ANALYSIS OF INSTITUTIONAL GAPS THAT CONTRIBUTE TO THE SITUATION OF FOOD INSECURITY IN UTHUNGULU, NORTHERN KWAZULU-NATAL

 \mathbf{BY}

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A thesis submitted to the Faculty of Arts in fulfilment of the requirements for the degree of Doctor of Philosophy (Ph.D.) in Development Studies in the Department of Anthropology and Development Studies at the University of Zululand

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KwaDlangezwa January 2018

DECLARATION

I, Mandla Mfundo Masuku, declare that:

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DEDICATION

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ABSTRACT

This study analyses the effects of institutional gaps on food security in rural households in the uThungulu District of KwaZulu-Natal, South Africa. The study found that inadequate access to and low production of food were common in poor households. When compared to other African countries, the South African Government is seen to have established sound policies aimed at eradicating food insecurity in historically disadvantaged communities, *inter alia*, by reprioritising public spending. However, these policies have not been well implemented, resulting in an increase in the number of food-insecure people in the country, irrespective of food availability.

In this study, participants comprised community members aged 20 years and above (n=147), nine key informants and focus groups (n=11). Questionnaires, interviews and focus group discussions were used to obtain data related to the institutional gaps that contributed to food insecurity. Both content and statistical analysis were used to realise the study objectives.

The results of the study showed that participants had to contend with numerous challenges in sustaining their community development projects towards achieving food security and received only limited support from various institutions. In general, communities with a poor socio-economic profile are vulnerable to food insecurity because their low status denies them access to credit provision, skills and information. In the uThungulu District, agriculture was widely practised as a strategy to eradicate food insecurity: crop farming particularly, in the form of community and home gardens, was undertaken, but very few participants engaged in livestock farming.

The study revealed that the issue of land access and ownership compromised rural production. Rural business people had inadequate knowledge of how to participate and compete in the market. The study's results also showed that local municipalities' services were often politically aligned, and politicians as heads of institutions made poor, top-down decisions that did not meet the needs of poor people. Local municipalities were mostly dependent on governmental funding which was limited. Furthermore, governmental institutions themselves were faced with challenges, including inadequate staff, capacity and skills to serve communities satisfactorily.

The study concluded that while South Africa as a nation was food secure, households – particularly in rural areas – were not yet free from food insecurity. Food in/security is a multi-sectoral issue that needs to be tackled by all institutions and sectors and should not be aligned with the agricultural sector only. It is recommended that the government should improve food security policies, determine methods of financing rural entrepreneurs and small-scale farmers and expand the institutions committed to rural food security programmes. It also needs to provide training in entrepreneurial skills and assist and empower poor people to adopt modern farming practices which include intensifying livestock production. Policies and strategies to alleviate food insecurity need to be analysed and improved as a matter of urgency. Further research should investigate and monitor the implementation of food security interventions in rural areas.

Keywords: South Africa, food security, food insecurity, rural areas, institutions, agriculture, co-operatives, small-scale farmers, support services

ISIFINGQO

Usebenzi omkhulu wezikhungo eziphakeme ukubhekana nokulungisa inkinga zabantu ngokwenza nokusebenzisa imithetho ezofukula ukuvikelwa kokudla ngokuthuthukiswa kwezindawo ezisemaphandleni ngokutshala izimali ezongeziwe zokusiza imiphakathi. Ikhungo eziningi zikaHulumeni zibhekiswe ekuthuthukiseni izindawo ezisamaphandleni, ukulekelela, ukuxhasa, nokuseka izenzo zobumbano zokuqinisa amalungelo abahlwempu yokuba abanikazi bezindlu ukuze bakwazi ukuba nezinto ezibambekayo. Nomakunjalo, ngokwenqubo, izikhungo eziningi zikwazelonke nasemhlabeni jikelele zishoda ngamandla okuheha, okudala ukuthi abantu abaningi bashode ngokudla ngenxa yokungatholakali kokudla ngisho kukhona. Ukungabinamandla kwezikhungo kubonakele ezibalweni zabantu abasuka e Afrika, ikakhulukazi abahlala emaphandleni kodwa uhulumeni waseNingizimu ne Afrika usukubeke phambili ukusetshenziswa kwezimali zomphakathi ukuze kuthuthukiswe izimo zokuvikelwa kokudla kwabantu abahlala emaphandleni ababecindezelekile phambilini ngokomlando .Ezinye izinhlangano zomphakathi ezingabheke nzuzo zinenqubomgomo yokuqiniseka ukuvikelwa kokudla kwemindeni yasemaphandleni ngokwenza imali ebolekwayo itholakale kanye nokuthuthukiswa kokulima okusemazingeni aphansi ukuze kuthuthukiswe imikhiqizo.

