naturally a low rainfall area where cropping can be so difficult without other dependable sources of water.

4.5.3 FLOODING

Flooding is also an obstacle to crop production in districts such as Mangwe. The people's efforts in agriculture have also been wasted by the floods, which affect both livestock and crops. The headman said:

...in this ward, we have the problem of water logging. If the rains become much, the crops are submerged in water. The cattle as well die as they are trapped in excess water.

Thus flooding is becoming a common problem in Matabeleland South Province. This calls for a food security model that must have disaster management components to mitigate the effects or impact of flooding on food security programmes.

However, for some residents flooding is not totally a disadvantage. There were some residents in Beitbridge who agreed that sometimes flooding provide relief in any area which does not receive normal rainfall. As reported by one resident:

At times, our water sources are filled through flooding... pastures for our livestock begin to blossom soon after the onset of floods and this saves us a lot in feeding the cattle.

This means that there is no general view of floods as a total disaster, but there are also little benefits. What is needed is a well-articulated flood management strategy which can include for example, water-harvesting technologies or techniques that avoid all the flood waters going to waste.

4.5.4 INFERTILE SOILS/ LACK OF PRIME LAND

The soils in some parts of Beitbridge are naturally bad and cannot produce meaningfully in terms of harvest or yield, even in the presence of enough rains. One respondent who is a resettled resident complained:

They should take us back to the reserves where soils were better than here. The soils are barren. Human life and animal life cannot be properly sustained here under these circumstances.

Thus, the natural terrain and soil type pose as a serious food security threat to food security activities in areas like Beitbridge. The land is largely not suitable for crop farming and in this regard, other crop farming solutions for food security must be called for.

Complaints about poor soils were also voiced in Insiza district by the local farmers who indicated that some of their fields were predominantly sandy and not so suitable for crop farming activities. One of the farmers voiced:

What do you expect to get in a field with this type of soil? ... if you have no fertilizers you will not get even a single maize cob. We always try but you can see for yourself these sandy soils we have around here.

This means that across districts, the issue of bad soils is a major challenge, which needs to be considered when coming up with sustainable food security models in Matabeleland South Province. What can be done, given the type of soil available, need to be given a serious thought in coming up with food security solutions in the province.

4.5.5 WILD ANIMALS AND BIRDS DESTRUCTION

Wild animals are also a menace to agricultural activities in Beitbridge. The animals, which are not well managed by the parks department, constantly break away from the parameter fence and destroy crops. One respondent commented:

...Also there was a problem of elephants that were eating our crops, this has reduced our crop yield drastically. Baboons are also everywhere and a menace here.

In Matopo District, the same concerns of wildlife posing serious threats to food security in the province were voiced by one village head:

We are surrounded by the Matopo game park, which is a home to many crop eating wildlife like elephants and buffalos. Lions and hyenas and cheetahs also feed on our livestock given a chance.

This means that for any sustainable food security model in any area prone to wild life activity, human activity in terms of their productive works versus animal activity in terms of their movement should always be considered. Farmers are heavily affected by wild life, as their crops are destroyed year in year out by wild life in areas near game reserves. This poses a serious threat to food production culminating into food insecurity.

Qualia birds have also affected hopes for food security in Ingwizi and Insiza area. These birds are difficult to contain and they have the potential to wipe almost the whole field or yield if there are no control measures instituted. One farmer in Insiza reporting on the severity of damage by the birds said:

Also we have the problem of qualia birds that ravage in the fields of small grains. We have no means in place to control the birds and they can finish up your entire crop if you are not careful.

Another farmer emphasized the problem of qualia birds saying:

The problem, which causes people not to harvest much, is that of qualia birds, these birds are too many that one person cannot contain them. If you want to concentrate on one part of the field you will see them on the other part. For example, I have four hectares of pearl millet and I am the only person at home.

Thus, the prospects of food security are also dampened by birds, and this calls for measures to contain or deal with the situation. It is believed that small grains can be one of the answers to the problem of food insecurity in Matabeleland South if mechanisms are designed to prevent crop loss and through maximization of hectares under small grains.

4.5.6 UNDER RESOURCING AND LACK OF POLITICAL WILL

Under resourcing and lack of political will is a major obstacle in Ingwizi just like as it is in Beitbridge. Irrigation development suffers from lack of funding for both expansion and to keep it afloat. This situation dampens the prospects for food security in the area. One of the Ingwizi irrigation scheme committee members pointed:

We have a serious challenge here. The government has invested less in irrigation development, and there is poor coordination of policies and programmes. It is all disorder thus why you see us starving sitting on this huge potential for irrigation.

An Irrigation Officer in Beitbridge supported this view when he said:

Yes, I agree that the government has been struggling to develop and maintain existing infrastructure. The exercise needs a huge budget and this has been our hindrance to rolling out the irrigation programs.

Thus, there is general consensus that food security interventions need full commitment and adequate funding for them to be sustainable. This has been found devoid in government interventions as they lack full commitment to ending hunger in the province.

However, there were some sections of the community who dismissed lack of political will and under resourcing as a serious threat. Instead, they blamed the local community as negligent uncooperative, hence the failure of irrigation projects. One Village Head said:

When the government commissions a project to operate for your own benefit, why do you expect the same government to come back and do all sorts of work for you like repairing broken pipes and pumps? Surprising people around here always looks up to the government to do that for them.

In Mangwe, one irrigation farmer reported:

Once surrendered to you (irrigation scheme) it is now your own baby to carry and you should be ready to take care of it, all its needs...the situation is different here...we have some people even stealing and vandalising the irrigation equipment.

Thus, while under funding is a concern, the local people should also guard against vandalism as the government cannot keep replacing broken down, vandalized and stolen equipment. Residents need to grow and become full time owners and custodians of their projects.

It was noted in Insiza District that there are some water projects that were mooted in the early years of independence, but these have not come to fruition. This situation has increasingly done more harm than good to the food security situation in Matabeleland South Province. One of the respondents said:

We hear of reports that on this particular land there were supposed to be a dam, here were supposed to be an irrigation scheme but we have not seen such projects taking shape over a long period of time.

This point to a situation where plans have never been converted into something practical in as far as food security interventions or projects are concerned. Thus, indicating consensus that lack of political will that culminates into lack of funding has been a challenge to improving food security across districts in the province.

4.5.7 DEPENDENCY SYNDROME

Dependency on food handouts from government departments like social welfare was picked as creating a syndrome on the part of the community to lie idle and unproductive. One respondent in Beitbridge said:

As farmers, we thought you would bring us food and seed...our food reserves have since dried up and the farming season will be coming soon and we have no money to buy farming requirements.

The over dependence on donor aid was also concretised by the World Vision Worker in Insiza District:

In the event that there are no handouts, the community is hard hit by starvation cause there will be literally nothing having put under the soil. The people around here have a tendency to sit back and relax in the farming season knowing that some form of benevolence will come their way.

Thus, the old adage that a man should not be given fish but a fishing rod should be embraced when addressing critical food shortages in the community. People tend to become reluctant or go into the fields when they know that a certain organization like NGOs or a Government department will always come to their rescue to parcel out food handouts thereby cushioning them from hunger strife.

Just like in Beitbridge, this same donor syndrome is also one factor pointed out in Mangwe District as retarding and affecting food security measures in the area. The people are also much obsessed with donor syndrome and dependency such that they shun working in their fields basing on the common fact that donors or development agencies will always come with food handouts to feed them. According to the Extension worker:

Most households in this ward are not keen to go and farm in their fields, as they know that donors and the department of social welfare will give them something to eat.

In cementing that same notion the Community Development Officer for Matopo District said:

The people have practically abandoned their fields and other forms of livelihood since the influx of these non-governmental organizations like Christian Care, World Vision and IOM. Sometimes we feel that food aid is oversubscribed here at the expense of sustainable ways of coping with hunger.

In this regard, it is then critical to have or develop a model which deals with cross cutting issues that dampen hopes for food security in the affected areas. Relying on food aid will leave the people redundant in as far as their own production is concerned.

4.5.8 IGNORANCE

Ignorance by farmers on the new farming methods and practices greatly retards food security in the Mangwe area. Farmers due to lack of proper orientation and being offered seed for free tend to lack seriousness as they have nothing to lose. Even when information is availed to them some farmers choose to ignore the call to try new measures to promote food security. One of the respondents in the Mangwe District pointed:

...farmers sometimes won't be able to practice what they have been told and this might result in others selling the seed, others keeping the seed. Of which, this will not at any point contribute towards alleviating food insecurity.

Concerns over ignorance on the part of subsistent farmers were also echoed by the livestock Officer in Insiza District:

Most communal farmers do not recognise the importance of taking precaution measures against diseases on their livestock. They wait for the animals to get affected first and they start visiting the vet department. By then the diseases will be difficult to contain.

In Beitbridge the ICRISAT research officer said:

The local farmers do not realise the importance of small grains as a hunger cushioning measure. There is need to really make people aware of the overwhelming benefits which can be brought by adopting small grains variety.

Thus ignorance on the part of the farmers is also a factor in explaining the problem of food insecurity in Matabeleland South. However this ignorance can also be explained by paying detail to how programmes are introduced to local people as the implementers normally use the top down approach.

4.5.9 LACK OF PROPER MONITORING AND EVALUATION

Lack of monitoring and evaluation of food security intervention is a serious challenge to solving the food security problem in Matabeleland. There is no follow up to programmes to

ensure continuity of the programmes. Some interventions are abandoned due to lack of strict and systematic follow up. One local farmer in Matopo District said:

As I speak, farmers have gone back to their usual varieties such as SV4. The major problem was that, when the Shiri Kure variety was harvested, they never got back to farmers to do the evaluation. However, in my own opinion the variety was not welcomed by people.

The headman in Mangwe District echoed:

I understand the government, particularly the crop and livestock departments are strained in conducting monitoring exercises, transport for officers is a challenge and as such farmers do not get the advice and feedback they need from them.

The concern over lack of monitoring and evaluation was also noticed and evident in the words of the Ward Development Officer for Beitbridge District, who expressed:

When you bear a child you keep checking on it to ensure its growth. This tendency to initiate projects and disappear from the scene should be dealt with if the problems affecting this community are to be dealt with in an efficient way.

Thus for any food security intervention to be successful and to yield better results, there is need to institute proper monitoring and evaluation measures to identify operational problems, which will need to be rectified along the way or during the course of programme implementation.

4.5.10 TOP DOWN APPROACHES TO COMMUNITY DEVELOPMENT

In Beitbridge, community participation is lagging behind in promoting programmes for community development. The respondents indicated that programmes trickle from top to bottom hence there is usually lack of understanding and considerable buy in by the locals. As indicated by one Ward Committee Development member in Beitbridge:

...we need to be consulted even from the planning stage so that they will hear our concerns. We do not wish to have a situation whereby you bring us a baby to nurse and nurture when we do not know how the baby was born.

Thus, food security programmes are failing to yield remarkable results because design and implementation of those programmes is decided at the top without involvement of the people in the community, who are supposed to benefit and become custodians of such programmes. As such, food insecurity continues to hound the communities on a greater magnitude.

The top-down approach to food security interventions was also noticed and is also rife in Mangwe District. People voiced the lack of consultation of the local people in the

implementation or initiation of programmes and this has witnessed failure in most of such programmes or interventions. One local farmer retorted:

Not at all, the government just uses knowledge from the Ministry of Agriculture on best crops that are grown for this particular area especially wards five... they just bring their own crop varieties and other associated programs and we are gathered maybe under a tree to receive.

Another of the respondents further said:

It is indeed wise to consult first because last time we made a loss when the fertiliser was applied and it burnt the maize crop because there was no[t] enough rains... I am very sad because we were not consulted when the Shiri Kure variety was introduced. It took too much time to be harvested and this increased the waiting period before people could harvest and also it is not suitable here where there is very erratic rainfall.

The claims that people are never consulted in program design were however refuted by the District Administrator for Insiza, who said:

It is a norm that before any developmental program is implemented we go to the people first to find out on their take and contribution... the problem comes when some people take our calls to attend consultative meetings for granted only to complain in times like this.

While there may be a grain of truth in the sentiments of the Insiza District Administrator, there was general consensus that people should always be consulted whenever interventions are brought, especially for the first time to their communities. People need to be aware of the objectives, methods of implementation and the expected impact of programs paying attention to waiting period of such impacts.

4.5.11 ABSENCE OF DIVERSIFICATION

Lack of diversification strategies has brought more harm than good in Beitbridge, in terms of promoting food security. People are usually planting maize and this crop does not do well without enough water or rainfall. The people are neglecting diversifying into small grains, which scientific studies have over the years proven they can yield better to avert the problem of food insecurity in the area. One local farmer in Insiza District noted:

But our problem is to grow one type of crop every year and it is not the best crop for our area, maize does not do well here and we know that historically our forefather used to plant millet and sorghum.

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), research Officer expressed the issue of lack of diversity in the province by saying:

People in this semi-arid region need to look beyond growing of maize as a sole staple and adopt other crop varieties especially small grains. The people here are not growing on a full scale the crops, which can do well in the dry regions hence the reason they experience severe staple food shortages.

In Matopo District, one local resident had this to say:

We are aware that sorghum and millet can do far better here my son, but to tell the truth, maize is much easy to farm. Those small crops require intensive labour thus why we prefer maize instead.

Thus, failure to diversify even into animal husbandry, also poses a serious threat to food security in the Beitbridge area. Indications from peoples responses point out that while some sections of the communities are growing small grains varieties, this is not on a large scale hence the province continue to suffer from lack of adequate food.

4.5.12 CORRUPTION

Corruption largely by politicians is a cancer that has affected food security programmes or interventions. It was noted during the research that politicians hijack and divert resources meant for community development for their own personal use or personal aggrandisement. One of the respondents in Mangwe claimed:

Yes, it was hijacked. Politicians were taking irrigation pipes for personal use at their own farms or sometimes selling them somewhere and this incapacitated the irrigation scheme.

One farmer in Matopo District cemented the issue of prevalence of corrupt activities as one factor derailing food security interventions saying:

There are times when we have presidential inputs in the form of fertilizers, ploughs scotch carts, and harrows, etc., but those people with connections only get them. We hear and see that so and so is selling those items and equipment in his own shop.

In Insiza District sentiments on the issue of corruption were also evident in peoples' responses as one local resident expressed:

These things do not get to us... they take them to their own farms (tractors and farming implements). Even when we report, no one gets arrested, they are above the law.

Given such a scenario where people in high offices abuse power to gain what is due to save the poor members of the community, it becomes clear that cross cutting issues are supposed to be addressed to come up with more sustainable ways of curbing food insecurity in the province.

4.5.13 LACK OF PROPER MARKETING STRUCTURES OR PLATFORMS

Exploitative marketing systems are rampant in the farming areas of Matabeleland. Farmers are not able to negotiate better prices for their farm produce as the buyers take advantage of them. One of the irrigation farmers at Ingwizi said:

The issue of where to market our farm produce becomes a challenge. If we get it, it means the prices will be very low and this has a negative bearing on our part in as far as continuing with production is concerned.

The extension worker further said:

As you can see that these farmers deal with perishables, most of the perishable goods quickly decay and this will be a loss to the farmers. They end up selling just to push the produce out of their hands.

The farmers are exploited because they are far from the markets that are lucrative. One of the farmers in Mangwe District said:

The buyers are cruel, they buy with a very low price knowing that you won't even make it as a farmer to go and sell in Plumtree town. The only place where we can sell our farm produce is the mining area and they do not buy every day.

Thus there is consensus among respondents that the marketing structure for produce in other areas is not lucrative for farmers, and as such they get low returns to cater for their other food requirements and necessities as they are exploited by buyers or agricultural produce dealers.

4.5.14 TRANSPORT AND COMMUNICATION CHALLENGE

There is poor road and communication network in Matabeleland South. The area is highly inaccessible. This challenge has greatly affected the food security situation in the area. According to one farmer in Mangwe:

Our roads are so poor for us to access lucrative markets out there... even agricultural dealers shun our area because they cannot easily penetrate. No one would want to damage his lorry ferrying these farmers or their produce to the market.

The District Administrator for Beitbridge concurred with this challenge of market by saying:

[The] District Development Fund is incapacitated to service our roads, the terrain is so bad. The farmers remain stuck with their produce in the communal areas due to lack of transport to the market. It is an area we need to look into as a district.

This scenario affects the smooth flow of goods and services meant to benefit food security interventions processes in Matabeleland South Province. The people need to be well connected in terms of road networks and communication to do business with the outside world.

4.5.15 CHALLENGE OF THE CASH ECONOMY

The highly dollarized or cash economy is also a challenge to food security in a community with little access to cash. There are times when food can be available in shops, but lack of cash limits peoples access to food. At the same, time retailers take advantage of the poor rains hence unavailability of food at household level to hike prices making it even more difficult for the villagers to have anything to feed on. As noted by one respondent in Beitbridge commenting on food availability in local shops:

Yes, it is possible but the problem is: you do not have hard cash, [and] the retailers increase the price of basic commodities. This actually arrests our ability to buy food for our families.

The cash crisis challenge was also prevalent in responses from Matopo District. One of the respondents said:

Cash is a serious and common problem. Imagine a grown up family man like me can spend up more than a months without even a dollar in my pocket. How then will I feed my wife and children in this dry area?

The Social Welfare Officer in Insiza commented on the cash crisis as a food security hindrance saying:

The issue of availability of cash is a national problem trickling down to provinces, to districts and into wards. We have the social cash transfers but the figure is very small and not for all. People here have no incomes but they still need food and other basic necessities like education and clothes.

The voices above agree that money is a real challenge to the residents in Matabeleland South as it is at national level. Thus, it is evident that the cash economy also limits people's access to food as rural dwellers with no source of income can never afford exorbitant food prices in local shops.

4.5.16 UNAVAILABILITY OF FOOD RESERVES IN THE LOCAL COMMUNITY OR VICINITY

Besides the issue of cash unavailability as a hindrance to food access, there are times when the situation becomes critical and food becomes unavailable even in local shops regardless of people having the money. One of the respondents in Beitbridge noted:

... sometimes if I get money I find no food in the shops. This gives me torrid times as to where to get the food for the children. Having to travel in search of food for someone old like me you can imagine the hassle.

Another in Insiza cemented the same predicament saying:

I can go for gold panning and get a few grams which I can easily sale to some gold dealers who always come around here...The problem comes when there is no single shop selling the food provisions we require.

In Mangwe, the District Administrator said:

Inaccessibility of some of the areas due to poor road networks makes the food distribution channel highly unreliable and inconvenient. This is usually experienced during the rainy season and transport cannot move easily.

The concurrence of the voices of the respondents above speaks volumes of the complexity of the food insecurity challenges in Matabeleland South Province. Thus, while the cash economy is a serious problem on its own, it should be noted that constant supply of food to local shops greatly affects people access to food, even in situations when they get the cash. In situations where production of food on local or homesteads farmlands is minimal, food security models should consider availability and access through other channels.

4.5.17 PERSONAL AMBITIONS VERSUS PUBLIC INTERESTS

Local leadership like councilors in Matabeleland South Province have not been able to drive food security programmes to desired levels due to personal ambitions. In Mangwe, the respondents pointed out that there is politics of favouritism by local leadership who want to seek favours to retain office positions. One local resident said:

Politics is rife in food programmes here by the councilors. This leads to improper handling of programmes and side-lining of other members of the community, hence suffering the scourge of starvation.

Another local resident in Mangwe suggested:

The Chiefs can also represent their people and we know that everyone is represented other than councilors who only represent those who voted them, what about those who voted against them. Most of the times these people who vote against them are side lined in food security interventions.

The same issues of politicization of food programmes were echoed in Beitbridge District when one youth representative said:

If your political affiliation is known to be opposing that of the local leadership then you risk not benefitting when any provisions are brought to save people from starvation. Known supporters always get food handouts at the expense of non-supporters.