Lolucwaningo lubheke ekucwaningeni ukuthi ukuvikelwa kokudla kulinyanzwa kanjani izikhala ezikhungweni, okudala ukushoda kokudla, ikakhulukazi emizini esemaphandleni. Ukungatholakali namazinga aphansi okukhiqizwa kokudla kuningi emaphandleni ngenxa yokushoda kokwesekwa okuvela ezikhungweni ezihlukahlukile. Usizo olunganele, nokushoda kokwesekwa okuvela ezikhungweni zikaHulumeni kunemithelela emibi kwimizamo yokuvikela ukudla, ngalokhoke ukucwaningwa kokusebenza kwemithetho namasu okuvikela ukudla kwenziwa. Amalunga omphakathi aneminyaka engama 20 nangaphezulu (n=147), abazisi abayishishagalolunye, namaqembu abheke loludaba ngqo (n=11) babeyindlenye yalolucwaningo. Ulwazi lwahlanganiswa kusetshenziswa imibuzo, amanhlolokhono, nezingxoxo ezivela emaqenjini adingada loludaba ukuze kuhlanganiswe ulwazi oluqhamuka kumaphuzu adale ukushoda kokudla ngenxa yezikhala ezidalwe yizikhungo. Ucwaningo lwenhlanganisela nezibalo kusetshenzisiwe ukuze kufezwe lenhloso.

ikhombisa ukuthi abayingxenye yalolucwaningo babe nezinselelo Imiphumela ekubhekiseni izinhlelo zokuthuthukisa imiphakathi endleleni yokuvikela ukudla ngenxa yokusekwa okuncane okuvela ezikhungweni ezihlukahlukile. Imiphakathi enezimo zenhlalakahle ezimbi ithinteke kakhulu futhi yiyo ebhekene nezimo zokushoda kokudla ngenxa yokuthi izimo zabo zibancishile igunya lokuboleka imali, ukushoda kwamakhono, nokungakwazi ukuthola ulwazi. Ukulima kujwayelekile ezindaweni ezisemaphandleni njengesu lokuvikela ukudla emiphakathini nokuba nezingadi zasemakhaya, bamubalwa abafuyile. Ucwaningo luveze ukuthi udaba lokutholakala komhlaba nobunikazi bawo luseyinkinga namanje okudala imithelela emibi ekukhiqizeni emaphandleni. Amabhizinisi asemaphandleni awanalo ulwazi olwanele lokuba yingxenye yezimakethe nokuncintisana. Imiphumela iveza ukuthi izinsiza eziningi komasipala basendaweni zisetshenziswa ukuthola amaphuzu ezepolitiki futhi osopolitiki njengabaphathi balezikhungo kwenza ukuthi bathathe inqumo ezingaxazululi inkinga zabantu. Ngaphezu kwalokho, izikhungo zikaHulumeni zibhekene nezinselelo, ezibandakanya ukushoda kwabasebenzi abanganawo amakhono okunceda imiphakathi.