However, one local councillor in Mangwe denied that they politicise programmes by saying:

We select beneficiaries according to the level of need. The food is always not enough to distribute to all the people and people will not take that lightly. Complains will be awash that so and so has allocated to his or her supporters to seek further votes.

While the councilors made an effort to defend themselves, the responses above point to the discontentment expressed about the infiltration of politics in denying people their fundamental right to food. This means that politics and personal ambitions should be separated from developmental issues, which affect people's lives.

4.5.18 UNDER UTILIZATION OF LAND AND WATER RESOURCES

Under utilization of available resources was pointed as one of the major challenges to food security in the Matabeleland Province. There are water bodies that have been underutilised in the districts. One farmer in Mangwe District exclaimed and questioned:

Here in Mangwe there is a very big Ingwizi dam, which never went dry since 1964. Surprisingly Mangwe district is deemed food insecure. What is really the problem?

In Matopo District, the Extension Officer echoed the same issue by saying:

The land is not that bad in some parts of this district, there are better soils around which can be put to good use if water is made available. Matopo Dam is there but no water is being drawn there to serve our water woes.

Thus, the availability of under utilised resources points to a situation of an area with potential to be food secure, but lacking proper measures to implement sustainable projects to promote food security in the area.

Land under irrigation is very small in Mangwe, due to uneven and unfair distribution of land. This limits the amount of food available to the local people. Instead of allocating more land for agricultural production to the local people, land has been allocated for commercial purposes to outsiders. According to one headman in Mangwe:

The problem is that, yes the dam is there but the hectares under irrigation farming is very small as compared to the capacity of the dam. As community leaders we were supposed to sit down and identify the land suitable for irrigation. But the Ministry of Agriculture and ARDA has given vast tracks of land to ARDA and TREK to grow wheat and maize.

Commenting on wheat and maize availability despite the ARDA and TREK activities in the area, one local resident in Mangwe said:

No, there is nothing like that, the proceeds are taken to Harare to augment the national cake and leave the local people starving. It is our land but we get nothing out of their activities

Thus, the government should not prioritise commercial activities at the expense of local people's needs. Priority should be given to local peoples' food needs before commercialization of the means for food production to outsiders.

4.5.19 GOVERNMENT STRINGENT CONTROLS

The command nature of the government in agricultural activities was sighted in Matabeleland South Province as affecting food security in the area. The government mandates the farmers to distribute their crop to GMB and this leaves the local people with almost nothing for local and their own consumption. According to the Extension officer in Matopo District:

It was going to be most ideal if the government could categorise farmers into three groups, that is, large-scale farmers, medium scale and small-scale farmers. Then, the large-scale farmers will be the only ones who can be mandated to sell to Grain Marketing board, and then the remaining two can do so as they wish so that the district can have its own food reserves.

In Mangwe one local farmer said:

The prices offered by GMB are too low but we are sometimes forced only to sell to them. Besides that they do not pay farmers in time in order to prepare for the next season...

Another farmer in Insiza said:

When you are given inputs like fertilizers and seed it means you will have to sell all your produce to the Grain Marketing Board. You will be left with nothing to go back into the field because they pay less than the private grain dealers who also pay on delivery.

Judging by the voices of the respondents above across districts, it thus means that government dictates are also a hindrance to food security in Matabeleland South in terms of pricing and where to sale surplus. Some degree of free plays of market forces should be allowed to allow locals to retain their grain and sale to each other in times of need.

4.5.20 CONCEPTIONS AND UNDERSTANDING OF GOVERNMENT POLICIES

It was noted that, the generality of the respondents do not have a deep understanding of government policies. The conception in most individuals is that policies are mere politics manoeuvres that have no benefit to general public. Asked on whether the people knew what ZimASSET is, the people professed ignorance. One of the respondents in Insiza voiced:

My brother we just hear about it being mentioned at political rallies...we do not know what it is and how it will benefit us...if it is meant to promote food security here please enlighten us about it first as a starting point.

In Mangwe a local farmer referring to the ZimASSET also pointed:

Those are ZANU PF things. They want our support and they bring those things to us and nothing comes to us thereafter. What results are there to prove that it worked so far?

Another local resident in Beitbridge said:

ZimASSET belongs to the ruling party because they want to fleece people to gunner support for the next election. It does not work. We have seen such documents before saying it will bring prosperity in our livelihoods.

The voices above indicate that there is no marriage between people and government policies. The reason lies in how these policies are crafted. Thus lack of understanding of government policies and programmes are a hindrance to adoption and ownership by the local people hence a negative bearing on the food security situation of the area.

4.5.21 RELATIONS AMONGST LOCAL PEOPLE

The local people in Matabeleland South are divided on partisan basis or part lines. There is a hostile or tension between people of differing political affiliations. This situation was pointed as also affecting progress in food security interventions. People belonging to certain political parties have better access to certain goods and services especially on government initiated programmes. One local resident in Mangwe District commented:

To acquire a piece of land in the irrigation scheme depends with whom you support politically...we are enemies of our own development because we side line each other in issues of public interest and benefit.

One local resident in Matopo District lamented:

MDC supporters will make it a point that if a genuine idea to make our lives better is coming from a ZANU PF person they will not take heed and vice versa. There was a time when some poultry projects were brought and there were no takers from opposition.

Another in Insiza District on the same note disputed:

It remains a fact, no matter how they try to polish up, MDC people will not allow people of different political orientation into their programmes. At the same time ZANU PF people will not also tolerate MDC people in their programmes. They simply cannot mix for a common cause.

Thus the prevailing lack of cordial and working relationships between the local people remain a serious threat to the development of sustainable food security models and interventions in Matabeleland South province. Differences in political orientation culminate in rivalry between people in a given community and this rivalry creates uncooperative working relations between the people in Matabeleland South Province.

4.5.22 RELATIONS BETWEEN LOCAL LEADERSHIP AND GENERAL PEOPLE

There is a high level of mistrust between the local leadership and the general population. The leadership is viewed as opportunists, saboteurs and of cynical motives. The people also doubt the leadership competence, as a consequence there is a bad working relationship between the local people and their leadership. One of the respondents in Mangwe District charged:

These councilors and village heads should be removed from development committees because they do not know how to handle [the issues] and where to carry our food security concerns.

In Matopo District one local resident said:

Chiefs can be better to lead the food security development initiatives in our communities. The councilors are not the right people for the job. When they are at the helm of the programmes, they divert agricultural resources to their own use. We hardly get any feedback from some of these councilors. They attend meetings and come back to their homes and sleep on the information meant for the people.

A different view of councilors as impediments to advancement of food security interventions was noticed in Insiza District, when one local resident said:

Yes, councilors should continue leading development initiatives for food security because they know all areas [that] need attention. They should just be trained to improve on the great work they do.

One councillor in Beitbridge defended the relations and said:

We have cordial working relations with our people. Our problem is not in us and the people, but it is a problem deeply rooted in our geographical location and lack of enough resources to improve our livelihoods including agriculture.

From the above, it is apparent that there are differing views on local leadership in terms on how they handle programmes for food security. This means that there are councilors who have been corrupt in discharge of duties, while others have done their job in a transparent way hence have the support or backing of the people. Over and above, the lack of trust has been noted as one of the obstacles to food security interventions because the local leadership,

which is supposed to cascade information on intended intervention as well as coordination, is met with resistance and high level of mistrust by the local people.

4.6 COPING STRATEGIES TO ARREST FOOD INSECURITY AT HOUSEHOLD LEVEL

People in Matabeleland South have not been short of coping strategies to cushion themselves from the scourge of food insecurity. It was noted that there are skills that exist amongst the people, some of them non-agricultural, which help people to generate income to acquire food for their families. However, it should be kept in mind that the bulk of the coping strategies employed by the people in Matabeleland South Province are highly unsustainable and un-bankable as they only provide short while relief to food insecurity plague. This means that a more sustainable food security model is at stake in Matabeleland South Province to save people from starvation and other associated effects, which can be so devastating to both human and animal life.

4.6.1 REMITTANCES FROM DIASPORA

Diaspora remittances are one of the cushioning measures for the people in Matabeleland South Province. Parents with children in the neighbouring countries like South Africa and Botswana are not at the mercy of food insecurity or starvation as compared to their counterparts without children in the diaspora. The children either send money to buy food or send food itself. It was noted through the District Administrator in Beitbridge that:

Some of them have got children in South Africa and these children send remittances back home. They use these remittances to buy food. At times they send food with those cross boarder transporters.

Another local resident in Mangwe said:

Yes, I have children in Botswana and they know the situation here. They send money or groceries every month with Omalayitsha [cross boarder transporters] and this helps my family a lot.

The same sentiments were also echoed in Matopo District by one farmer:

We do our farming yes, but as you know our farm provisions are never enough for the whole year, thanks God we have children [in] Egoli (South Africa) who always complement in times of need.

Thus, the proximity of the province to South Africa provides local residences with a life line as their able bodied children and other relatives skip boarders to find work, hence being able to send money back to cushion their parents and relatives from starvation or food insecurity.

However, it should be noted that it does not always follow that parents with children in the diaspora are always better off in terms of food security as compared to those parents without children in the diaspora. There was evidence during interviews that parents still suffer the scourge of food insecurity even when they have diaspora children. One respondent in Beitbridge said:

... as for me, I do not even remember the last time my child send me a single cent from South Africa. They keep on saying times are hard; they have no work down South.

Another respondent in Insiza said:

It is no longer the same as it used to be. Some time ago our children were sending us groceries like rice, cooking oil, mealie meal and soap. Things have changed now, they no longer afford to do so, and they say the economy has changed.

The District Administrator in Mangwe District supported the dwindling diaspora remittance base issue saying:

Before the dollarization of the economy, parents with children in the diaspora enjoyed from the prevailing situation. A few South African Rand or Botswana Pula could be converted against the Zim Dollar to buy a lot of groceries here. Things have changed with the adoption of the US Dollar. The children can no longer afford to support their parents as they did before.

From the above responses, while it is agreeable that diaspora remittances play a crucial role in cushioning people from starvation, the practice is highly unsustainable due to ever changing economic environments. To base food procurement on diaspora remittances is not sustainable, hence the need for more robust models to address food insecurity across districts in Matabeleland South Province.

4.6.2 COMMUNAL ASSISTANCE

Communalism and socialism traits are evident in Matabeleland South Province as people share what they have in times of need. Neighbours with food can help those without, suggesting that there are times when neighbors receive a helping hand from fellow neighbors with plenty. One of the respondents in Beitbridge District said:

I am just seated [sitting] and looking forward to get help from my neighbors, if they do not have I move to other villages to look for food. I am sure I will get something to make me survive.

And another elderly person in Matopo District said:

There are some generous neighbors around here who can assist with food items, those in critical situations like the elderly and orphans. I just depend on my neighbour for a living; if he does not have then that's it.

Thus, collectivism is another of the copying strategies being employed by the people in Beitbridge to cushion neighbors from starving. Those with better food reserves can pass on to others in critical need to save them from starvation as indicated from responses above.

Although communal assistance was sighted as copying strategies, a number of respondents indicated that it was impractical to many in this day and age that a neighbour will give you food for free. One local resident in Insiza said:

It is not practical that your neighbour will fend or look after you... maybe it depends with your relations, but I do not see this happening. People have enough trouble in feeding their own families.

Some respondents in Mangwe District also vehemently denied this gesture. One local resident refuted:

Oh my brother, no one can give you food for free. There is nothing like that in this village, you survive by your own means, it is unheard of. People only donate free food at funerals my brother.

Thus banking on communal assistance received mixed responses and reactions, which indicates that it is not bankable and not always practical in this day and age where capitalist mentality is the order of the day.

4.6.3 MARKET GARDENING

A number of people practice market gardening to meet their food requirements. However this is not taken on regular basis as this is done at times depending on the situation. One of the local farmers in Mangwe said:

Sometimes we go to the irrigation scheme and grow vegetables and sell, so that we can get money to buy other food necessities. But sometimes water availability will always limit us.

Another local farmer in Matopo also said:

As for me, I have got a portion in the irrigation scheme where I grow maize and then sell to the community and nearby shops. Getting customers is difficult though, people have no money.

The agriculture Extension officer for Mangwe cemented how the practice of market gardening has been helpful to some households:

We cannot under estimate the importance of market gardening here. Some families entirely survive on that especially those with farming portions in the irrigation scheme. They grow vegetables, mealies and pumpkins for their own consumption and for sale.

Thus, agriculture as evidenced by the above responses is an integral part of the coping strategies employed by the people in Matabeleland. However, this agriculture in terms of market gardening needs to be further developed in order to realise full or maximum benefits.

4.6.4 CASUAL LABOUR

Provision of casual labour was also cited as one of the coping strategies to food security challenge. People who do not have portions or pieces of land in the irrigation schemes usually provide cheap labour in return for payment or food. One respondent in Mangwe District said:

... as for me I do not have anything except free labour that I give to those with plots in the irrigation scheme, and in return they pay me either in cash or with some food provisions from the plot.

In Insiza another of the local resident posited:

Casual labour is an option available to many. You sweat it out in someone's field and you are assured of something by the end of the day. At least my children will not starve to death.

However, casual labour provision is not a sustainable way of survival in the face of food security threat. Proceeds from casual labour are very minimal and highly straining.

One local resident in Matopo had this to say:

Out of no option I just have to work extra hard to feed my children but to tell the truth it is not different from slavery. The amount of work I do and the returns do not tally at all. It is never fair but they know we got no option when hunger is knocking on our doorsteps.

Another respondent in Beitbridge reiterated the unfairness in casual labour as a coping strategy:

You break your bones for the whole week for a single bucket of sorghum or millet. It is really hard to fend for the family out of supplying casual labour. It is not even good for one's health.

The responses above indicate that casual labour provision comes at hand in cushioning people from the scourge of starvation, but it is highly exploitative and inversely have a toll on one's health. More robust strategies need initiation in the communities to ensure food security amongst households.

4.6.5 ARTISANAL MINING/ GOLD PANNING

Mining is one of the coping measures adopted by some people to save themselves from starvation. It was noted that returns from farming are minimal; hence people turn to mining as a coping strategy. One of the farmers in Matopo said:

As for me, I farm a lot in the irrigation scheme, but there is [not] much [that] comes from the irrigation scheme. So, what I normally do, I go to the mining area and take the residues that would have been left by illegal gold panning. That is where I can get a little bit of gold then I sell to earn a living.

Another farmer in Insiza said:

I can go as far as to Filabusi [nearby District] to engage in some gold mining when things get tough. On a good day, I can get up to 2 grams of gold. It will be enough to buy food for my family.

The reliance on gold panning was again captured in Beitbridge District. The people have adopted gold panning as a more reliable coping measure. The District Administrator posited:

Gold panning is a real lifeline to many household livelihoods and food woes. Of [course] there are some dangers to the practice, which need to be looked at, like environmental degradation and loss of lives when shafts collapse and when violence erupts between mining syndicates, but it remains that families are surviving on gold panning.

Thus there is concurrence that gold panning has played a pivotal role to provide people with income to buy food requirements despite the dangers associated with the practice. The presence of such opportunities means that resources which can be converted into the community food basket are there, but these activities need to be formalised in order to prevent people from being exploited hence receiving proper returns from such activities.

4.6.6 ANIMAL REARING

Some people have diversified from crop farming to do animal husbandry. This helps people to cushion themselves from food challenges since crop farming does not do well in the Matabeleland region. One local farmer in Mangwe District, who happen to also have a portion in the irrigation scheme said:

I also do goat, poultry and cattle rearing, I sell these goats so that I can get food for my children. Crop does not do very well here and it is wise to branch out into some other farming areas.

The extension officer in Matopo supported the existence of diversification in the area by saying:

We have since realised that crop will never do well here, we are going back to basics, this area is known as the livestock hubby and we want people to embrace that. We have been training people on goat and sheep rearing, etc., and we are satisfied with the uptake of such programmes by the local people.

The issue of Diversification was again stamped by the world vision officer in Mangwe as a copying strategy underway and adopted by many:

Through programmes like Amalima, we are selecting households for livestock rearing and restocking. We have realised that traditionally Matabeleland is a livestock area, and therefore agricultural activities should be centred or emphasise livestock farming.

This venture in livestock production is an indication that some individuals have realised the need to diversify their farming activities to include animal husbandry as a way to avoid starvation or suffering from the effects of food insecurity. This is a necessary measure, which should also be adopted by many people in the Matabeleland South districts as it is widely known that livestock rearing can do well in the Matabeleland region.

4.6.7 CONSERVATION FARMING

People in the communal areas have turned to conservation farming as a copying strategy. This type of farming produces better yields in the region as compared to the universal type of farming, although this type of farming presents itself with its own set of challenges. One of the farmers in Matopo said:

In the communal areas we do conservation agriculture so that our yield can be improved. We were taught this by the ministry of Agriculture and agriculture related organizations. The problem here is that, the rainfall patterns have shifted drastically [so] they are no longer dependable. For example, good rains are received in January yet long back we used to have good rains in October, November and December. Conservation farming is also labour intensive and thus a lot of people shun it.

The existence of conservation farming was also evident in Mangwe District as one local farmer indicated:

Yes, some of us have been trained in conservation farming by the Farm Community Trust some time ago. For those who have fully embraced it their yields are better. I once adopted it and my maize crop was by far better from what I used to get. The only problem with it is that it is so much labour intensive.

It was however noted that very few people have adopted conservation farming despite its benefits. The nature of conservation farming is being highly labour intensive, and lack of

understanding about this farming practice was the reason why most people are not practising it. The Community Development Officer for Insiza District said:

Most people think conservation farming is for the poor... they think that it is only for those people without draught power and with no hopes of ever getting it year in year out. They do not realise that it is highly beneficial to them as well as they can realise better yields through its practice.

Thus, the communities in Matabeleland South Province have varying understanding of copying strategies available to them and this determines their adoption across the communities. Full adoption for some of the strategies calls for full understanding of them through education and training before implementation.

4.6.8 TECHNICAL SKILLS

Building and brick moulding are some of the skills that help to cushion people from the scourge of food insecurity in Matabeleland South Province. Another of the respondents in Mangwe district said:

As for me, I do farm in rural areas, but I am also into some other income generating projects like brick moulding and building of toilets. I can get almost enough to feed my wife and children.

In Insiza, people also expressed their continuous usage of technical skills available to them for survival of their families as one respondent said:

I am a carpenter. I do roofing of people's houses and everyone around my village and beyond knows that. That is how I fend for my family. I generated reasonable income through that.

The headman for Matopo District cemented the issue of technical skills as a survival strategy as well:

Our children have acquired some skills at school like sowing, building, carpentry, etc. A number of them have taken such skills as their professions and whenever there are some projects we give them work and they get paid. Individuals also hire them and pay for their services. That way their families are saved from starvation.

Thus, the above voices are an indication that the area is abundant with skills, which can generate extra income convertible to food requirements at household level. However, these skills need to be well organised in order to generate income in a more orderly and profitable way. For example, the market for bricks was reported to be unreliable as sometimes there is no one to buy the bricks in the local community due to lack of disposable income.

Rare skills were also noted amongst the respondents, that is, electrical skills. The respondents with these skills reported that they get additional or supplementary incomes from such skills. One of the respondents in Beitbridge said:

I fix generators to get money to buy food to feed my family. All these shops and other business people will need my services at one point in time and I reap something out of my service.

The availability of such skills is a testimony that necessary human capital is available, which can fully be utilised to work towards establishment or implementation of sustainable food security projects in the Matabeleland South Province or area.

4.7 GOVERNMENT AND OTHER DEVELOPMENT AGENCIES FOOD SECURITY INTERVENTIONS OR SUPPORT

The government and the non-governmental organizations are key to the food security problem in Matabeleland South Province. The non-governmental organizations have played a complementary role to the government in times of severe food crisis. However, at times there is lack of coordination between government and other development actors and this creates problems like double dipping by local people in food security interventions. This leaves the other deserving vulnerable groups severely food insecure. According to the District Administrator for Matopo:

When there is no coordination of NGO and Government activities, problems arise when the same group of people continue to benefit from interventions at the expense of others in need.

This means that coordination is an important aspect in any developmental initiative in any given community.

4.7.1 PROMOTION OF ADAPTIVE CROP VARIETIES

In the Mangwe district, organizations like LEAD Trust and Agricultural Technical and Extension Services (AGRITEX) have had various food security interventions either as individual organizations or as complementing partners. The LEAD Trust together with the department of AGRITEX introduced the inyoni katshana/shiri kure (birds away) sorghum variety as a way to cushion farmers from losing crops to birds. One of the farmers referring to how they got to know and adopt the inyoni katshana variety said:

...we were informed about it by the department of AGRITEX and LEAD Trust. The variety is not consumed by birds because of its nature. It is a better alternative to our other varieties, which birds can wipe out.

The World Vision Livelihoods Officer had this to say in relation to the adoption of new adaptive crop varieties:

Seed varieties which can adapt and do well in dry regions are being developed and made available to people. Those households that embrace the new crop varieties have realized marginal gains in their yields. More specifically [it] is the new sorghum seed variety we have distributed during the last five years.

However, the variety is said to be a long season variety, hence the people are abandoning farming the crop. This means that more robust strategies are still needed to ensure buy in of food security interventions by the local communities who are supposed to be upholders or custodians of such interventions.

4.7.2 RESEARCH

FAO has also been a key player in combating food security in the Mangwe district. This has been done through research and introduction of crop varieties that best suits the area. One of the extension workers in Mangwe referring again to the inyoni katshana sorghum variety said:

This type of seed came from FAO basing on the fact that, there was a thorough research that was done, which showed that, the shiri kure variety is the only way to address food insecurity in Mangwe.

However, the variety is not an end to food security woes in Mangwe as claimed by one farmer who said:

Later on, it was discovered that, it takes more time to mature than other varieties and this is against the rainfall patterns of Mangwe that are very unstable and unreliable.

Thus, the efforts for food security in Matabeleland need to consider all the factors that may affect their fruition. Some interventions are quick to lose relevance hence they are quickly abandoned.

The International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) has also been carrying out research towards resilience programmes for drought prone areas of Matabeleland South Province. The organization has also developed small grain varieties adaptive to the area and its climatic conditions. According to the ICRISAT research Officer:

We have developed with proceeds from DFID [Department for International Development] some crop varieties in the area of small grains highly adaptive to the whole of Matabeleland regions. Trials have already been done and we

have taken the seed varieties to districts like Mangwe, Matopo, Beitbridge, Insiza, etc. The results so far have been amazing.

According to one farmer respondent in Matopo district:

We are being assisted and encouraged by ICRISAT to grow these small grains, which can do very well in our area. Ever since, we can see that our children have always had something to eat as compared to the yester years.

Thus, organizations are doing their best within their means to promote food security in Matabeleland South Province through research, promotion of the adoption and growing of small grains which can yield better in an area which is characterized by extremely low levels of rainfall annually.

4.7.3 FOOD SECURITY ASSESSMENTS

The government is at the forefront of doing food security assessment in the area to establish the magnitude of food insecurity. This is done in order to call for corrective measures with the aim of preventing starvation. An extension officer for Matopo District said:

What is there is that, if there is a case of food shortages, the agricultural extension officers move around the ward to do crop assessments. This is done to establish the extent at which farmers have managed to harvest... The extension officers from the Ministry of Agriculture take the food insecurity concerns from the people, then they give their District head who will intern tell the District Administrator.

The Extension Officer concurred with the Provincial Extension Officer for Matabeleland South Province:

It is part of our work that every farming season the officers move around examining the condition of the crop. Their reports are necessary as they are submitted to responsible authorities so that food interventions are planned well in advance.

However it does not always follow that enough food will be available to the people after such assessments.

One farmer in Insiza retorted:

It is a norm that these government people come around jotting down names and are concerns [concerned] whenever our yield is not well. We wonder where our names are being submitted and how that is going to help us as farmers.

The government has limited resources to procure enough food to feed the vulnerable populations. This situation is met by wide spread starvation. Given such a scenario, robust

measures to address food insecurity in the province have to be taken and the model developed by this researcher is a move towards that.

4.7.4 AGRICULTURAL INPUTS

The government also support famers with agricultural inputs as a measure to combat food insecurity through presidential inputs schemes. This was noted when one farmer in Mangwe said:

The Presidential input scheme gives farmers agricultural inputs for free and farmers use this when the rains come. Each farmer can get fertilizer up to 200 kgs and maize seed up to 20 kgs.

Farmers in Matopo District also concurred that free agricultural inputs have been given as one of them said:

Yes, it is an on-going exercise [the presidential input scheme]. Farmers have something to start on. Come rain season you know your fertilizer and seed is something that you are assured of for free.

However it was noted that the inputs are not received by many, as they are limited,

In Beitbridge one farmer complained:

We are aware that some get these inputs year in year out. They are the favoured ones. As for me, I have never received those inputs. They say they give only their comrades [ZANU PF supporters]. But we all need them regardless of our political affiliation.

The Provincial Administrator insinuated the issue of agricultural inputs provision saying:

We have tried as government to make available seed and fertilizer requirements for every single farmer. The challenge we have is that the provision is not enough for every single household and hence the reason we get some complains.

The responses above indicate a discord in agricultural inputs provision by the government rendering it unsustainable. The allocation per single household is usually not enough. At the same time, the legibility to getting or receiving such inputs is branded political by many. Ruling party supporters normally get inputs at the expense of the supporters of the opposition parties. This kills fairness and justice to food security, which is a fundamental human right.

4.7.5 FOOD HANDOUTS

The government through the social welfare department has been parcelling out food handouts to vulnerable households in emergency times. However, food handouts have been far short to feed the affected and vulnerable population. One respondent in Beitbridge said:

In this Beitbridge village there are 350 households, but the department of social welfare only managed to give 100 families, leaving 250 families food insecure. The number of people being reached by the social welfare department leaves a lot to be desired.

While the efforts are commendable more than half of the people are left starving, as they have nothing to fall back on. Such a situation overwhelmingly indicates that the intervention by the government departments is highly unsustainable.

In Insiza the presence of government with food handouts was noticeable as one of the respondents exclaimed:

People do receive some peas, maize and dried fish from the social welfare. However, this is a preserve for the chronically ill, orphans and the elderly people. But I feel every household deserve an allocation because we suffer almost the same.

Non-governmental organizations have also come at hand in the provision of food handouts to villagers in times of extreme food shortages. The food handouts normally come or are distributed by organizations like Care International and World Vision. One of the respondents in Matopo pointed:

Were it not for the assistance with food by Care and World Vision some of us would have died of starvation... in extreme cases if they do not come in time we survive on wild berries and roots.

In Mangwe, the NGOs have provided a lifeline to some families but this has only a few of the families in need as one of the village heads said:

We express profound gratitude to World Vision and Care for coming at hand to give us food in worse situations. We wish they could stretch their hand to reach out to every family in need because it is [sic] only may be less than half of needy people benefiting from them.

Thus, there is concurrence that the non-governmental organizations have played a complementary role in feeding and saving people from starvation on behalf of the government. However, at the same time there is agreement that these handouts are never enough to feed all the affected populations or people in need of food.

4.7.6 IRRIGATION DEVELOPMENT

Irrigation development was identified and established as key in addressing the problem of food insecurity in vulnerable communities. The Beitbridge irrigation scheme was established in the early years of Zimbabwe's independence upon realization that rain fed agriculture could not be sustained in the area. A local farmer in Beitbridge posited:

Irrigation farming has been a relief to beneficiary households and I personally thank the government for mooted such a development in our area. It has been an answer to many of our basic food requirements.

However the scheme is no longer fully functional owing to a complex of challenges. One farmer in Beitbridge said:

Politicians were taking irrigation pipes for personal use and this incapacitated the irrigation scheme. We hope the situation will be rectified and normalcy be restored to ensure that such kind of thieving is stopped forth with.

In Mangwe District, the appreciation of the irrigation development was evident despite the challenges cited. One of the farmers said:

[the] Ingwizi irrigation scheme was given to us by the government. There are [sic] a number of families doing their farming in there. From my experience, families in there are far much better in terms of household food security. However, of late we have noticed a lot of vandalism going on there, irrigation pipes being destroyed and being stolen.

The above expressions indicate the role the irrigation schemes have played in food security promotion. However, there are serious indications of discord in how the irrigation schemes have functioned ranging from land allocation in schemes, vandalism, and theft. This means the bulk of the people are left with one option: to wait for the rains of which the area is in region 5, where rainfall is very minimal around less than 500mm per season. For irrigation schemes to be more sustainable, a number of issues surrounding how they are operated should be addressed.

4.7.7 DEVELOPMENT COMMITTEES

At a more local level and structurally, the Beitbridge and Mangwe communities had development committees, which looked at cross cutting developmental issues in the district with the food security issue included. The committees included the Village Development Committees (VIDECOs) and Ward Development Committees (WDCs). One of the respondents in Mangwe commented:

The Committees have functioned to some extent in organising various development initiatives including food programmes. But now there is a lot of infiltration and I doubt if they are now serving their original purpose.

In Beitbridge one ward committee member said:

Yes, we do have a standing Ward Development Committee. This is where all development concerns, including food security concerns are aired before onward submission to the responsible authorities.

However, these committees have failed to work properly due to lack of proper coordination. One of the respondents in Beitbridge said:

These Committees are no longer functional and I do not dispute that they were there. They do function but in a disorganised way. They used to coordinate development in both the village and at ward level.

Thus the lack of well-coordinated developmental structures has affected the communities in coming up with sustainable food security interventions. Developmental committees need clear cut structures and coordination in order to come up with more robust development and food security interventions.

4.8 PROSPECTS OF A MORE SUSTAINABLE FOOD SECURITY MODEL AS ENVISIONED BY THE MATABELELAND SOUTH COMMUNITY

Indications as evidenced by the people's responses are that the yesteryear programmes have suffered stillbirth due to a number of challenges ranging from structural to natural factors. There was general agreement that for food security to be achieved, there should be proper coordination and high level of commitment by the interested and concerned stakeholders in Matabeleland South Province in order to ensure ownership and development of programmes by the local communities.

4.8.1 NON POLITICIZATION OF AGRICULTURAL PROGRAMMES AND TIMELINESS IN INPUTS DISTRIBUTION

Indications were that inputs are distributed late to the farmers and this retards production. The respondents in Ingwizi called for timely distribution of seed and fertilizer in order to keep up with the farming season. One of the farmers in Mangwe suggested

The first thing is, the government should avail inputs well before the planting season begins. You realise that inputs get to us sometimes in the middle of the season, when it is common knowledge that ours is a region of very low rainfall.

The issue of failure to meet timelines in the distribution of agricultural inputs was also witnessed in Matopo district, and one of the farmers called for corrective measures to this anomaly:

Whoever is responsible for providing us with inputs should be well versed with [the] agricultural season pattern of this region. It does not make sense to start distributing inputs when the rains are nearing their end.

Further to that, politics and food security issues need not to be politicized, as one of the village development committee members in Insiza District noted:

The distribution of inputs should not be done on partisan basis... A well-coordinated food security implementation structure in [is] needed, which is people centred.

In Beitbridge, the respondents also raised concerns over politicization of agricultural programmes and called for addressing this anomaly. One local farmer requested;

The issue of food insecurity affects everyone regardless of political orientation. Our leadership and responsible committees should desist from allocating inputs on partisan bases. The presidential inputs are from the president of this country and he is our president all of us whether ZANU PF or MDC.

The above expressions indicate that there is concurrence that for any food security model to be sustainable politics of favouritism should be abandoned, and targets in terms of timelines should be largely considered for desirable results.

Political determination should be demonstrated in government programmes by the responsible authorities. The respondents indicated that of late, there have not been remarkable commitment by the responsible authorities and this explains why most food security interventions have failed. One respondent in Beitbridge, who called for full commitment by the responsible authorities said:

The problem of food shortages in this area needs local solutions with full support of our political leadership. For example, the Beitbridge irrigation scheme is lying idle because there is no follow up by government on the farmers' concerns. For example the ZimASSET blue print is very good but when it comes to implementation it's zero.

In Mangwe, one local farmer also cemented the need for strong political will in seeing through the success of food security interventions by saying:

We do not want a situation where the authorities come and commission programmes for food security here, and disappear never to be seen again. At least they should remain attached to the projects and continue to offer technical support.

From the above indications we can conclude that political will and commitment is lacking in projects, evidently this needs urgent redress. In most instances, indications are that most of plans remain paper tigers. The respondents therefore in this regard called for practical action in terms of implementation of food security programmes.

4.8.2 STAMPING OUT CORRUPTION

Respondents singled out corruption or graft as a serious threat to food security programmes which need to be decisively dealt with. The respondents in Beitbridge indicated that there

was lack of accountability and transparency in government programmes as politicians diverted public resources for personal uses, but they have not been brought to book as criminals. For instance, one of the farmers in Beitbridge said:

Irrigation pipes for Beitbridge irrigation scheme went missing, having been stolen by politicians. We only saw them on the day of commissioning and the next thing we hear they are to someone's plot when they were supposed to benefit the whole community.

In Mangwe, the same sentiments on the need to stamp out corruption were brought forward by one of the Ingwizi Irrigation Project beneficiaries, who said:

Surely, corruption is derailing our progress in this scheme. Politicians are abusing the resources and equipment meant for this project. For instance, some of the pumps were taken for repair long back, but they never brought them back. Someone should just look at this and address this problem once and for all.

In Insiza, the problem of corruption was reported as rampant and the local farmers called for its stamping out. One of the farmers suggested:

There should be mechanisms to avoid the resources meant for community development being diverted for personal use by the leadership. We have witnessed situations where the leadership share diesel, seed and fertilizers meant for distribution to local farmers here. There should be a monitoring mechanism to avoid such acts.

Thus, there is agreement amongst research subjects that corruption is a serious vice, which need redress in food security interventions. The respondents suggested strict monitoring of the properties meant for public or community benefit to avoid siphoning of the resources by greedy individuals, hence placing the generality of the populace at the mercy of food insecurity.

4.8.3 PROPER COORDINATION OF FOOD SECURITY PROGRAMMES

The respondents agreed that for food security to be achieved, the players in the field need to have a proper coordinating structure and platforms. People who are supposed to be beneficiaries need to have a deep and full understanding of the programmes brought to them. One farmer in Matopo noted:

As already alluded to earlier on, the problem is that our implementation model here in Mangwe needs to be redefined. Everyone does what suits her or him. I believe, if the government can come down to the people and hear their concerns, this problem of food shortages can be addressed.

One beneficiary in Ingwizi irrigation scheme in Mangwe suggested:

There should be proper structures with shared responsibilities towards food security promotion interventions. The reporting structure should be well defined so that every player is accountable, without that, the situation will remain the same.

In Beitbridge the calls for proper coordination for food security programmes were also evident in the words of the District Administrator, who lamented:

The coordinating structures for most of the food security interventions have been more or less defunct for some time. I agree that there is need to reinstitute them, redefine their roles in order to ensure continuity and sustainability of our food security programmes.

Thus, there is an agreement that proper structures are supposed to be put in place to coordinate food security programmes in Matabeleland South. This has been lacking in the area culminating into severe and critical food security situation.

4.8.4 WATER RESOURCE DEVELOPMENT AND AFFORDABILITY

Water was identified as a key resource and ingredient to agricultural production and promotion of food security in Matabeleland South. Water is both scarce and expensive in the area as the water authority charges exorbitant rates, which are not affordable and pro production. One of the farmers in Mangwe said:

ZINWA [Zimbabwe National Water Authority] should reduce its water charges. Some people opted out of the irrigation scheme because water charges did not tally they what they got from their farming activities. They ended up with huge water debts risking losing some valuable assets like livestock to service such debts.

In Insiza, the need for development of water resources was called for by a number of respondents. The agricultural extension officer suggested:

Apart from borehole drilling, Dam construction will be key to transform this area into a green belt. The responsible authorities need to serious[ly] consider construction of dams around the district so that people do not solely rely on seasonal rainfall which is already scarce here.

Thus, resources that feed into agricultural production should be accessible and affordable in order to promote profitable agricultural production.

Revitalization and development of the irrigation schemes is key to sustainable food security as suggested by the respondents. The residents in Beitbridge want the dysfunctional schemes

to be resuscitated and initiate coordinated structures to take care of the irrigation business. During the interviews one of the respondents in Beitbridge said:

I personally propose that, the Beitbridge irrigation scheme should be rehabilitated and become functional. [A] Local committee can be formed to manage the irrigation scheme with the help of agricultural extension officers. Also, politicians should not hijack the good programme.

Another respondent in Matopo District said:

The only way out of this problem of food shortages is to revive the irrigation scheme through community participation. Irrigation farming answers all our food problem[s] provided it is well monitored and coordinated.

Thus, there is general consensus that irrigation development is key in promoting food security, but the running of irrigation schemes should be done more orderly in a coordinated approach with full community participation.

4.8.5. LAND ALLOCATION

More land allocation is crucial to development of a sustainable food security model in Matabeleland South. In Mangwe at Ingwizi, it was noted that the people seriously need more land for irrigation purposes. One of the local residents requested:

The government should avail more land for irrigation to small-scale irrigation farmers. This is necessary because to increase production, there is also need for more hectares to grow crops to feed the whole population.

In Matopo the need for irrigation land was also suggested by one local headman who said:

The beneficiaries of the irrigation schemes do not even represent all the villages. There should be a way to ensure that every village is represented in the irrigation scheme, this can only be possible if more land for expansion of the scheme is availed. As you can see, our families are growing and we cannot keep squeezing on that small piece of land.

The voices above indicate that the amount of land allocated for irrigation purposes is not enough to produce sustainably outcome for food security across the districts. Responsible authorities need to seriously consider land allocation to the ever growing population.

Fairness in land allocation should be practised in Matabeleland South district. It was noted that the local authorities have been parcelling out land to commercial ventures at the expense of the local people. One of the local farmers Beitbridge said:

Local people should occupy and work on large portions in irrigation schemes. The commercial venture does not pay back to the community and they have no social responsibility ventures.

Another respondent in Mangwe indicated:

More than half of land in irrigation schemes is being framed by outsiders like Trek [Petroleum (Private) Limited] and they do not retain their produce for the local people... they transport everything to where they think they can make huge profits. It is high time that the land is given back to its rightful owners or beneficiaries.

Judging from the above, there is evidence that there have been anomalies in land allocation and distribution. As suggested by the respondents, the land allocation should give priority to locals for them to produce enough food for their communities.

4.8.6 AGRICULTURAL DIVERSIFICATION

Diversification of the agricultural sector was suggested as also key in combating food security challenges. In Beitbridge, one of the farmers said:

I think it is very wise for farmers to diversify their activities. For example when growing crops we can grow finger millet, maize, potatoes, animal husbandry just to mention but only a few. But our problem is to grow one type of crop every year. So I think farming diversified can be a solution to this problem.

Small grains can replace maize as they can do well in the dry areas and animal husbandry can help cushion the local people from starvation as it can be converted to other food stuffs upon selling and also as supplementary food by providing milk and meat. The people largely supported diversification, but they need technical assistance on how to go about the diversification programme.

In Insiza, the calls for diversification were also awash in peoples' responses as one of the farmers called:

With diversification you will not suffer back to back loses. If your crop do not do well, your other farming ventures like poultry or livestock can cushion you from total starvation. We need to embrace it on a full scale.

In Mangwe as well, the need for diversification of agricultural production to include both crop and livestock production was over emphasized just like in Beitbridge as another farmer said:

I want to encourage my fellow farmers that, they should not entirely depend on irrigation farming but to spread their efforts to, livestock production, poultry production and even gold panning.