Omasipala basezindaweni basemaphandleni bathembele kwimali evela kuHulumeni eshodayo okudala ukuthi zingafezwa idingo zabantu kube kuvele kusakhona idingo eziningi ezingakafezwa. Ucwaningo luveza ukuthi I Ningizimu ne Afrika inakho ukudla okwanele kodwa emazingeni asemakhaya, ikakhulukazi emaphandleni, abakaphumi enkingeni yokushodelwa ukudla kodwake uHulumeni usenze izinyathelo ezinhle kwimizamo yokuvikela ukudla uma kuqhathaniswa namanye amazwe ase Afrika. UHulumeni wase Ningizimu ne Afrika usuwenze imigomo emihle yokwehlisa ukushoda kokudla kodwa lemigomo ayisetshenziswa ngendlela efanele okwenza sinyuke isibalo sabantu abashoda ngokudla. Ukushoda kokudla udaba oluthinta izigaba ezihlukahlukile oludinga ukubhekwa yizozonke izigaba nezikhungo ezingaqondene nezolimo njengasona sigaba esingakwazi ukwehlisa inkinga yokushoda kokudla. Kuyanconywa ukuthi uHulumeni akathuthukise imigomo ezoqinisekisa ukuvikelwa kokudla. Kwenziwe nendlela yokuxhasa osomabhizinisi basemakhaya, abalimu abafufusayo, kwandiswe nezikhungo ezizibophezele ezinhlelweni zokuvikela ukudla. Kufanele futhi ubanikeze ukuqeqeshwa ngezamabhizinisi, kukhuthazwe nabantu abahluphekayo kuthi mabalime, okubandakanya nokwandiswa kwemfuyo. Imigomo namasu okuqeda ukungatholakali kokudla kumele

kuhlaziywe ngokushesha. Olunye ucwaningo kufanele luphenye luqinisekise izinhlelo zokuvikela/zokonga ukudla ezindaweni ezisemakhaya.

Amagama abalulekile: Ukuvikelwa kokudla, indawo ezisemaphandleni, izikhungo, ezolimo, inhlangano, abalimi abafufusayo, usizo

OPSOMMING

Die kernbesigheid van instellings is om mense te dien en hulle behoeftes aan te spreek deur beleide te formuleer en implementeer wat voedselsekerheid sal versterk deur landelike ontwikkeling te bevorder deur meer openbare befondsing daarin te investeer. Die meeste staatsinstellings is hoofsaaklik ingestel op die lewer van landelike dienste en om gemeenskaplike optrede aan te help en ondersteun deur arm mense se eiendomsreg te versterk ten einde toegang tot bates te vergroot. In die praktyk kort die meeste nasionale en internasionale instellings egter stemmingmaakkrag, gevolglik bly meer mense voedselonseker weens onvoldoende toegang tot voedsel ongeag voedselbeskikbaarheid.

Institusionele tekortkomings is onder die swart bevolking waargeneem, veral in landelike huishoudings. Die Suid-Afrikaanse regering het egter nuwe prioriteite vir staatsbesteding gestel om te fokus op die verbetering van voedselsekerheidsituasies van histories benadeelde mense. Ander gemeenskapsorganisasies soos nieregeringsorganisasies het die mandaat om landelike huishoudings se voedselsekerheid te verseker deur kredietvoorsiening en verbetering van kleinskaallandbou om produksie te verhoog.

Die studie het gefokus op die ontleding van hoe voedselsekerheid geraak word deur institusionele gapings wat lei tot voedselonsekerheid op huishoudelike vlak hoofsaaklik in landelike gebiede. Onvoldoende toegang tot voedsel en lae produksie kom meer algemeen voor in arm huishoudings waar daar onvoldoende steundienste van verskeie instellings is. Minimum en ontbrekende steundienste van staatsinstellings het negatiewe gevolge op die verbetering van toegang tot voedselsekerheid, dus is die doeltreffendheid van die beleide en strategieë om voedselonsekerheid te verlig, ontleed. Gemeenskapslede van 20 jaar en ouer (n=147), nege sleutelinformante en fokusgroepe (n=11) het aan die studie deelgeneem. Data is ingesamel met vraelyste, onderhoude en fokusgroepbesprekings om data te verkry gebaseer op faktore wat bygedra het tot voedselonsekerheid deur institusionele gapings. Sowel inhoud as statistiese ontleding is gebruik om die navorsingsdoelwitte te verwesenlik. Die navorsingsresultate toon dat deelnemers aan die studie talle uitdagings het om hulle gemeenskapontwikkelingsprojekte gerig op die bereiking van voedselsekerheid vol te hou weens beperkte steundienste van verskeie instellings. Gemeenskappe met 'n lae sosioekonomiese profiel is negatief beïnvloed en blootgestel aan voedselonsekerheid weens die