The voices above indicate a general consensus that agricultural diversification is key in promoting food security in Matabeleland South Province. People need to desist from

regarding or viewing agriculture in the context of crop production only. This is necessary because generally Matabeleland region of Zimbabwe is regarded as the livestock hub.

4.8.7 CONSERVATION FARMING

Conservation farming was generally agreed as one of the remedies to food security in Mangwe, which need to be intensified. The yield, it was noted, can be greatly improved through conservation farming and the respondents gave testimony to that. A farmer in Mangwe voiced:

When conservation agriculture was started in 2014, most of the households if not all did not face the problem of food insecurity... conservation agriculture helps crops to survive even the time of floods, crops are not submerged in water.

The extension officer for Beitbridge pointed out that:

The program of conservation agriculture depends on the type of soil and the amount of rainfall. If the soil is good and the rains are good a better yield is expected. If there is no rainfall there is nothing [sic] that you are going to get.

According to the AGRITEX Officer although the practice can be regarded as somewhat labour intensive, it has the potential to improve yields:

The uptake of conservation farming practice is still very low, but believe me or not, if properly managed it has the potential to improve yield because it retains a lot of moisture even in dry regions like these. Manure and fertilizers can be used more efficiently.

This means that with proper technical expertise, the solutions to the food security problem in Matabeleland South can be mooted. This however needs proper cooperation and coordination from all interested stakeholders.

4.8.8 SKILLS DEVELOPMENT THROUGH VOCATIONAL TRAINING

The need to diversify sources of livelihoods is key in averting the problem of food insecurity in Matabeleland South. Instead of solely depending on agriculture as a source of livelihood, people should have other skills, which help generate income to buy food from areas where it is available. As suggested by the Extension Officer in Mangwe:

The government should strengthen vocational training for youths, if youths go to training centres such as the Mushagashe Training Centre they will have something to do [other] than entirely depending on agriculture, which fails four times in every five years.

In Beitbridge, the need for other skills development as a means to fight food insecurity was also pointed out. According to the District Administrator:

This is a border town where a lot of tourists pass through into Zimbabwe, there should be vocational training on arts and crafts like professional bead making, weaving, and other forms of fine arts which can provide a source of living to the local people.

The same sentiments were echoed in Matopo District as the Village head suggested:

There is need to capitalise on the available resources in designing and implementing vocational and technical skills amongst our youth. Tourism thrives here through Matopo Hills and as such stone carving and wood carving skills can attract the eye of the tourist.

Thus, a sustainable food security model should promote other skills which can help people generate incomes which can in turn be used to source for food requirements elsewhere as suggested by the voices above. This is necessary because agriculture is not always dependable in Matabeleland south due to inadequate rainfall.

4.8.9 FINANCING OF FARMERS AGRICULTURAL ACTIVITIES

Agricultural production needs dependable financial support. The financial support should come in the form of loans that must have affordable rates that will not strain farmers. One of the farmers in Ingwizi said:

The government should avail loan to farmers; these loans should have affordable rates so that it is easy to payback. We need to invest in things like irrigation at individual homesteads to counter water problems.

This was supported by another farmer in Matopo, who said:

Affordable loans can help me buy water pumps and irrigation equipment, and also fencing material. [I] Have the potential to do better because my plot is near a major dam where I can draw water. But I would need some fencing because my area is near game reserve.

In this regard, it is therefore evident that the local farmers in Matabeleland South are aware of the need for financial back up in order to improve food production in the area there by promoting sustainable food security.

However, some sections of the community did not agree to finance of agricultural activities through loans. There was general fear that the loans might end up accruing and unpayable. This will in the long run lead to them losing their assets to servicing of the loans. One local resident in Matopo said:

The issue of loans is tricky and one needs to be careful with it. You may end up losing all your cattle, goats and sheep to those funders... I feel the government should just provide subsidies to us.

These sentiments mean that people need to have a full understanding of the agricultural financing system before they are drawn into signing for loans for agricultural purposes.

4.8.10 INSTITUTIONAL CAPACITATION OF LOCAL SCHOOLS

Capacitation of schools in farming activities was identified as key in easing the problem of food insecurity. Respondents from Ingwizi agreed that schools, both secondary and primary, should run farms and this will help in both agricultural skills development in children and also feeding schemes or intervention for starving children. One farmer in Mangwe said:

Both primary and secondary schools should be given farms to practise agriculture in all its forms, that is crop production and animal or livestock production.

The Provincial Administrator cemented the saw view saying:

Apart from their core businesses, institutions should fit into the equation of finding solutions to our food security problem. Churches need land to practice mass agricultural projects. Schools alike need to take agriculture seriously [rather] than having small gardens for their agricultural classes. Of course this will need our consorted efforts to achieve.

Thus, institutional capacitation as echoed by the voices above can be regarded as one of the key strategic interventions to easy food in security in Matabeleland South.

4.8.11 PROMOTION OF HOME GROWN SOLUTIONS TO FOOD SECURITY

There was consensus amongst participants that a bottom up approach is necessary to fight the scourge of food insecurity in the Mangwe community. The omission of the people in programme design and implementation was a bone of contention amongst participants. People wanted to be included in every aspect of programmes, which they are meant to be beneficiaries and custodians. One of the respondents in Mangwe said:

What I can simply say is that, the people who are affected should be actively involved in the implementation of such polices. That is from the line, to the village development assembly, ward development assembly, then to the Rural Development Committee.

Thus, people centred projects are the way to go for food security interventions as suggested by the local people themselves.

There was the same call by the people in the Beitbridge community, who also emphasized that local people need to participate in programme design meant to benefit them rather than bringing finished programme designs to them. Respondents suggested that a bottom up approach should be used in order to promote sustainable food security programmes in Beitbridge. One of the Village Heads said:

The government should come to the people and hear their concerns rather than coming up with the solutions from the top. This other time they supplied us with some combine harvesters, when they are the least things we need here. There is nothing for us to harvest yet.

Another CARE Field Officer in Insiza District pointed:

This thing of bringing help from above it can be equated to bringing a train where there is no railway line. That operating template need[s] to be changed. Lack of community participation has been sighted as a serious hindrance to sustainable development projects.

Thus, there is concurrence that as the prospects of the ZimASSET in promoting food security are unpacked, there should be maximum involvement of the local people in the planning and implementation stages in order to have common understanding and buy in of the programmes associated with ZimASSET in the area of food security.

4.8.12 REVIVAL OF COMMUNITY DEVELOPMENT STRUCTURES

Development committees should be reactivated and capacitated in order to come up with programmes that promote food security in line with the ZimASSET. In Beitbridge one farmer pointed:

We need to reactivate our old development committees but we should incorporate the chiefs and agricultural development associations and even the church organizations to ensure transparency and representation of all.

Another respondent in Mangwe suggested:

I think the community should come up with a clear coordination structure whereby at village level people should have village meetings chaired by the village head, then the concerns are passed to the ward, where the WARDCO is chaired by the Councillor and the councillor takes the concerns to the chiefs, then to the Rural District Development Committee (RDCC).

More so, the people need to be enlightened on proper channels to follow when bringing their issues to the fore. There were indications that people lack necessary knowledge on channels to follow when trying to address their issues as one respondent in Insiza said:

Using the village assemblies and ward assemblies is very good when coming up with livelihood and food security plans but after all the concerns reach the district we do not know the next step and it takes a lot of time to be implemented.

Thus, people realise the need for having local structures tackling community pressing issues, such structures are Ward Development Committees and VIDCOs. This promotes working together for a common cause and information sharing hence promoting shared vision in developmental issues.

This was also reiterated by Mangwe respondents who indicated that Ward and Village committees which have since ceased functioning well need to be revived and undergo full capacitation to carry out their duties in a professional way, which is not riddled by partisan traits in the disposal of duties or key result areas. It was not that the skeletal structures are still there but need re orientation. The extension worker in Mangwe district said:

This structure was functional soon after independence that is 1980 to 1990, from there, people are now doing things on their own and most importantly people are politicising everything and this impedes development. There is need to reconsider them as they can play a major role in coordination of food security programmes.

Another respondent emphasised in Matopo District:

Yes, I do not dispute, VIDCOs and WADCOs were there, even now to a certain extent they do exist but the chairpersons of these committees do not know what is expected of them. There is need for capacity building and to eliminate the councillors because they are very political.

Thus, there is consensus that development communities are necessary to ensure a sustainable food security model but these would need reorientation to effectively dispose or undertake their duties on development and food security programmes or interventions in the province.

However, it was noted that some sections of the community did not agree to working with some of the local leadership in development committees. Some people advocated and voiced for the removal of councillors and village heads in development committee structures that they labelled corrupt and lacking professionalism. One local resident in Mangwe said:

These councillors should be removed and we [should] report straight to the chiefs... they do not know how to carry our concerns to the top. We receive no feedback on the part of our submitted concerns.

This was however disputed by another resident in Mangwe who commented and questioned:

Do you think it is wise to remove this councillors from their duties?... what is needed is proper training for them to fully understand their mandate... we cannot stir development without them.

The differing views on how the people should work with councillors means that there should be a well-defined working template for both leaders and the community so that there will not be confusion emanating from lack of understanding of each one's or each stakeholder's duties in the course of implementing developmental programmes on food security in the Matabeleland South Province.

4.8.13. DEALING WITH THE BIRDS SCARE

Growing of adaptive species can be crucial to ending food insecurity as suggested by the people in Mangwe. There are crop varieties that cannot be attacked by the pests and birds. One farmer in Mangwe said:

People can grow inyoni katshana or shiri kure (birds away) type of small grains, which is not eaten by qualia birds. Such kind of crop varieties can provide lasting solutions to the problem of birds eating crops.

The Provincial Extension Officer was also one of the advocators for finding solutions to bird scare remarking:

Small grains are an alternative to dealing with hunger here as they can do well. But birds are the major hindrance to growing of such crops as they have a tendency and potential to wipe away the entire crop. I call upon researchers like ICRISAT [International Crops Research Institute for the Semi-Arid Tropics] to continue developing crop varieties, which cannot be consumed by the birds.

The ICRISAT Research Officer cemented this view remarking:

We continue to realise the need to research on more adaptive crops for the region, particularly in the area of small grain. Resistance of such crops should not be only to droughts but should also resist other hazards like the bird and insect scare.

Thus, with proper measures and remedies there are chances that the people in Matabeleland South can turn to be food secure. There are water bodies that need full utilization and crop varieties that are adaptive to the environment, hence people can be able to realise better yields.

4.8.14 CREATION OF MARKET LINKAGES

Responsible authorities should create or help to create markets for local producers to prevent farmers from being exploited by the bogus buyers of agricultural produce. One Farmer representative in Mangwe suggested that:

The farmers should be linked with other partners such as churches and schools like Bulu High School, Mpandeni and Embakwe that can depend on our farm produce [rather than] to go to Bulawayo for their fresh food requirements.

Further to that, the extension worker in Mangwe added:

The government can consider opening new markets at Ingwizi or at other central points, and also a good road network to Plumtree and Botswana, our neighbouring country.

In Beitbridge, the need for creation of market linkages was also evident in people's responses as one of the farmers suggested:

Beitbridge is a growing town and this should be a market opportunity for us. The people there need our farm fresh produce but we are limited in terms of transport means or network to reach out to that lucrative market. We need a proper road network to reach out easily.

Thus, home-grown solutions should be availed to locals in the area of marketing to curb exploitation of the farmers. Better returns means a more sustainable food security model as the proceeds can help them to continue producing and to acquire other food stuffs not locally available.

4.8.15 EXPLOITATION OF AVAILABLE RESOURCES

Most parts of Matabeleland South are endowed with mineral resources. The resources in Matabeleland South include gold and nickel. The communities can be empowered along mineral development ventures and this will feed into promotion of sustainable food security in the area. During interviews it was pointed out by one Village Head in Beitbridge that:

We have gold around here but we do not benefit from mining activities around here... it is our wealth and we are entitled to a share. Local authorities should see to it that at least there is a community share from the mining activities and I do not think we will ever starve if that measure is seen to fruition.

In Insiza District, the need to exploit gold deposits by local communities was also echoed by one of the Community Development Committee members who suggested:

It is unusual for a community with rich gold deposits to starve to death. We hear of community share ownership trusts but to tell the truth we are still

waiting for them here. Besides that, we should have legal mining syndicates drawn from all villages and this will go a long way in answering our livelihoods and food insecurity woes.

Thus, there is a general agreement that the local people should be involved in mining activities in their communities and the proceeds from such activities can go a long way in averting the problem of hunger and starvation, as people will be having disposable income, which they can always use to procure household or family food requirements.

Matabeleland South is also surrounded with game reserves and other natural flora and fauna. Examples are Matopo Hills and Gonarezhou National Park. This means that the availability of such features makes the area a great tourist destination. Local people should have access to form partnerships and syndicates in tourism so as to reap benefits from the industry. One of the respondents in Matopo pointed:

We have great potential around here in terms of tourist attraction...why are we not benefitting from our resources... someone out there should be benefitting at our expense.

In this regard, it is clear cut that the people in Matabeleland South observe that they should have entitlements to the lucrative tourism industry and this will empower them to have the means to boost their food security initiatives. Incomes generated from tourism involvement will be easily converted to food requirement for the community, families and individuals.

4.8.16 PROMOTION AND DEVELOPMENT OF WATER HARVESTING TECHNOLOGY

Matabeleland is a very dry area but it periodically experiences floods. Most of the water from floods goes to waste, as there are no water harvesting technologies and techniques. According to the Extension worker for Matopo district:

The local community should take advantage of the flood waters to create a green belt in their area through adoption of water harvesting techniques...water from floods can be harvested and used at a later stage.

The World Vision Livelihoods Officer supported the need for water harvesting techniques saying:

There is need to draw up a plan to ensure that every water received either through rainfall or through unfortunate means like floods is harvested [rather] than leaving it to waste. In some countries like Kenya, they do water harvesting and we need to take a leaf from them.

The District Administrator for Mangwe also echoed the need to develop water harvesting techniques by suggesting that:

Investing in water harvesting techniques need[s] serious consideration. There are some periodic floods experienced and instead of counting loses we should devise ways to also start counting benefits which can be reaped out of them.

Thus, while floods are destructive in nature there can also be benefits derived from them if proper measures are adopted to make use of the water rather than all of it going to worst. This will go a long way in improving the agricultural activities in the province, and as a consequence by promoting food security in the province.

4.8.17 PREVENTION OF VANDALISM AND STEALING

The people called for a more vital way in dealing with vandalism especially in irrigation schemes. Both animal activities and human activities have been agents of vandalism of equipment in irrigation schemes. According to one village head in Mangwe:

Stray animals encroach into irrigation schemes and leave a spurt of destruction... people as well have a mentality to sabotage irrigation schemes, especially those who would have failed to become part of direct beneficiaries.

Another respondent in Matopo said:

Penalties should be given to those who leave their cattle to stray into the irrigation scheme perimeter... this will help to deter people from being reckless with their livestock.

The voices above point to security issues as a drawback to full operation of food security projects. There is need for more security measures to protect destruction of acquired resources for the benefit of the whole community.

Besides protection from acts from vandalism, the people also called for more security measures to prevent stealing of equipment in irrigation schemes and perimeter fence. There are people who steal equipment like aluminium pipes, electrical cables and pumps to sale somewhere else. According to one irrigation farmer at Ingwizi irrigation scheme:

Equipment is stolen by thieves who then sale in Plumtree to some aluminium and copper smelters... there is need for the irrigation committee to come up with a security system to avoid such acts... the scheme should always be guarded by a security guard or irrigation beneficiaries should rotate in manning the premises.

One of the farmers at Beitbridge Irrigation scheme also concurred with the problem of stealing at irrigation schemes, this need to be curbed:

Initially we had all the basic equipment needed for an irrigation scheme to operate normally, it is not that the equipment has broken down but there are some bad elements in the community who have stolen some of the

equipment to sell somewhere. Security need[s] to be beefed up around our projects.

Thus, security is of vital importance to prevent losing agricultural equipment to thieves. The farmers in irrigation schemes are left with difficulties in carrying out their work as the thieves are taking away their means of production. The local residence agreed that deterrent measures were urgent to protect unnecessary losses through thieving and other acts of sabotage.

4.9 SUMMARY ON INTERVIEWS DATA ANALYSIS

In all the interviews, there was general consensus that food insecurity in Matabeleland South is a long time problem, which has failed to find sustainable solutions. Both natural and man-made factors affect food security in Matabeleland South ranging from inadequate rainfalls to maladministration of food security interventions whenever there are attempts or efforts to initiate them. However as suggested by the respondents themselves, Matabeleland South despite having a host of challenges to food security has a great potential to improve its bread basket through harnessing and utilization of available resources and opportunities both agro related and non-agricultural. It is possible to develop a sustainable food security model for Matabeleland South Province making use of available human and natural resources of the province.

CHAPTER FIVE

5.1 DOCUMENT ANALYSIS

This part of the research analyses food security documents to capture their reportage on Matabeleland South Province. This is done in order to find areas of concurrence and synergies as well as differences with the above analysis based on interviews. Trends in food security are captured together with coping strategies, government and development agencies interventions and possible solutions to food security in Matabeleland South. This exercise will have an eventual effect of coming up with a food security model for Matabeleland South Province in line with the aspirations and objective of the ZimASSET on food and nutrition. The motivation is that one of the ZimASSET blueprint clusters meant to end hunger and starvation not just in Matabeleland South Province, but amongst Zimbabwean population or citizens at large.

5.2 FOOD SECURITY STATUS - HISTORICAL AND CURRENT TRENDS

Matabeleland South Province is in region 5, the area of Zimbabwe characterised by arid and dry conditions. Historically, the province is the hub of critical food shortages due to minimal rainfall patterns of between 400mm to 500mm, which makes the region highly unsuitable for crop cultivation (FEWS NET, 2010). The province however, is regarded as a potential livestock hub suitable for wild life and domestic animals. Most ranches and animal farms are found in this province, and before the fast track land reform program (FTLRP), these performed relatively well and contributed significantly to the gross domestic product (GDP). To understand the current trends of food security in Matabeleland South Province, one needs not to ignore the historical context of food security in Matabeleland South Province. This is necessary in the development of a sustainable food security model which is the thrust of this study, thereby enhancing the objectives and call by the ZimASSET cluster on food and nutrition.

5.2.1 CROP AND ANIMAL PRODUCTION OUTLOOK ACROSS DISTRICTS

According to Mabebla (2014), reporting on behalf of AGRITEX, there was low maize production level in Matabeleland South Province in the 2013/2014 agricultural season, after a slight increase in the previous agricultural season from the 2012/2013. The crop production outlook indicated that Beitbridge and Mangwe Districts had the most severe food deficits as compared to Matopo and Mangwe Districts. More so, livestock production also indicated low yield as the livestock base continued to dwindle due to diseases and other factors. Thus, as

pointed out by Mabehla, it is evident that Matabeleland South Province has a trend of having food deficits even in situations when there is a slight increase in food production. The people are usually not able to produce enough to feed them throughout the year. This situation calls or demands a sustainable food security model for the province to arrest the food insecurity situation especially on the most vulnerable groups.

Mabehla (2014), further points out that cereal sufficiency rate is low in Matabeleland South as compared to other provinces in Zimbabwe. The people in Matabeleland South are able to feed from household reserves for between 2 to 4 months of the year, and thereafter they will have to rely on other sources or means like buying. For districts like Beitbridge and Mangwe, some families have zero cereal production rates which means they have to source for food through other means all year round. This situation points out a critical food shortage level in Matabeleland South Province, which needs urgent redress through the development of a sustainable food security model as envisaged by the ZimASSET through its food and Nutrition Cluster aimed at ending starvation and promoting better nutrition.