feit dat hulle status hulle toegang tot kredietvoorsiening ontneem het en daar gebrek aan vaardighede en toegang tot inligting is. Landbou word meer algemeen in landelike gebiede gebruik as die strategie om voedselonsekerheid te bekamp; veral gewasverbouing word meer gebruik in die vorm van gemeenskaps- en tuistuine met baie min deelnemers betrokke by veeboerdery. Die studie toon dat toegang tot grond en grondbesit steeds 'n uitdaging bly wat ook negatief inwerk op landelike produksie. Plattelandse besighede het onvoldoende kennis oor hoe om in die mark deel te neem en mee te ding. Die resultate toon dat plaaslike munisipaliteite se dienste in ooreenstemming met die politiek is om politieke punte aan te teken en politici as hoofde van instellings swak besluite neem wat nie die behoeftes van die arm mense weerspieël nie.

Boonop staar staatsinstellings uitdagings in die gesig, waaronder personeeltekorte en onvoldoende kapasiteit en vaardighede om gemeenskappe te dien. Plattelandse plaaslike munisipaliteite is hoofsaaklik van beperkte staatsbefondsing afhanklik wat gevolglik lei tot swak dienslewering en steeds massiewe agterstande in dienslewering. Die navorsing bevind dat Suid-Afrika voedselsekerheid het, maar op huishoudelike vlak, veral in landelike gebiede is hulle nog nie bevry van voedselonsekerheid nie. Die regering het egter sekere positiewe bydraes tot verligting van voedselonsekerheid gemaak in vergelyking met ander Afrikalande. Die Suid-Afrikaanse regering het goeie beleide daargestel om voedselonsekerheid uit te wis, maar hierdie beleide word nie goed geïmplementeer nie, gevolglik is daar 'n toename in mense wat steeds voedselonseker is.

Voedselsekerheid/-onsekerheid is 'n multisektorale kwessie wat aangepak moet word deur alle instellings en sektore wat nie in ooreenstemming gebring is nie met die landbousektor as die enigste sektor wat die situasie van voedselonsekerheid kan uitwis. Dit word aanbeveel dat die regering voedselsekerheidsbeleide behoort te verbeter, metodes behoort te bepaal om plattelandse entrepeneurs en kleinboere te finansier en die instellings wat tot plattelandse voedselsekerheidsprogramme verbind is, behoort uitgebrei te word. Opleiding in entrepeneursvaardigheide moet ook ook verskaf word. En arm mense moet bygestaan en bemagtig word om moderne boerderymetodes in gebruik te neem, wat die van intensivisering veeproduksie insluit. Dit is 'n saak van dringendheid dat beleide en strategieë rondom om voedselsekerheid geanaliseer en verbeter moet word. Verdere

navorsing behoor die implementering van voedselsekerheidsintervensies in plattelandse areas te ondersoek en te monitor.

Sleutelwoorde: Voedselsekerheid, voedselonsekerheid, landelike gebiede, instellings, landbou, koöperasies, kleinboere, steundienste.

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LIST OF ACRONYMS

BEE Black Economic Empowerment

BBBEE Broad-based Black Economic Empowerment?