The common trend or position of food insecurity in Matabeleland South province is also echoed by the Ministry of Agriculture, Mechanization and Irrigation Development 2017 report. There is concurrence that crop sufficiency in terms of cereals for the 2016/2017 agricultural season was low but varying across districts. In Beitbridge, Mangwe and Matopo Districts, the people had a cereal sufficiency of 6 to 8 months, while Insiza had a 2 to 3 months sufficiency. This means that there is a general consensus that across seasons, people in Matabeleland South Province do not harvest enough to carry them throughout the year. The only changes to food security situation are the sufficiency levels across Districts, which can have slight fluctuations.

5.2.2 DIVERGENT VIEWS ON SUFFICIENCY LEVELS

The Zimbabwe Vulnerability Assessment Committee (ZimVAC 2015) report for 2013/2014 agricultural season and the Ministry of Agriculture, Mechanization and Irrigation Development report (2014) portrayed a different picture of food security situation from the one described above. These reports indicate that during the 2013/2014 season Matabeleland South had cereal supply for between 10 to 12 months. If this is anything to go by, it means that for this particular agricultural season, the food security situation in Matabeleland South was satisfactory. However this assertion is dismissed by the Famine Early Warning System Network (FEWSNET 2017), which says the sufficiency of 10-12 months was only in A1 and

A2 farming areas, and therefore not representative of the whole province. Mangwe and Beitbridge are labelled critical areas of concern with very poor yields. For example, Mangwe is not able to meet annual food requirements for its 70 000 people (FEWSNET 2017). Thus over and above, the food security situation in Matabeleland South is critical and in need of better strategies to address the shortages.

USAID and FEWSNET report (2014), assert that Matabeleland South Province is in the food stressed category and that should be taken as a common position. Food production is characterized by persistent fluctuations with Beitbridge, Insiza, Matopo and Mangwe topping the ranks in their order. It is pointed out that sufficiency levels for the province are between 4-6 months on average, and this has been the trend for the majority of the people in the province over a long period of time. Thus, there is a general agreement between various reports from organizations that the food security situation in Matabeleland South is characterized by critical shortage, hence the need to develop more sustainable intervention to save the population from starvation and associated effects.

5.2.3 DIVERGENT VIEWS ON AVAILABILITY

The ZimVAC report of 2015, states that although the food availability at household level can be limited to a few months of the year, food availability is not a major constraint to food security for the people in Matabeleland South as they can purchase the food within the same ward. This is however disputed by FEWSNET (2017), which argues that besides the cash limitations availability of food, goods are only available at Grain Marketing Board (GMB) depots and nowhere else. For places like Mangwe, the people can acquire their grain from Plumtree GMB depot, but transport costs and distance keeps them away from coming to buy their food requirements. All in all, availability issues are of great concern in the food security matrix.

5.2.4 ACCESSIBILITY

Accessibility issues with regards to food are at stake in Matabeleland South Province, the Smart Survey Report (2016) points out that food can be available in a province, but people will still have limited access to the food which they did not produce themselves. The only assurance to access is when the people produce most of their food requirements on their own. Little cash and long distances limit people's access to food. For example in Mangwe and Beitbridge Districts, the long distance to the GMB depots is prohibitive, the unsubsidised price of food or grain is beyond reach to many as well. Thus, an understanding of availability

versus accessibility issues needs to be taken into consideration in the design and implementation of a food security model for the province.

5.2.5 EFFECTS OF FOOD INSECURITY

Food insecurity in Matabeleland South Province has varying effects on both humans and animals. It is critical to note that from the document analysis, it was established that high food insecurity levels in Matabeleland South Province have had rippling and far devastating effects as compared to other provinces of Zimbabwe. The effects of food insecurity in the province range from diseases stemming from malnutrition, and mass exodus of productive age group, to death of livestock like cattle, sheep, donkeys and goats, which are key to the food production matrix, either as providers of meat, milk, income upon sale and draught power in agricultural or farming activities.

5.2.5.1 MALNUTRITION

Matabeleland South Province is one of the provinces recording extremely high levels of malnutrition. According to the Smart Survey (2016), which was carried out across 25 selected districts in Zimbabwe, found out that the districts in Matabeleland South Province namely Matopo, Mangwe, Beitbridge and Insiza were part of the topping list in acute malnutrition. This includes mortality, underweight and high stunting levels with the boy child being the most affected. Thus, malnutrition is a serious problem affecting mainly children's development in Matabeleland South Province. This calls for sustainable measures to arrest food security in the province to improve the health of the children.

5.2.5.2 DEATH OF LIVESTOCK

Food insecurity has had a devastating effect on livestock population in Matabeleland South Province. According to the Agricultural, Technical and Extension Services (AGRITEX) report (2017), Insiza district recorded high numbers of cattle deaths as many cattle died due to lack of water and pastures, especially the pregnant ones which had to endure walking long distances in search of water and pastures. This scenario indicates that food insecurity in Matabeleland South Province is a cause for concern because the people lose the means of production and this worsens their food security situation as draught power is lost, and as such farming becomes a difficult and labour intensive task for many families in the province.

5.2.5.3 EMERGENCY OF UNFAIR PRICING REGIMES

Food insecurity in Matabeleland South creates highly unfair and exploitative pricing systems. The people are duped of their belongings mainly livestock by bogus dealers. As indicated by USAID and FEWSNET (2012), Matabeleland South is the most affected province by pricing systems. The cattle dealers offer very minimum amounts for livestock purchases like cattle and the people will have no option but to sell, otherwise the cattle will be dying from starvation or lack of feed or other related diseases. The need to find cash to purchase other food-stuffs, mainly cereals, exerts pressure on local people to sell their livestock at very cheap prices. Thus, food insecurity in Matabeleland South has led to loss of assets through exploitative pricing systems in which the people have no decision making power; as a consequence, people are left even poorer due to this asset base loss.

More so, the food insecurity situation in Matabeleland South lead to exorbitant and unjustified prices on food stuffs by informal and formal traders. According to ZimVAC (2016), Matabeleland South Province has the highest prices in grain. Expenditure on food items per household is extremely high as compared to other provinces like Mashonaland West. In this regard, it is therefore apparent that the high level of food insecurity in Matabeleland South Province has culminated in unfair and unjustified food pricing systems. This further leads to suffrage of the local people, as the bulk cannot afford buying food due to the liquidity challenges affecting cash circulation in the economy. The poor people will continue to be pushed into the vortex of economic and social oblivion, as their buying power is weakened, people will be losing their precious assets to bogus and irrational traders.

5.2.5.4 MIGRATION

Migration leads to family disintegration. Evidence of migration of people from Matabeleland South province to neighbouring South Africa and Botswana is unquestionable. According to FEWSNET (2017), there is considerable income to families in the province coming from family members in the diaspora. While this can save the people from starvation or devastating effects of food insecurity, this has led to family disunity as husbands and wives spend long periods of time without meeting their loved ones. This situation has also the potential to spread out diseases like HIV/AIDS and other STIs, as levels of promiscuity will shoot up in the absence of spouses who will be distant apart. Thus, migration is a serious family unity threat generated by the food insecurity situation in the Matabeleland South Province.

5.2.5.5 ILLICIT BEHAVIOUR

High levels of prostitution are recorded in the high food insecurity zones. The people, especially young women and girls, are turning to prostitution as a coping strategy to food insecurity. Kadzunge (2017) posits that the high levels of food insecurity in the Beitbridge District make them migrate to the border town to become sex workers. This trade surely comes with a very high price, that is, unwanted pregnancies and sexually transmitted diseases. Thus, food insecurity in Matabeleland South has led to moral decadence as people turn to unruly means of survival.

Thieving has also become rampant and this is also attributed to the food security situation, which is deplorable. According to Kadzunge (2017), high stock thefts are recorded in Insiza district where food insecurity topped in 2016. This proves that there is a relationship between illicit behaviour and food security status in a given community. When people are pressured by circumstances, they tend to adopt criminal strategies to cope in the face of hunger. Thus, there is need to develop a sustainable food security model for Matabeleland South Province to arrest food shortages with regards to accessibility, availability, and utilization among other aspects.

5.2.6 GENDER DIMENSIONS TO THE FOOD SECURITY SITUATION IN MATABELELAND SOUTH

According to ZimVAC (2017), widows, orphans and female-headed households are the most affected by food insecurity in Matabeleland South Province. The chronically ill and the elderly are also part of the group of mostly affected populations. FEWSNET (2016) also concurs with ZimVAC that women and children, apart from the chronically ill, are deeply affected by food insecurity compared to their male counterparts. This means that households with more men are less likely to be affected by critical food shortages, in comparison to female dominant households. In a situation where female-headed households are the most affected, there is a need to develop food security models that are sensitive to the needs of vulnerable populations like women and children as well as the elderly.

A divergent view of the gender dimension to food security situation in Matabeleland South Province is portrayed by the Smart Survey (2016), which indicates that boys are the most vulnerable group to malnutrition. The survey report points out that acute malnutrition, stunted growth, and underweight as well as mortality, affect more boys than girls. This assertion gives a different view that women and girls are the most affected and vulnerable group to societal disasters. In this case, the point to drive home is that food insecurity in Matabeleland

affects both men and women, and as such there is need to develop and implement an all-encompassing food security model which addresses the food security needs of all groups of people in the province.

While both men and women affected by food insecurity in Matabeleland South province, it is still the case that women provide most of the labour needed in farming or agricultural activities. According to Kadzunge (2017), women and children provide the bulk of the labour for household agricultural activities, and this goes on when providing casual labour in farming activities to fend for their families. Kadzunge further asserts that although women and children are labour providers, they have less control or power over farm produce since they are subordinate to their husbands or male relatives. Thus, a food security model for Matabeleland South Province should also aim to empower women so that they will have decision-making powers in allocation and distribution of both resources and proceeds.

5.2.7 CHALLENGES TO FOOD SECURITY IN MATABELELAND SOUTH PROVINCE

The document analysis revealed that Matabeleland South Province face a vast number of challenges to its food security matrix. Just like what was revealed by the interviews and focus group discussions, the challenges to food security in the province are both man-made and natural. This means that a sustainable food security model should have the strategies to address this complexity of the food security challenge in the Matabeleland South Province.

5.2.7.1 LACK OF DRAUGHT POWER

Lack of draught power is a serious challenge to agricultural production, heavily and negatively impacting on food security situation in Matabeleland South Province. According to ZimVAC (2012), a considerable number, specifically nearly half of people in Matabeleland South province, has insufficient draught power. An alarming number of people has between one and three cattle, and this is not enough to provide draught power. The challenge of livestock for draught power is further cemented by FEWSNET (2017), which asserts that livestock conditions are a factor in explaining the food insecurity situation in Matabeleland South Province. Thus, a sustainable food security model should address issues of restocking of livestock, as well as best practices in management of farm animals in order to maintain a livestock base able to sustain and support agricultural activities in the province.

5.2.7.2 LACK OF ADEQUATE WATER

Another issue pointed in document analysis was the insufficient water resources, regarded as one of the major hindrances to agricultural production and food security. FEWSNET (2017)

posits that crop production in the province is greatly affected by marginal rainfall patterns of between 450 mm to 500 mm annually. For a province with persistent water challenges, there is need for bulk water projects to support the crop production activities. In light of this situation, it becomes apparent that water shortage is a natural phenomenon in Matabeleland South Province. It is obvious that the province needs sustainable redress mechanisms, which will go a long way in averting the problem of food insecurity in the province.

Kadzunge (2017) points out that malfunctioning of available alternatives to water problem exacerbates the food security situation in Matabeleland South Province. Most irrigation projects in districts like Beitbridge, Mangwe and Insiza are operating below capacity because some of the equipment has broken down. This means that maximum crop production is being hampered by lack of adequate water supply alternatives to complement the minimum rainfall patterns in the province. This situation has a negative impact on the food security situation in the province.

5.2.7.3 LACK OF AGRICULTURAL INPUTS

Lack of agricultural inputs like fertilizers and seed greatly hampers food production in Matabeleland South Province. According to FEWSNET (2016), at the beginning of each agricultural season most households will not be having seed and fertilizers to carry out their agricultural activities. In situations when agricultural inputs assistance is provided, the inputs come very late and this does not help much for a province characterised by the lowest level of annual rainfall amount. Thus, for Matabeleland South Province to be food secure, there is need for adequate food supplies in time so that people and farmers make the best use of the little available rainfall.

5.2.7.4 INFERTILE SOILS

The issue of bad soils is pointed out in document analysis as a major natural obstacle to food security in Matabeleland South Province. Just as indicated in the interviews and focus group discussions, the province is covered in sand, especially in those areas occupied by the communal farmers. Kadzunge (2017) posits that the farmers in the province receive a poor yield per hectare because the soils are nutrient deficient coupled with lack of fertilizers at the farmer's disposal. Thus, the natural terrain and environment pose a serious challenge to food production in the province negatively impacting the food security situation.

5.2.7.5 PEST OUTBREAK

Occasional and persistent out breaks of pest is a serious challenge and threat to crop production in Matabeleland South Province. FWESNET and USAID (2016) posit that in the traditionally arid regions in Zimbabwe, persistent bouts of army-worm greatly retard crop production and yields. If not controlled, pests have the potential to wipe almost all the expected yield. In Matabeleland South Province, the people are usually more reactive than proactive to pest problems. Response measures to save most of the affected areas come late. FEWSNET (2017) points that the 2016/2017 crop season suffered more from army-worm than from lack of rainfall in Matabeleland South Province. Thus, unsustainable measures to control pest outbreak in the province affect and deplete food production, thereby creating a serious food insecurity situation to the people.

5.2.7.6 ANIMAL DISEASES

It was noted that most livestock is lost through diseases. AGRITEX (2014) reports that cattle is lost through diseases like anthrax, blackleg and lumpy skin. Poultry is largely vulnerable to new castle outbreak. To top it all off, Matabeleland South Province receives the least veterinary services. The diseases on livestock pose a serious challenge to food security in the province. The lack of adequate veterinary services exacerbates the food insecurity situation, as many livestock is lost to diseases. Livestock play an important role in the food security matrix and as such, measures to ensure good health and maintenance of livestock base should be a matter of priority in the province

5.2.7.7 HUMAN DISEASES

Human diseases are cited as an obstacle to food security in Matabeleland South Province. It is apparent that diseases affect people's productivity. People with poor health are not able to maximize their full productive capacity; hence the high levels of food insecurity in disease affected families. According to ZimVAC (2016), the prevalence of food insecurity is high in chronically ill groups of people, the reason being that chronically ill people cannot provide sufficient labour to their farming activities. In light of this, it is prudent to assert that dealing with human diseases, which affect human productive activities, is of great importance in the design and implementation of a sustainable food security model for the province.

5.2.7.8 FLOODING AND HAILSTORMS

Flooding and hailstorms are becoming serious challenges to both, crop production and livestock production in Matabeleland South Province. For example, cyclone Denio in the

2016/2017 agricultural season, and El Niño in 2015/2016 agricultural season, destroyed fields in Matabeleland South Province, with the obvious consequence of reduced yield. In these cases, livestock were lost due to flooding, as animals were submerged or trapped by water. This means that disaster management components ought to be included or considered in the development of a food security model in Matabeleland South Province. The area is becoming highly prone to natural disasters, which affect crop and livestock production culminating in high levels of food insecurity in the province.

5.2.7.9 DISTANCE TO MARKETS AND FOODS DEPOTS

The distance to markets is a major challenge to food security in Matabeleland South Province in terms of access. The people in the province have no sufficient food to take them throughout the year; hence they have to rely on available markets for their food requirements. According to FEWSNET (2017), long distances to GMB depots keep people from purchasing in districts like Mangwe, where the nearest GMB depot where maize is available is only in Plumtree. This situation creates challenges to both availability and accessibility to food in the districts. As such, a number of people across districts endure food insecurity at household level.

5.2.7.10 CASH CRISIS

The macro economic conditions prevailing in the country are also heavily impacting on the food security situation in Matabeleland South Province. FEWSNET (2017) postulates that the continued liquidity challenges in Zimbabwe are a serious threat to food security in the province as there is shortage of both, the bond and US dollars, at people's disposal or in circulation. The cash shortages limit people's buying power. The result is lack of access to food even in situations where the food is readily available on the market. Thus national macro-economic problems are a serious threat to the food security situation, not only in Matabeleland South Province, but also in the country at large.

5.2.8 COPING STRATEGIES AT HOUSEHOLD LEVEL

The document analysis revealed that the people in Matabeleland South have over the years employed various coping strategies to their food insecurity situation. It is critical to note that some of the coping strategies employed by the people have the potential to become sustainable livelihood if well developed and managed. The coping strategies however lack sustainability because they are not coordinated and suffer from lack of reliable formal market

system; most products are supposed to end up in a market structure, which can benefit all the parties involved.

5.2.8.1 GOLD PANNING

The Matabeleland region is a mineral resource area as evidenced by gold deposits found in the area. Gold panning provides a life-line to many food insecure households in Matabeleland South Province. ZimVAC (2016), FEWSNET (2015), and the Ministry of Agriculture, Mechanization and Irrigation Development (2016) concur that gold panning activities are an integral part in solving the food security problem in the Beitbridge, Matopo and Insiza districts.

While gold panning has been mainly a man's preserve because of its labour intensive nature, women are increasingly getting involved in gold panning activities as a livelihood strategy in the province. The proceeds from gold panning activities are used to resolve family needs, such as clothing, school fees, and above all, food requirements for the households. In this view, it is therefore evident that gold panning is a solution to the scourge of food insecurity, although the activities are dangerous to the environment in short and long run.

5.2.8.3 MOPANE WORM INDUSTRY

Mopane worms provide a partial solution to the food security problem to many households in some districts of Matabeleland South Province. The worms provide relish and are a source of protein to households in areas like Mangwe district and Beitbridge district. Families can harvest enough worms to take them throughout the year in a good season. Besides being food to many households in the mentioned areas, the worms are a reliable source of income. Proceeds from the sale of Mopane worms come at hand to provide the money to buy other food requirements in the form of grain and cooking oil.

However, the industry, which has a potential to peak and realize maximum gains to the involved communities suffers from lack of coordination and poor marketing structures (USAID and FEWSNET, 2012). This results in people involved in the processing of the Mopane worms realizing minimum gains in comparison to the end distributors. This means that as a potential source of livelihood and as a coping strategy to food insecurity, the Mopane worm industry needs to be integrated and developed into a vibrant economic venture, which will help to improve food security in the Matabeleland South Province.

5.2.8.4 NON-AGRICULTURAL SKILLS UTILIZATION

A number of people in the Matabeleland South province employ other skills, which are non-agricultural in nature to cater for their food security needs. According to ZimVAC (2010), brick moulding is one of the prominent skills that give people a life line in critical food deficit situations. People resort to brick moulding for sale and the proceeds are used to procure household food requirements among others. However, brick moulding as also indicated in interviews analysis, is labour intensive and commercial marketing is difficult especially in a cash liquidity crisis.

5.2.8.5 EMPLOYMENT IN THE AGRO PASTORAL ZONE ACROSS BORDERS AND DIASPORA REMITTANCES

A number of people especially the youthful and productive generation are turning to South Africa and Botswana for employment. According to ZimVAC (2010), people in Beitbridge, Matopo, Insiza and Mangwe districts found jobs in the agro-pastoral zones along the South African and Botswana borders; this becomes a source of livelihood for many families. This entails that taking up employment in the neighbouring countries is, or has been a solution to solving the food security problem in Matabeleland South Province.

Diaspora remittances provide the people back home with the much-needed cash to purchase food-stuffs. FEWSNET (2016) highly regards remittances from relatives in the diaspora as key in arresting the likely devastating effects of food insecurity in Matabeleland South Province. Given such a situation, it becomes apparent that the geographic positioning of the province plays a crucial role in affording the locals an opportunity to cross borders to find jobs that allow people send home money to meet food requirements. However, it is critical to note that of late the flow of remittances has been negatively affected by liquidity challenges in the country as many people living outside the country are finding it extremely hard to send money home.

5.2.8.6 AGRICULTURAL DIVERSIFICATION

USAID and FEWSNET (2014) posit that, diversification has turned out to be a practice slowly gaining importance in some households in Matabeleland South Province. People are beginning to diversify their crop farming adopting small grains like sorghum and millet, which had been abandoned for maize crop earlier. Small grains do well in the arid regions as they are adaptive to drought conditions and are also resistant to crop diseases. However, the small grains are heavily affected by birds, plus many people also regard the work with small

grains as labour intensive on their farms. Nevertheless, diversifying by growing of small grains has played a crucial role in bettering the food security situation at household level in Matabeleland South Province.

5.2.8.7 CASUAL LABOUR

Casual labour has over the years turned to be an immediate and most accessible solution for food security problems to many poor families. In Matabeleland South Province, casual labour is rated amongst prominent livelihood options (ZimVAC, 2010). The people provide casual labour to mainly A1 and A2 Model farmers who in turn pay them with grain or cash, which can be converted to food items. However, returns from casual labour provision are reportedly low and it is normally the poor of the poorest or the poverty stricken who take up casual labour provision as a solution to their food woes. Thus casual labour while it is a solution providing a life line to many starving families, it remains a preserve for the most vulnerable groups of people like women and children who are unable to undertake other options like mining.

5.2.8.8 PETTY TRADING AND MONEY LENDING

Money lending and petty trading have emerged as crucial coping strategies among rural people in Matabeleland South Province. Furthermore, money lending clubs have also emerged in rural villages. Women are the most people involved in the money-lending clubs, thus this has been a coping strategy to female-headed households. However, the same report by FEWSNET points out that the operations of money lending clubs have been hampered by the liquidity challenges in the economy. Many of them are falling, as monies, which are supposed to be revolving and generating interests, are not recovered either in time or for good.

5.2.8.9. DEVELOPMENT AGENCIES AND GOVERNMENT INTERVENTIONS

The government and non-governmental development agencies have played a crucial role in designing and implementing programmes to save people from starvation and food insecurity. However, given the magnitude of the level of food insecurity in Matabeleland South Province, the interventions have been far short to save all the vulnerable populations or groups of people. In this regard, a number of households continue to suffer from high levels of food insecurity and its associated impacts in the province.

5.2.8.10 FOOD HANDOUTS

The people in Matabeleland South Province have been receiving food assistance from the government through the Department of Social Welfare. FEWSNET (2017) indicates that over the years the Social Welfare Department comes at hand to assist people with food, mainly grain and beans. The most vulnerable population such as the chronically ill, the elderly, child-headed families and female-headed households is the target group.

Apart from the government assistance, the people also receive food handouts from non-governmental organizations. For example, the Amalima programme (which takes its name from the Ndebele custom by which communities come together to help each other engage in productive activities such as land cultivation, livestock tending, and asset building), supported by the USAID, has helped to fight malnutrition by giving food support to lactating mothers as supplementary feeding. The National Schools Feeding Program is also supporting Grade 1 to Grade 3 pupils with supplementary feeding providing cereals and beans at schools in the province. Thus, food handouts come at hand in Matabeleland South Province to avert the impact of food insecurity in the province.

5.2.8.11 SAFETY NET PROGRAMMES AND SOCIAL CASH TRANSFERS

Safety net programmes have been availed by developmental organizations to cushion the people from starvation and food insecurity. Organizations like World Food Programme and Care Zimbabwe have rolled out harmonized cash transfers to vulnerable groups of people in Matabeleland South Province. The cash transfers are between \$10 dollars to \$30 dollars per month and the amount depends on the family size (ZimVAC, 2016). At times, the cash transfers have been reportedly disbursed late to the people, thereby straining the people in terms of how to acquire food provisions. While these transfers come at hand to save people from critical food shortage, the amount of money given to the families is far insufficient to cater for family's needs, considering the cost of living with regards to food and other non-food items. Thus, there is need to develop more sustainable safety net programmes to ensure a better standard of living with food security included.

5.2.8.12 ANIMAL VACCINATION AND QUARANTINE PROGRAMMES

The government has been rolling out the livestock vaccination programme in Matabeleland South Province to save the livestock base from threatening diseases such as anthrax, black leg and lumpy skin. According to AGRITEX (2017), the livestock vaccination and quarantine programme has been running since 2012 up to 2016 in all districts in the province, namely

Mangwe, Beitbridge, Matopo and Insiza. This has helped to prevent spread of livestock diseases into or from the province. However, this programme has been affected by lack of enough funds for the required vaccines. Thus, animal disease control is key to solving and averting the food security challenge in communities and the government has been providing that support in the province.

5.2.8.13 THE GRAIN LOAN SCHEME

The grain loan scheme has been one of the interventions extended to people in Matabeleland South Province to save them from the scourge of food insecurity. Under this scheme, people are allowed to access grain from the GMB which they will pay later upon harvesting their own crop in the next season (FEWSNET and USAID, 2012) However, the continuity of this programme has been threatened by lack of funding as some beneficiaries are not willing to pay back the loaned grain.

5.2.9 PROSPECTS OF SUSTAINABLE FOOD SECURITY MODEL IN MATABELELAND SOUTH PROVINCE IN LINE WITH ZIMASSET CLUSTER ON FOOD AND NUTRITION

From the document analysis, a number of submissions have been identified as key to promoting sustainable food security in Matabeleland South Province. These submissions indicate that despite the geography of the province characterised by low rainfall patterns, there is potential for improving the food security situation in the province using available resources and taking a multi-sectoral approach in food security programme design and implementation.

5.2.9.1 IRRIGATION AND WATER RESOURCES DEVELOPMENT

Development of irrigation facilities as well as rehabilitation of available ones is of paramount importance to promote food security in Matabeleland South Province. According to information from AGRITEX (2014), the province is home to a number of irrigation facilities, which are operating at below half capacity. For example the Beitbridge irrigation scheme is not producing much to save people from starvation; the same goes for Ingwizi irrigation scheme in Mangwe. Thus, it is only through water resources and irrigation development that the people in Matabeleland South Province can be saved from starvation or food insecurity.

5.2.9.2 DEVELOPMENT OF LOCAL INDUSTRY

Promotion and development of the local industry to become a full vibrant industry is key to end food security woes in the Matabeleland South Province. According to USAID and FEWSNET (2016), the Mopane Worm Industry in the districts of Beitbridge and Mangwe

have great potential to develop into a full-fledged industry, providing employment and livelihoods to a number of people in the province. There is need to promote value chains in the province supporting local industry for the benefit of locals. The people in Matabeleland South Province need to realize maximum benefits from the Mopane Worm Business, unlike the current situation where the end distributor benefits more than the people who pick and process them. Thus, there is need for proper coordination of the industry to make it vibrant and profitable for the benefit of the local people in the province.

5.2.9.2.1 DISEASE CONTROL AND RESTOCKING

The Province of Matabeleland South has lost a greater part of its head of cattle to diseases like anthrax and black leg. According to Kadzunge (2017), livestock play a crucial role to livelihoods of the people in the province since crop production is not very vibrant. Thus, restocking and disease control is very necessary in the province as one of the people's livelihood base. The restocking programme and disease control will go a long way in averting the problem of food insecurity in the province.

5.2.9.2.2 INFRASTRUCTURE DEVELOPMENT

Access to food security is a great challenge to food security in Matabeleland south Province. According to Mabehla (2014), infrastructural development in terms of road networks is key to ensure people's access to food markets such as GMB. Local markets need to be established across districts so that people will not have to travel long distances to access food from far away markets. The issue of accessibility to markets is further cemented by FEWSNET (2016), which posits that the limited number of both formal and informal markets makes food inaccessible to many remotely placed households or villages in the province. Thus, infrastructural development is crucial to ending food insecurity woes in Matabeleland South Province, as it will help to solve availability and accessibility problems.

5.2.9.2.3 AGRICULTURE SUPPORT SCHEME

Agricultural support needs to be rolled out to the farmers in the province in order to promote productivity. Inputs need to be provided in time so that people make the best use of the little available rainfall water amount per season. Furthermore, as asserted and suggested by Kadzunge (2017), agricultural inputs need to be distributed on merit basis rather than on partisan basis. Many a times, agricultural inputs go to waste as the beneficiaries sell seed and fertilizers since they are get crushers through politics and not real farmers. In this vein, it is therefore prudent that political power should be demonstrated in community development

programmes, and this political will should separate real drivers of development from political get crushers who abuse and misdirect agricultural support to own selfish gains.

5.3.1 INTERVIEWS AND FOCUS GROUP DISCUSSIONS VERSUS DOCUMENT ANALYSIS - POINTS OF CONCURRENCE AND DIFFERENCE

There was a lot of concurrence in the data collected through interviews, focus group discussions and document analysis. The magnitude of concurrence indicates that the food security situation in Matabeleland South Province is a genuine problem, which can only be addressed by a people centred approach in designing and implementing sustainable food security strategies or models in the province.

Both analyses showed that the problem of food security in the province has been a life-time problem due to the geographic nature of the province where rainfall patterns are highly unreliable. The trend is that the people in Matabeleland South Province are food stressed category and have no food to carry them throughout the year. To this end, the analysis pointed to the development and full utilization of available water sources and irrigation to improve the food security situation in the province.

Common challenges to food security in the province were identified through both analyses. Lack of water for agricultural production, lack of enough financial support and loss of a considerable number of livestock were among the key challenges to agricultural productivity in the Matabeleland South Province. Thus, both analyses points to same challenges that need redress to avert food insecurity in the province.

The coping strategies identified by both analyses appeared to be the same. From both analyses it was pointed out that diaspora remittance is key in providing the means to acquire food in many households. Casual labour provision, petty trading and gold panning as well as brick moulding skills were also identified among key coping strategies across districts in the province.

The other point of concurrence in both analyses was on government and non-governmental food security interventions in the districts across the province. Both analyses acknowledged that food handouts, agricultural input schemes, and provision of irrigation facilities although not working at full capacity, have come at hand to better the food security situation in the province.

Both analyses pointed out that irrigation development and water resources, restocking of the provincial head and coordination as well as development of available skills and resources are key to addressing the problem of food insecurity in the province. There was concurrence that despite the province being in natural zone 5, where water is scarce, there is great potential for the province to become food secure through the full harnessing of locally available resources and community participation in design and implementation of food security projects.

An area of difference was found on one of ZimVAC assertions: there are better seasons when the province can have food available at household level at a sufficiency rate of 10-12 months per year. This was disputed by the FEWSNET, which argued that such measurements are based on food security assessment on A1 and A2 farmers, not the usual communal farmers who are food insecure for the greater part of the year. To this end, a food security model in Matabeleland Province need to be developed from grassroots where the real people affected by food insecurity reside.

Another slight difference observed between the two analyses was on the issue raised by the Smart Survey that boys suffer more or are the most affected by malnutrition in the province. The interviews had largely a different outcome on this issue as the responses showed that it is mostly women and girls who are more vulnerable to the scourge of food insecurity in the Matabeleland South Province. By and large, the food insecurity situation in the province affects both men and women, and as such, solutions to this problem should take a gendered approach.

All in all it can be asserted that the analysis from interviews, focus group discussions and document analysis showed a great deal of concurrence. This finding served as verification means to establish the authenticity of responses rose during the interviews. To this end, it is therefore prudent that the food security situation in Matabeleland South Province is of great concern because from both analyses, the problem of food insecurity in the province is a historical one and permanent solutions to its address have been long overdue. There is need to come up with home grown solution in addressing the food security problem in the province as yesteryear programmes suffered stillbirth because they were introduced from the top without full participation of the community in design and implementation of such programmes.

5.3.2 CONCLUSION

Matabeleland South Province districts are all faced with the same food security challenges, which need urgent redress through a sustainable food security model. The whole province grapples with food availability due to little rainfall received annually and underutilization of available water sources and irrigation schemes. In situations where food can be available within the province, access is limited to remotely placed households, due to long distances and lack of localized markets at ward or district level. Utilization of available food is also problematic across districts as people are not able to utilize what they have to save themselves from starvation. There are instances when some households will be having livestock at their disposal but at the same time children having malnutrition related deficiencies from lack of protein based foods.

CHAPTER SIX

6.0 THE FOOD SECURITY MODEL FOR MATABELELAND SOUTH PROVINCE

6.1 INTRODUCTION

The first part of this chapter discusses the study findings using the thematic approach and case study analysis. The chapter integrates the qualitative results from focus group discussions and key informant interviews and was followed by qualitative document analysis to find areas of concurrence. The chapter summarizes the current realities of food security in Matabeleland South Province in Zimbabwe particularly, in Mangwe, Matopo, Beitbridge and Insiza Districts. The key concept and issue deduced from the study findings included acknowledgement of severe food insecurity situation with attempts on food security intervention characterized by a top down approach, corruption and lack of political will by authorities.

The current section seeks to integrate the study findings and the results with participants' recommendations to develop a food security model purported to break away from the current system that embraces a top down approach and also characterized by lack of political will and alienation on political ground and corruption. This model is going to be used to implement the ZimASSET programme and other future macro-economic blue prints. The breakaway inherently symbolizes a change and improvement in food security situation, that is, livestock and crop production to the advantage of the Matabeleland South Province residents. The development of the food security model in Matabeleland South Province was also a fulfillment of the challenge that Bourdieu (1989: 24) posed about whether "science has never progressed except by questioning" the status quo. This section seeks to respond to Bourdieu (1989) call by recommending a model of action subjected to the scrutiny and validation of experts and stakeholders in the food security arena in Zimbabwe. Guidelines for implementing the model are also discussed.

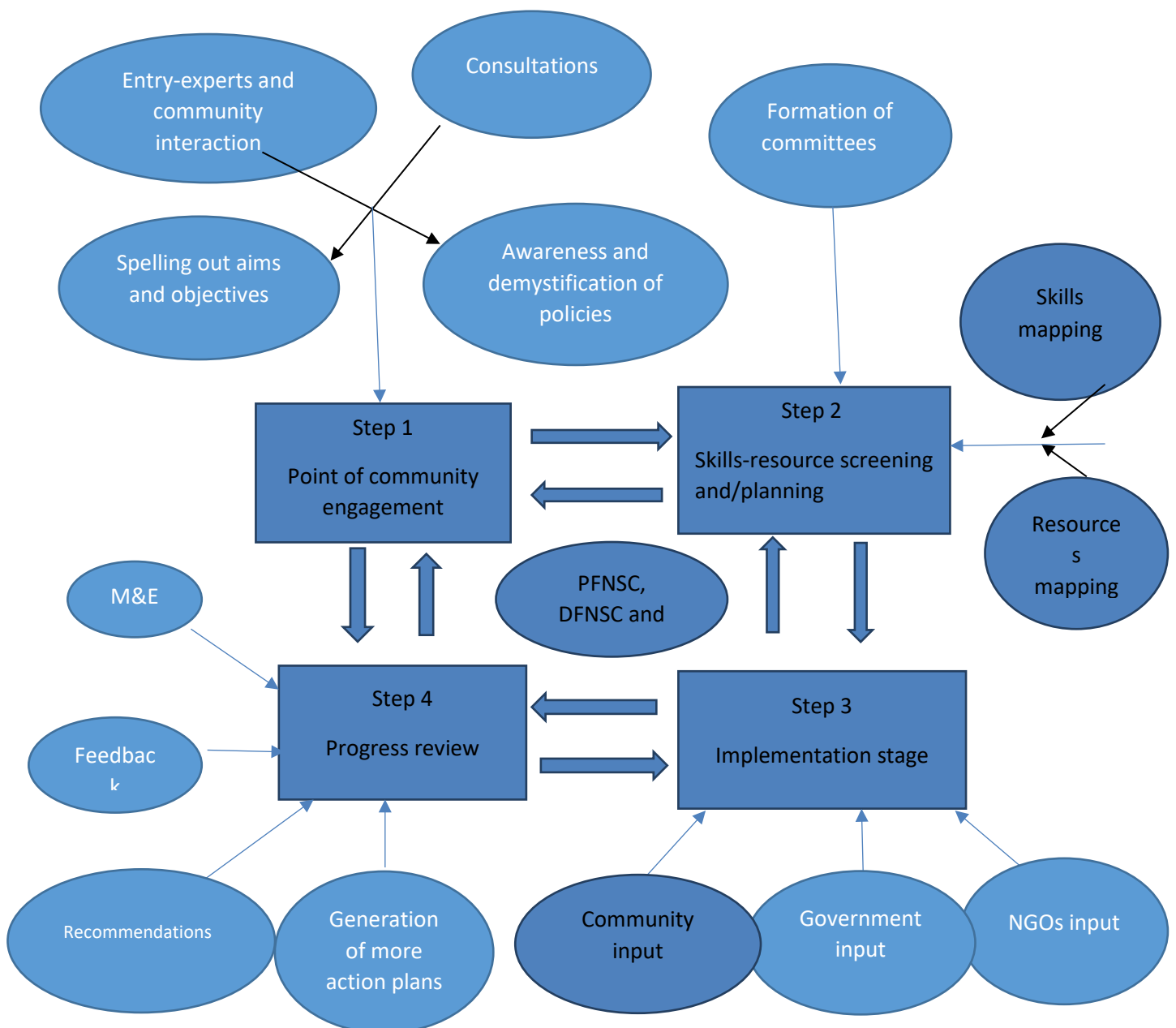
The final draft of the food security model is anchored on the premise of community participation to give it a prolonged life span. The food security model advocates for a new approach to food security interventions, and practice is foreseen to be autonomous from political interference. In the process, food security interventions will be disengaging from the current system, which has become so taken for granted as political machinations. In a way, according to Bourdieu's (2000: 185) thinking, the food security model becomes some form of

“symbolic hijacking” by challenging the orthodoxy present at the time of the model inception.

6.2 IMPLEMENTATION PROCEDURES

Figure 6.1 below shows the final graphic presentation of the preferred future food security model for enhancing a sustainable food security situation in Matabeleland South Province in Zimbabwe, as designed and constructed by study participants. The structuring of the model followed specific steps at all the levels from village level to the provincial level. Information sharing followed a two-way path at all stages or steps.

FIGURE 6.1 PROPOSED FOOD SECURITY IMPLEMENTATION MODEL FOR MATABELELAND SOUTH PROVINCE



6.2.1 THE PROPOSED FOOD SECURITY IMPLEMENTATION MODEL FOR MATABELELAND SOUTH PROVINCE IN A NUTSHELL

The proposed Food Security Implementation Model for Matabeleland South Province consists of four phases: i) point of community engagement, ii) skills-resource screening and/planning, iii) implementation stage, and iv) progress review stage. It is imperative to note that, the proposed implementation is iterative in nature, *i.e.*, it is very flexible and allow implementers to proceed or revisit mistakes for the common good of the community in as far as improving food security is concerned.

The first step is community engagement that is, the entry point where the local people or community first meet to interact with experts in the food security sector. This is a necessary stage where rapport is built on a more personal and grass root level. During the process of this study it was established that most of the intervention programmes implemented at the community lacked participatory edge. At this stage, that is where the community spells out aims and objectives, consultations are made with food security stakeholders, entry of experts where they will be interacting with communities, awareness and demystification of policies. For the purpose of this research and the objective of participatory process development, this is where aims and objectives of the intended programme are spelt and explained to communities. Communities need to be fully engaged at this particular phase.

The second step is the skills-resource screening and/ planning. Finding the skills available in the Province was very essential in order to find synergies and how the available skills can complement each other. The third step is implementation of the Development of a Model. It is at this stage whereby the communities affected by food insecurity recommended that there should be community driven food security intervention strategies. The last stage is that of progress review. At this stage, monitoring and evaluation is done at ward level, district level and Provincial level by the Ward Food and Nutrition Security Committees, District Food and Nutrition Security Committees and Provincial Food and Nutrition Security Committee. The monitoring and evaluation should be in a tripartite dimension, that is, progress of the interventions, identifying challenges and making necessary recommendations for improvement. Each stage will be thoroughly described in the next sections.

6.2.1.1 POINT OF COMMUNITY ENGAGEMENT

6.2.1.1.1 ENTRY POINT

Community engagement is the entry point where the local people or community first meet to interact with experts in the food security sector. This is a necessary stage where rapport is built on a more personal and grass root level. This is supported by farmers when one communal farmer in Makorokoro village in Mangwe alludes that, “sometimes you get surprised to see field officers of these Non-Governmental Organizations coming to us with the programme of conservation agriculture which is very labour intensive and which the community never agreed on.” One of the Chiefs in Beitbridge along the Limpopo basin also said, “if food security is to be improved the government and the development actors should consult the communities involved rather than bringing the programmes from Harare without any community consultation.” During the process of this study it was established that most of the intervention programmes implemented at the community lacked participatory edge. The District Agriculture Extension officer from Insiza District concurred with the community saying, “most of our programmes if not all are initiated by the central government or development actors.” This was also supported by the Provincial Agriculture Extension officer when he says: “What causes this most of the time [sic] the community might not be able to identify what needs to be done or it might take time to come up with something concrete in as far as addressing food insecurity in the province.” It was also clear that communities were not fully engaged in the process of deciding what was best for them. The following was said by the District Administrator who chairs the Rural District Development Committee: “most of the NGOs if not all of them, just come with their Memorandum of Understanding (MoU) for signing without any pre engagement with the communities to find out what is really the problem and how best can it be dealt with.” As such, it is important that local residents’ chairpersons, traditional leadership and the community at large, play a major role in mobilizing the people for this necessary meeting point or initial engagement, which this model development process aimed at accompanying.

6.2.1.1.2 SPELLING OUT AIMS AND OBJECTIVES

For the purpose of this research and the objective of participatory process development, it is here where aims and objectives of the intended programme are spelt and explained to communities. Communities need to be fully engaged at this particular phase. One farmer from Cross Roads area echoed that, “The program of Inyoni Katshana whereby extension officers from AGRITEX are advising to grow small grains that are not consumed by quilea

birds was good, but they did not tell us initially why we are growing that type of a variety.” In the data analysis phase it came out that some food security interventions suffered a natural death due to lack of buy in or support from the local people. In most instances community members were not aware of the aims and objectives of such programmes or interventions as they are brought to them at implementation stage; the programmes have been already planned in higher offices. The representative of farmer organizations (ZFU) said, “Conservation agriculture was not suitable for Matabeleland South Province, but the government and development actors did not explain that to farmers and it failed dismally.” Thus, for community members should be motivating to be part and parcel of a programme, necessary steps should be taken to make people understand the aims and objectives, which ought to be achieved by a particular programme or intervention.

6.2.1.1.3 INITIAL CONSULTATIONS AS ENTRY POINTS

Initial consultations are also made at this stage to establish what exactly the community needs and how they foresee and envisage their own development at local level. According to Chambers (1983), this activity aims to ensure high level of community participation from all angles. Women should be allowed to feed their input in the consultative level. During the data collection phase, it has been noted that, even if communities are involved, women participation is very minimal. One female farmer from Matobo District says: “Communities are not involved in the initial stages of the interventions, worse still in the local development committees. These committees are dominated by men. In other words, we are suffering from double exclusion.” The data analysis indicated that marginalized sections of the society have had no considerable input of views in previous interventions as they play a subordinate role. The physically handicapped ideas and views should also be encompassed at this particular level. This means a common language able to be understood by all corners of the community should be adopted and mechanisms to ensure that should be in place.

Understanding the problems that have been bedeviling the previous food security interventions in the province from the local peoples own point of view, becomes a necessity in the initial consultations. It was established that in most instances the program implementers have been lacking in articulating real problems affecting the sustainability of food security interventions in Matabeleland South Province. For example, the one size fits all approaches that have been advanced, meant that the program will not have all or many takers as local people in the province have varying skills and interests, which might not be impressed by the running project.

6.2.1.1.4 AWARENESS AND DEMYSTIFICATION OF POLICIES

It is crucial that at this initial phase full awareness and demystification of policies as political machinations is ensured and thoroughly done. In the data analysis there were strong indications or vivid evidence that the local communities have not been able to give or render their full support to programmes due to the general perception that its politics of vote buying. This was supported by one commercial farmer in Filabusi in Insiza that: “most communities think that, government policies are ZANU PF campaigning manifestos, as Members of Parliament are not able to differentiate the two.” As such, there is need for the intended programme implementers to come down to the grass roots to fully explain and create awareness of the programme. In this regard, the local communities understand that matters of their own community development need not to be taken for granted as mere political machinations.

6.2.1.2 SKILLS-RESOURCE SCREENING AND/PLANNING

The next step in model development involved screening and mapping available skills at the community level, this is necessary at this particular stage of the model. Both agricultural related skills and non-agricultural related skills existing in the community should be established. Mapping was necessary in order to find synergies and how the available skills can complement each other to come up with a more sustainable food security intervention strategy for the province. In the process, several skills were identified as critical: agricultural, non-agricultural, resource management related to water, land use, livestock, mining, tourism and energy. Additionally, there was a need to understand how markets and other non-agricultural livelihood food security mechanisms operate. The skills are described in the next subsections below.

6.2.1.2.1 AGRICULTURAL SKILLS

The data analysis reviewed that the people in Matabeleland South Province do possess agricultural skills in both crop and animal production, although these skills have not been put to maximum good use. The skills with regards to horticulture and market gardening are mapped at this stage, identifying people who are able in this regard. For instance, a considerable number of people interviewed indicated that they are capable of undertaking market gardening alongside animal rearing although they faced some challenges in the execution of their skills mechanisms to ensure that people make the best use of their skills to promote their food security of their community need to be fully adopted at all costs in the province.

6.2.1.2.2 NON AGRICULTURAL SKILLS

Non-agricultural skills are also abundant in the province; these include artisanal gold mining, brick moulding, bricklaying and electricians. These skills are mapped at this particular stage of the model to establish proportions of community members able to excel in this area. These skills can complement the existing skills on crop farming and animal husbandry to promote sustainable food security projects or interventions. People with similar or related skills can further form clusters, which work together to establish viable ventures enjoying economies of scale. The remittances or proceeds obtained will then feed into the Matabeleland South Province's food security equation.

6.2.1.2.3 NON-HUMAN RESOURCES

Available non-human resources in the province are identified at the particular stage as well. This is necessary to find out how these can be harnessed towards promotion of food security in the province. Despite a host of challenges, the province has a number of resources, which can feed into its food security equation.

6.2.1.2.3.1 WATER RESOURCES

The available water bodies and facilities are mapped at this stage to establish for instance their capacity and numbers. In the data analysis phase it came out that the province has water bodies in the form of dams, which can support agricultural activities in a province characterized by low rainfalls. The province has also boreholes dotted around or across, which can provide the water needed for both livestock and crop farming. This identification of the water bodies and facilities available across the province should take precedence at this particular stage in order to develop programmes for food security in the community. An attempt should be made to establish capacity of such water bodies to support agriculture.

6.2.1.2.3.2 LAND RESOURCE

Identification of potential land for irrigation purposes is a necessary step at this stage. The number of irrigation schemes already in existence need to be established against their capacity. It was established in the data analysis that the province of Matabeleland South has irrigation schemes dotted around the province, which regrettably have been operating at low capacity. Examples of these include Ingwizi and Beitbridge irrigation schemes. More land for irrigation is identified at this stage as it was established that rain fed agriculture is highly unsustainable in region 5 where the province is located.

6.2.1.2.3.3 LIVESTOCK

Livestock base and pastures should be a key arm of agriculture identified and established at this stage of the model. Naturally the Matabeleland region is regarded as the animal husbandry area in Zimbabwe. The type of animals to be kept will need to be established. In the data analysis, there is evidence that cattle, goats, sheep and wild life can do well in the province. Thus, considering serious uptake of animal husbandry projects is key to promotion of sustainable food security in the province.

6.2.1.2.3.4 MINING

Mining potential of the province should be better articulated at this particular stage of the model. It is a fact that the province of Matabeleland South is abundant with minerals like gold in areas like Beitbridge and Gwanda. How artisanal small-scale miners can be integrated into the mainstream mining activities is part and parcel of this stage. The people reviewed during interviews that they possess artisanal mining skills but these have not been formalized to realize full benefits. The people involved in the mining of gold in the province are largely regarded as illegal gold panners.

6.2.1.2.3.5 TOURISM

Mapping the tourism sector is crucial at this stage of the model. It was established from participants in interviews and focus group discussions that the province is a tourist hub as evidenced by the presence of wild life, which occasionally destroys their crops. This means that the community can benefit either through community share ownership trusts and joint ventures in the tourism sector. Proceeds will then feed into the bread basket of the province.

6.2.1.2.3.6 ENERGY RESOURCES

Mapping of potential and available energy resources is key at the stage of the model to promote viable food security interventions. The interviews and focus group discussions indicated that irrigation farming has failed due to lack of constant electricity supply to run the pumps and other electric equipment. The province, which is characterized by sunny and hot weather conditions, has great potential for solar energy production, which is cheaper than hydro-electricity and only attracts a once off payment with no monthly charges.

6.2.1.2.3.7 NON-AGRICULTURAL LIVELIHOODS

Non-agriculture potential livelihoods are also identified at this phase as part of the screening process. Food security is not only supported or promoted by agricultural related ventures but by other forms of livelihoods. For instance the information in the data analysis phase points

out that the province has a potential Mopane Worm Industry, which has the prospective to boom in a well-integrated value chain. Areas like Beitbridge and Mangwe are abundant with these worms, which are a special relish sought after by many in Zimbabwe.

6.2.1.2.3.7.1 MARKETS MAPPING

Potential market mapping is crucial at this stage as well. It was established in the data analyzed that most of the marketing in the province takes place at non-formal market places. The result is ripping off of the local communities of their livestock and crops by unscrupulous dealers. The District Agriculture Extension Officer for Mangwe supported this by saying, “this district has got palatable grass and the meat as well is of good quality, but the problem is that, there are no buyers who can buy beef at good prices. This exposes farmers to unscrupulous buyers.” It is essential that strategies on improving and establishing markets be considered to ensure access of food by local people. For instance in Mangwe it was established that the nearest Grain Marketing Board is in Plumtree, which is a very long distance for people who are remotely placed in the province. Thus without proper market structures, even in situations where food is available in the province, it can still be inaccessible to those who are far from the market. Also farmers in Matobo District echoed the same sentiments when one of them say, “here at ARDA Khezi we produce good quality maize, tomatoes and green vegetables but buyers are buying our farm produce with very low prices which do not allow us to produce the next season.” More so, people who want to sell other goods to convert to other food items end up using informal channels of marketing through which they are liable to being duped by unscrupulous agricultural dealers.

6.2.2 FORMATION OF COMMITTEES

Committees to deal with various aspects that feed into food security model are formed at this stage. These committees should be headed by people with know how of the functions at that particular committee. This means appointments will be based on merit and not on partisan basis as has been the situation in previous years, revealed by the participants during interviews and focus group discussions. The District Agriculture Extension officer for Beitbridge supported that: “the District Food and Nutrition Security Committee should be rejuvenated since it uses the top down approach though it cascades down to the ward level, but at village level it needs to be strengthened.” For this model, it is necessary that there be a livestock committee dealing with livestock or animal husbandry issues like animal disease control and restocking, Cropping farming Committee must be dealing with crops and plant farming; water committee dealing with water availability and development issues; skills and

capacity building committee, and non- agricultural skills committee working to integrate such skills into the model for food security in the province. At the apex of these small committees there will be a District Food and Nutrition Security Committee and the Provincial Food and Nutrition Security Committee.

The committees are formed from the village level and it is the community who chooses its representation in those committees. This is done to ensure accountability and transparency in the dealings of such committees. Reports from Key Informant Interviews (KII) and Focus Group Discussions (FGDs) indicated discontentment about how committees are selected, it was denounced the infiltration of political individuals who are corrupt and concerned with personal aggrandizement and advancement of political ambition. One female farmer from Beitbridge said: “ward councilors execute their duties on political grounds as they do not want people from other parties to benefit from the Presidential Input Support Scheme (PISS).” From the village committees there should be ward committees, followed by the district committees and lastly the provincial committee. Surprisingly, there is only the District Food and Nutrition Security Committee (DFNSC) and the Provincial Food and Nutrition Security Committee (PFNSC).

It is critical to note that at every level and across levels of these committees, information and idea sharing is a two-way path. Previously, information was dictated from the top. This means that programs were imposed on people and not home grown. Data analyzed proved that the information sharing was limited with previous Ward Food and Security Nutrition Committees (WFNSC), whose members displayed high levels of arrogance and political alignment. This is one of the reasons why programs have failed to yield meaningful results in previous years.

6.2.3 IDENTIFICATION OF SKILLS GAP

Identification of skills gap at this particular stage is also vital to ensure that people are trained and become productive in the province. It became clear in the data analysis that there are members of the community who possess zero skills. In this instance some sections of the people interviewed called for vocational training of the productive age groups especially the youth in agricultural related courses and other skills like apiculture, and tourism and hospitality, which can form part of the livelihoods base hence the promotion of food security.

6.2.4 IMPLEMENTATION STAGE OF THE DEVELOPMENT OF A MODEL

6.2.4.1 COMMUNITY INPUT

To curb food insecurity in Matabeleland South Province, the participants recommended that there should be community food security projects, which are designed and mooted by the same community. This improves community ownership which is a necessary factor to sustain the food security implementation model. Projects mooted in the community were projected to reduce the likelihood of severe food insecurity with regards to availability, access, utilization and stability. The other area where community can inject is through provision of skills they have in the implementation of food security intervention. For the community food security projects to suffice and be sustainable, and this will help to desist from the dependency syndrome, which has largely crippled some members of the community. Without contributing meaningfully to the interventions, it is likely that the Matabeleland South Province community will not be in a position to develop a sense of ownership to programmes designed to ease their food security situation. People tend to work hard and put extra effort in projects which they would have contributed either financially, ideally or with assets.

6.2.4.2 NEED FOR GOVERNMENT INPUT

The participants advocated for funding to financially aid programmes that facilitate the promotion of food security in Matabeleland South Province. Such funds would assist the people in the province to pursue their areas of interest (animal husbandry and crop production) as well as other non-agricultural projects, which can feed into the food security equation through promotion of livelihoods. The bottom line is that the economic capital, which refers to real money and possessions, was not available to most people in the districts across the province. The researcher observation and analysis indicated that there has not been enough commitment on the part of the government to fund bulk projects for food security interventions at a more localized level in the province.

The government has been giving food handouts through the Department of Social Welfare and the handouts have not been able to cater for all the affected people. In other words, there seemed to be a presence of alienation in support of farmers from the government or their social support system. In the projected future, the food security model would take cognizance of the fact that central funding should be shared on non-partisan bases in terms of inputs and agricultural equipment. Without funding, it is likely that food security interventions will not yield much to reduce the food deficit situation in the province.

6.2.4.3 IMPORTANCE OF NON-GOVERNMENTAL ORGANIZATIONS INPUT

The non-governmental organizations play a complementary role to the government. Where a government fails to provide for its citizens in need, the NGOs can chip in with their assistance to improve availability. NGO input can be in the form of technical assistance, inputs, equipment and handouts, this increases crop production and hence makes local communities to be food secure. It was revealed in this study that NGOs have been coming at hand to save people from hunger in the province. However, it also came out that most NGOs have concentrated on food handouts, and this creates a dependency syndrome on the community. Some NGOs give people money so that they can be able to access food from the shops. Some technical participants like the AGRITEX officer called for sustainable ways of curbing food insecurity in the Matabeleland South Province, through provision of lasting solutions to the problem through establishment of food security projects and adoption of crop varieties suitable for the area. The issue of food stability is addressed when NGOs fund health clubs in both the community and schools for the feeding programmes to avoid malnutrition related illnesses. Organizations should desist from concentrating on temporary solutions to the food security problem in the Matabeleland South Province.

6.2.4.4 PROGRESS REVIEW

6.2.5 MONITORING AND EVALUATION

Follow-up of implemented projects or interventions was viewed as imperative by the participants. They suggested that it could be best done by AGRITEX and other agricultural expert staff working in government and other non-governmental organizations. As the participants emphasized, the monitoring and evaluation people members must be trained. The follow-up should be focused on three areas: i) progress of the interventions, ii) identifying problems or challenges, and iii) making necessary recommendations for improvement. The technical participants in the study consistently highlighted the need to engage the local community in the follow-up process. Follow-up was furthermore projected to increase the social cohesion between technical people and local community, and ensuring further development. In the food security model, follow-up would maintain the focus of the implementation team so that sustainable food security ventures will be promoted. At the time of the study, there seemed to be limited follow ups with regard to support especially in irrigation schemes and command agriculture schemes.

6.2.5.1 FEEDBACK

Giving feedback is one important aspect in this food security model for the province. It has been observed that project implementers in the yesteryear programmes have never taken feedback as an important aspect in promoting viable community projects. During the interviews participants complained that when their issues are taken up to higher offices, there is no feedback to the community to inform or enlighten them of responses or what transpired in high level meetings. It is critical that upon a monitoring and evaluation exercise, the people in Matabeleland South Province should be informed of the results gathered so that they move along with the projects. In a situation where community members have enough feedback to on-goings in their own community projects, the community can as well input its own ideas on what needs to be done to advance or improve the programs or projects.

6.2.5.2 GENERATION OF NEW ACTION PLANS

Generation of new action plans is necessary at this particular stage of the model. What is utmost important at this stage is a participatory approach in the generation of new action plans for running food security programmes. The people of Matabeleland South Province should be accorded an opportunity to participate fully in coming up or developing new strategies for food security promotion in the province. Indications in the data analyses point out to a situation where planning of projects meant to benefit local people is done at the top and then brought down to be imposed on the community.

6.2.5.3 RECOMMENDATIONS

Under this model, the question of making recommendations for programmes and course of action to be followed need to be vested more in the community affected. The development actors, in this case the projects implementers, should follow closely people's wishes with regards to choice or typology of programmes to be implemented in the drive to promote food security in the province. More often than not as was revealed in the data analysis phase, the implementers bring in their own set of recommendations and this has brought more harm than good to food security projects in the province. It has been established that in situations where people cannot recommend their choice of programmes, the sense of ownership of such programmes by the community is far limited due to lack of involvement. Commitment to projects which the people had no full participation remains a stumbling block to the development of food security interventions in Matabeleland South Province.

6.2.5.4 SUMMARY

This part of the chapter discussed the food security model for Matabeleland South Province in Zimbabwe. The thrust of this study was to develop a food security model reflecting a systematic and comprehensive guide adopting a grassroots participatory approach in Zimbabwe. The goal was to re-frame to a more people centred model to promote sustainable and long lasting food security intervention in Matabeleland South Province and Zimbabwe at large that is articulated around social, economic and cultural resources of the people concerned. At the present moment, the un recognition of the local people in project cycles has fostered lack of interest on the part of the community people in food security interventions rendering the processes ineffective and bastardized as implied by Bourdieu (1984c: 7).

The model was focused to drive food security interventions in Zimbabwe into a new community participatory, home grown and locally relevant realm. Validation of the model was also done by the stakeholders and experts who modified the original version of the model to what it eventually evolved to become.

CHAPTER SEVEN

SUMMARY, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

This chapter presents and summarises conclusions and recommendations, as well as limitations with regard to the development of a food security Implementation Model in addressing food shortages in Matabeleland South Province. The section also covers the theoretical frameworks that helped to inform the study, and also the literature and methods used to review such literature. The methodology used in the study is also covered in this chapter. The conclusions and recommendations made are aimed at creating sustainable, harmonious, well-coordinated, stable and productive food security interventions, guided by the model used in Zimbabwe, Matabeleland South province in particular. All what the model provides should be borrowed when implementing the ZimASSET blue print and any other macro-economic blue prints.

In Chapter 6 the build-up towards the food security Implementation Model for addressing food shortages in Matabeleland South province in Zimbabwe was presented. This was based on qualitative findings from key informant interviews, focus group discussions and document analysis weaved in the Constructivist Grounded Theory on which this study was rooted. The study was driven by the research question: “What should a food security model consist to address food shortages in Matabeleland South province in Zimbabwe?” The challenge with this research study was to develop a specific and unique food security implementation model for Matabeleland South Province, which was non-existent in Zimbabwe at the time this investigation was conducted.

This is the first study aimed at developing a food security model to be conducted specifically for Matabeleland South Province in Zimbabwe. In view of this assertion, this work is an original contribution to both general community development discourse and food security policies, and therefore to world knowledge body. The focus in this chapter is to bring to a close the endeavour of this study. This chapter permeates through the summary of how study objectives were achieved, points out the limitations of the study and makes recommendations in view of the findings and results.

7.2 SUMMARY

The researcher used the chronological way of reviewing existing literature with regards to current trends and realities of food (in) security, and factors affecting farm household food security status internationally, continentally, regionally and locally. Yesteryear food security interventions were also reviewed. Indications are that, continents such as Latin America and Africa experience acute food shortages due to structural inefficiency and deficiency, diseases and haphazard, top down development strategies. This was the situation in Bolivia and Kenya, cases widely discussed in this investigation. The study shows that, much has been written on food security but no attempts have been made on developing a bottom up specific and unique Implementation Models for communities like Matabeleland South Province to address food insecurity or crisis. The research has identified this knowledge gap, which sought to address by engaging all food security stakeholders using the bottom up approach in the province.

The study employed two theoretical frameworks that is, the Entitlement Theory and the Systems Theory. The Entitlement Theory perfectly suits the study as it clearly answers research question one: what are the current trends and realities of food (in) security in Matabeleland South Province; and question two: how have food security implementation models worked in other countries to address food security. On the other hand, the Systems Theory answers research questions three and four, which are: which food security implementation model can be developed to unpack the prospects of the Zimbabwe Agenda for Sustainable Socio Economic Transformation blue print; and what processes are involved in validating a food security implementation model. The Entitlement Theory by Sen Amartya helped to establish the current trends and realities of food (in) security in Matabeleland South Province and also how food security implementation models have worked in other countries to address food insecurity. The Systems Theory contributed on the type of food security implementation model for Matabeleland South Province and also the processes that are involved in validating the food security Implementation Model.

The study used purely qualitative research methodology. The researcher employed qualitative research design and employed qualitative research instruments that is, Key Informant Interviews (KII), Focus Group Discussions (FGDs) and Document Analysis. This was done to mine and gather emotional responses and purely descriptive answers without modifying the state of society or community of Matabeleland South Province. By nature, phenomenological research design is explanatory and therefore gives room for contextual

analysis. Purposive sampling, that is critical case and expert sampling were employed as a way of targeting resourceful persons and districts which were hardest hit by food shortages, while at the same time safeguarding that, the sample reflects the general populace. Focus Group Discussions were used to gather data from ordinary settlers and farmers. Key informant interviews were employed on ward, district and provincial food security task force and other office bearers involved in food security issues to extract rich information, while observation was complementing those other methods. During the course of the study, the researcher upheld ethical considerations such as seeking informed consent and respect towards research participants. The differing research instruments were used together so that one method is used to contend the short falls of the other instruments.

The study was conducted in two stages. First and foremost qualitative data was collected and analyzed using Focus Group Discussions and Key Informant Interviews. Inductive and deductive reasoning facilitated synthesizing the data on the food security situation in the Matabeleland South Province of Zimbabwe. The second stage consisted of document review and analysis. Data analyzed from both stages was organized into themes concepts that represented and described the current trends and realities of food security or insecurity in the Matabeleland South province of Zimbabwe.

Data analysis was done using a Thematic Approach to avoid loss of important data during analysis. Presentation and discussion of research findings was done using the thematic approach. The research revealed that, agricultural interventions in Matabeleland South Province are under performing, contributing less to the province's bread-basket, which leaves the bulk of the populace in critical food shortage. The study findings pointed to the invisible hand of politics, maladministration by authorities like Agricultural Rural Development Authority (ARDA) and Rural District Councils, misconceptions and misinterpretations of government policies, corruption and lack of finance on the part of the local authority, as well as environmental conditions. Role ambiguity among the Rural District Councils, local community and traditional leaders is regarded as the second chief impediment to achieve food security, this ambiguity discredited yesteryear interventions in trying to address food shortages in the Matabeleland South province. The imposition of development programmes was the chief retarding factor in addressing food insecurity in Matabeleland South Province. The research indicated that, the people in Matabeleland South Province encounter acute shortage of social amenities to help them buy inputs to increase agricultural output. More so, politics cannot be discounted for causing and catalyzing the process in the province.

The findings showed dislocation and dissonance between and within the local farming community, local leadership and government parties involved in community development and food security interventions, hence the ensuing effect that negatively affected the outcome of food security interventions in the Matabeleland South province of Zimbabwe.

The study developed and availed the food security implementation model for Matabeleland South Province in Zimbabwe as envisaged by the overall aim and objective of the study. The model developed does not only depend on the life span of the ZimASSET programme, but rather implemented beyond ZimASSET. The study participants included stakeholders and experts in the agricultural field, development agencies officials, local farming community, local authorities and traditional leadership. It utilized Grounded Theory as a paradigmatic perspective, Social Constructivism as its meta-theoretical grounding and the Systems and Entitlement Theories as its theoretical models.

Conclusions on the lack of sustainable food security interventions were wide and varied, ranging from possible disillusionment of the local community on how best they can tackle their food security problem to possible lack of resources for agricultural purposes. The food security model then evolved from the integrated themes and concepts of the qualitative research findings and the results of document review as well as from peer review sessions.

7.2.1 FLOW OF THE STUDY

The study had a set of objectives and set out to achieve these objectives. The first two objectives of the study constituted objectives that sought to analyse the situation of current trends and realities on food security, while the last two objectives drove towards development of a food security Implementation Model for Matabeleland South Province. The objectives included:

- i. To explore food (in) security within the context of the Zimbabwe Agenda for Sustainable Socio Economic Transformation (ZimASSET) blue print in Matabeleland South Province.
- ii. To assess how food security Implementation Models have worked globally, regionally, nationally and locally to address food insecurity.
- iii. To develop a specific food security Implementation Model that addresses food shortages in Matabeleland South Province.
- iv. To validate the food security Implementation Model for Matabeleland South Province with print with experts and stakeholders.

All these objectives were achieved and were part of Chapter 1 of this study. This culminated in the development of a food security Implementation Model for Matabeleland South Province in Zimbabwe.

7.2.2 PROCESS OF DEVELOPING THE FOOD SECURITY MODEL FOR MATABELELAND SOUTH PROVINCE

The development of the food security Implementation Model was based or anchored on the findings, results and recommendations of the stakeholders not undermining the community as number one stakeholder. After the initial draft of the food security model had been crafted, a validation exercise was done with major food security stakeholders and experts. These stakeholders and experts from the food security sector suggested alterations and realignments. The factors that would activate the model were explained in Chapter 4 as well. Generally, the food security implementation model for addressing food shortages in Matabeleland South province was positively accepted.

Peer review of the study findings and results was also done through a conference with food experts and academics. Two meetings were also done with the Provincial Food Security Committee and the local community. At these gatherings, the paper, ‘A Food Security Model for Addressing Food insecurity in Matabeleland South Province of Zimbabwe’ was presented.

The following is a documented peer review statement by one of the delegates at validation meetings:

Your presentation took this topical issue of food security in Zimbabwe to another level. People in Arid regions of Zimbabwe were often completely lost in the food security endeavours as if they do not deserve a stable availability, access and utilization of food resources.

7.3 CONCLUSION

Not undermining or underestimating the current reality of food (in) security situation in Matabeleland South Province where the bulk of the population is in critical food deficit as availability, access and utilization are compromised, there is potential to correct the situation as expressed by the willingness and zeal by the local people if rendered enough support in terms of human and non-human resources.

The data extracted from the research naturally made one to safely conclude that, the food security situation in Matabeleland South Province leaves a lot to be desired. The factors which affected the food basket in the province are myriad and dynamic, hence the development of a model as a solution emphasizing home grown solutions to the food security problem in the province. The causes range from historical, environmental, psychological, economic, social and poor administration by mandated organizations or government departments, poverty, top down implementation of blue prints, lack of finances and corruption.

The outcome of this research demonstrates that, unsustainable food security initiatives, activities or interventions in Matabeleland South Province are not just about the geographic and environmental conditions, but poverty of ideas themselves and approach. Gross negligence and lack of strong political will by government in providing minimum economic and social services has caused untold suffering among the people in the province with regards to acute food shortages caused by the under performance of agricultural activities and interventions.

Developing the food Implementation security Model for Matabeleland South Province was not exactly a journey that was simply reached as was thought and alluded to in Chapter 1. It was definitely not a once off event but a long process, which was projected to find its destination in comprehensive and sustainable food security interventions for the community. In the process of the development of the model, obviously the socio-historical past of food security practice in the province and a combination of expectation from the generality of food experts, were expected to stalk the implementation of the food security model for the province. The wheels propelling the journey of the food security Implementation Model would be expected to be uneven initially, but would also be expected to spin evenly on its axis with time, since it was powered by evidence-based research and moving in cycles around the cooperation of community and food security experts that validated the model. This predictive assertion emanated from debriefing interviews with both the community and food security experts or teams, who consistently implied that it would be an uphill task to change the status quo and to transcend at the initial phase, but sustainable results will be achieved in the mid and long run.

7.4 LIMITATIONS OF THE STUDY

The research study had a few limitations. Chief among the limitations was that, the research was perceived as a political subject by the respondents aimed at exposing their leadership, and was perceived as a way of investigating them. For instance at provincial offices, it took some days of scrutiny for the researcher to be granted permission to carry out the study and was heavily warned against interfering into politics during the study. The researcher was however professional and diplomatic in conducting the subject to the extent that Focus Group Discussions, Key Informant and In-depth Interviews progressed well without any subjection to political connotations.

The study was conducted on mainly farming household heads or parents, and not on youths and children who form part of the productive age group providing farming labour. However, it is possible that including the youths and children in the study could have added perspective to the study. This also limits the generalisation of research findings beyond the household heads and parents.

One other very important limitation was that, the other participants had a tendency to try to exaggerate a situation expecting some food handouts at the end of interview sessions or Focus Group Discussions. Some of the participants, for example farmers especially in Mangwe, likened the study to the one usually carried out by Zimbabwe Vulnerability Assessment whereby it is followed by food distribution. Some participants thought that, if they give true answers they were not going to benefit from drought relief programme. However this was countered by triangulating methods of data collection as a check and balance strategy.

With regards to retrospective review of documents in the document review phase, the lack of specific documentation did not give a comprehensive picture of what actually the food security situation is, for instance with regards to other vulnerable groups like the elderly and women. There was a tendency by authors to treat the community vulnerability to food insecurity as homogeneous, but indications from interviews and Focus Group Discussions proved that some sections are more prone to food insecurity than others.

7.5 RECOMMENDATIONS

Recommendations were made with regards to possible future avenues related to the improvement of the food security situation in Matabeleland South Province and arid and semi-arid regions in Zimbabwe in general. These include research, policy makers, farmers

and extension education and community-private-public farming partnership and integration system.

7.5.1 BODY OF KNOWLEDGE

Future research should include youths, children and elderly so that their experiences are integrated with that of the mainstream community. This could give a total comprehensive picture of the food security situation on all sections of the community in Matabeleland South Province and in Zimbabwe at large. In future research studies, it may be valuable to explore what happens to specific marginalised groups like women, elderly, handicapped and children who are more prone to food insecurity.

Research on resilient strategies for the province should be prioritised. Crop varieties suitable for the province, especially small grains, were hinted as a panacea to solving food insecurity in the province. However, small grains should suit the specific ecological zones of Zimbabwe as the inyoni khatshana is a long season cultivar, which needs steady available of rainfall, therefore not suitable in Matabeleland South Province. Indigenous knowledge farming practices are also key researchable areas, which need to be looked at in terms of how they can be integrated into the modern ways of agriculture or farming practice in the province.

During the peer review sessions, peer delegates confirmed that there was indeed need for collaboration among academia, practice, professional organisations and regulatory bodies to unravel the complicated prohibitive ethical web that characterises research in food security issues in Zimbabwe.

7.5.2 POLICY

There is need for policy makers to re-direct or rethink food security interventions in Matabeleland South Province and in Zimbabwe as a whole. This could positively involve the marketing or selling of sustainable food security practices to the stakeholders and to the public. This is projected to counter massive, critical, severe food deficits in the most vulnerable communities. Policy expertise should be married with grass roots ideas to ensure full participation by the local community, hence promoting a sense of ownership of food security programs by the intended beneficiaries.

A similar school of thought was also brought up during a peer review of the study when peer delegates brought up the issue of how this study could be used to inform policy in line with correcting the food insecurity predicament in Matabeleland South Province in particular, and

in arid and semi-arid regions in Zimbabwe in general. The government of Zimbabwe, through the relevant arms involved in policy making, can invest in the current study and as such follow through the persuasions of this study with regard to policy readjustments in the area of food security strategies and interventions. The current Food and Nutrition Security Policy advocates for the top down approach in its implementation. However, this study advocates for the bottom up approach in implementing food security policies.

The first port of call for policy makers would be to integrate all instruments used in the development of food security interventions. An example would be the existing Food and Nutrition Security Policy (FNSP) with related operationalizing instruments like the ZimASSET and organizations like ARDA and AGRITEX strategic work plans. Policymakers would also benefit from adopting the food security model as a legal document that represents the will of experts and stakeholders in view of the comprehensive and sustainable food security interventions in arid and semi-arid regions. Future policy is recommended to facilitate the removal of the bureaucratic strategies where solutions are dictated and come from the top in addressing community problems.

7.5.3 COMMUNITY DEVELOPMENT

7.5.3.1 PRIVATE-PUBLIC PARTNERSHIP AND INTEGRATION SYSTEM

The success of the food security interventions through the model developed by this study is not possible by implementing interventions in isolation. It is therefore recommended that, the local community, local authorities, food security experts and other stakeholders, private and public, groups and individuals should integrate and align their activities to this research-based food security model as a combined and formidable force. This is projected to foster a widened scope of sustainable food security interventions in affected communities.

The food security Implementation Model is offering to take the food security issue beyond the boundaries of the known. It is opening a door into a food security new order in arid and semi-arid regions of Zimbabwe. The food security model is pushing the food security interventions to a new level or dispensation since it has changed its usual outlook of a top down approach to a home grown and grass roots oriented and community owned approach. It is inviting the stakeholders involved in food security issues to begin again, inciting them to be open to the possibilities of mapping the path to sustainable food security through involvement and multi stakeholder participation in food security program design and implementation.

7.5.3.2 FARMER OR EXTENSION EDUCATION

The farmer training regulations, which guided the training of farmers in best farming practices at the time of this study, did not have a comprehensive provision for theoretical input related best farming practices in semi-arid and arid regions. It was noted that extension workers have actually been withdrawn or the workforce down sized making it difficult for farmers to access extension services. However, it is a precondition that a farmer curriculum be developed enrolling farmers in batches to access basic education on farming and refresher courses as new knowledge is always developed, and the farmers need to be kept abreast with such developments or new trends in the agricultural field or sector.

The study therefore recommends that, it is necessary to give pre-farming training to farmers (some of whom have benefited from the Fast Track Land Reform Program without prior knowledge of agricultural practice) based on some of the findings and results of this study. This could facilitate comprehensive training and resultant excellence in agricultural activities meant for food security promotion in the province. It should be kept in mind that during the data analysis phase of this study, the results showed that most local farmers did not observe important farming practices due to ignorance or lack of knowledge. This could have resulted from the lack of theoretical knowledge input about better and sustainable farming practices. In other words, the researcher recommends revision of the aforementioned farmer training strategies.

7.5.4 SPECIFIC POINTS OF ACTION SUMMARIZED

Highly cognisant of the findings extracted in data analysis, the research also recommended the following points of action:

1. There must be flawless rules and guidelines outlining or spelling out the duties and responsibilities of the community, traditional leadership, politicians, Government and Rural District Councils and other concerned stakeholders in food security interventions. This is done to avoid administrative impasses, which created neglect, inconsistent and disjointed food security strategies in the communities.
2. The government should promote or institutionalise pro-active and reactive management policies regarding food security interventions rather than waiting for drought and hunger to set in first.

3. The government of Zimbabwe should increase the number of agricultural support staff and resources to help farmers on how to develop and manage food security programmes.
4. Agricultural policies and follow up programmes should be initiated by the farmers, and not by the government from the top.
5. The government through relevant ministry should offer capacity building workshops on agricultural production to enhance sustainability in food security interventions.
6. Formal market places should be created where buyers are going to meet farmers with their produce. Formal market structure helps to avoid duping of farmers by unscrupulous dealers.
7. Government should subsidise agricultural inputs and increase the buying price of agricultural produce so that farmers are able to pay back their loans.
8. Planning on food security interventions requires a participatory approach, unity and collaboration amongst stakeholders to identify, evaluate, diagnose, design and take appropriate action to develop sustainable food security interventions for addressing food shortages.

It needs to be reiterated that, interventions on trying to promote food security should provide potential options, not solutions. People in prone or affected communities are aware of the problems bedeviling them and are able to come up with possible best solutions rather than solutions being imposed on them from the top.

7.6 CHAPTER SUMMARY

This chapter presented and summarised conclusions and recommendations as well as limitations with regard to the development of a food security Implementation Model in addressing food shortages in Matabeleland South Province. The section also covered the theoretical frameworks that helped to inform the study and also the type of literature and method used to review literature. The methodology used in the study was also covered in this chapter. The conclusions and recommendations made were aimed at creating a sustainable, harmonious, well-coordinated, stable and productive food security interventions guided by the model in Zimbabwe, Matabeleland South Province in particular.

In Chapter 6, the build-up towards the food security implementation model for addressing food shortages in Matabeleland South province in Zimbabwe was presented. This was based on qualitative findings from key informant interviews, focus group discussions and document

analysis weaved in the constructivist Grounded Theory on which this study was rooted. The study was driven by the research question: “Which food security implementation model can be developed to unpack the prospects of the Zimbabwe Agenda for Sustainable Socio Economic Transformation blue print?” The challenge with this research study was to develop a specific and unique food security implementation model for Matabeleland South Province, which was non-existent in Zimbabwe at the time this investigation was conducted.

This is the first study aimed at developing a food security model to be conducted specifically for Matabeleland South Province in Zimbabwe. In view of this assertion, this work is an original contribution to both general community development discourse and food security policies, and therefore to world knowledge body. The focus in this chapter was to bring to a close the endeavour of this study. This chapter permeated through the summary how study objectives were achieved, points out the limitations of the study and makes recommendations in view of the findings and results.

This chapter has contained a brief summary of the research highlighting each and every phase from the background to the study, literature review, research methodology and data presentation and the discussion of findings. The research has some concluding remarks and recommendations made in relation to the development of an implementation model to address food shortages in Matabeleland South Province of Zimbabwe.

7.7 CONCLUDING REMARKS

Developing a food security Implementation Model for Matabeleland South Province is a paradigm shift from the current system characterized by bureaucratic, top down and one size fits all concepts. This problem has all along affected food security interventions in Zimbabwe. The Model is projected to release a new culture and practice in interventions from perpetually being government initiatives to being grass roots and community initiatives.

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