CASP Comprehensive Agricultural Support Programme

CSOs Civil Society Organisations

DAFF Department of Agriculture, Forestry and Fisheries

DEDTEA Department of Economic Development, Tourism and Environmental Affairs

DFID Department for International Development

DoA Department of Agriculture

DARD Department of Agriculture and Rural Development

DRD Department of Rural Development

DRDLR Department of Rural Development and Land Reform

DSD Department of Social Development
DTI Department of Trade and Industry

FAO Food and Agriculture Organisation

GDP Gross Domestic Product

HSRC Human Sciences Research Council

IDP Integrated Development Plan

IFPRI International Food Policy Research Institute

IFSS Integrated Food Security Strategy

ILO International Labour Organisation

IMF International Monetary Fund

KZN KwaZulu-Natal

LED Local Economic Development

LM Local Municipality

NGO Non-governmental Organisation

NDA National Development Agency

NPO Non-profit Organisation

PGDP Provincial Growth and Development Plan

RSA Republic of South Africa

SADC Southern African Development Community

SAPS South African Police Services

SEDA Small Enterprise Development Agency

SLA Sustainable Livelihoods Approach

SL Sustainable Livelihoods

SMMEs Small, Medium and Micro-enterprises

SSA Statistics South Africa

UDR uThungulu District Report

UNDP United Nations Development Programme

UN United Nations

USDA United States Department of Agriculture

WTT Ward Task Teams

CHAPTER 1

ORIENTATION OF THE STUDY

1.1 Introduction

This research seeks to analyse the institutional gaps that contribute to the situation of food insecurity in uThungulu District in northern KwaZulu-Natal (KZN) province, South Africa. Institutional gap analysis is crucial for understanding the challenges faced by uThungulu District in order to find and implement solutions. Institutional gaps in this study, described as institutional failures, focus on the effectiveness of political institutions and organisational capability of governments in such matters as transparency, accountability and the strength and effectiveness of civil society organisations. Furthermore, institutional failures impact on resource endowments, productivity, and management as well as on the wider workings of society and national and rural economies (Kydd and Dorward, 2001). Institutional gaps are the symptoms of dysfunctional institutions that encourage the formulation and implementation of inappropriate domestic policies and these gaps must be addressed to avoid the perpetuation of poverty, food insecurity and unsustainable lifestyles (Ebohon, Field and Ford, 1997).

Throughout the world food insecurity is a major public problem. In South Africa, food security interventions are the most important government priorities to improve the lives of the most vulnerable communities, particularly the rural populace. A number of studies have demonstrated that food insecurity is a continuous, thorny national and global problem because approximately 800 million people worldwide are chronically hungry, particularly in developing countries where women and children are more vulnerable to food insecurity. Moreover, almost 2 billion people worldwide still suffer from deficiencies particularly in micronutrients including iron, zinc and vitamin A. On the African continent approximately 23 million people in 11 African states are suffering from food insecurity particularly in rural areas (Koppmair, Kassie and Qaim 2016; Sonnino, Marsden and Moragues-Faus 2016; Ubisi, Mafongoya, Kolanisi and Jiri 2017).

Agriculture plays an essential role in household food security in rural livelihoods, especially among the poor. MacMillan and Dowler (2011) note that small producers fail to produce adequate food due to an increasing population which makes them unable to sustain their livelihoods. However, Islam and Wong (2017), Hristov *et al.* (2017) and Thamo *et al.* (2017) note that agricultural production has drastically decreased due to climate change that has led to lack of water, crop failure and reduction of livestock practices. In urban areas other sources of food and income have come to play an equally important role whereas a rural population's economic activity and income is based on agriculture as livelihood strategy, hence 75 percent of food and nutrition insecurity are still found in outlying areas (FAO, 2015a; Rodrigues et al. (2016) and Ubisi et al. 2017). Public institutions fundamentally exist to serve the needs of the people, i.e. to develop and implement policies and programmes aimed at improving food accessibility and availability for poor and vulnerable households to enhance food security as the long-term goal.

De Marco and Thorburn (2008) in Oregon in the United States of America clearly state that a household is a food insecure if it is uncertain of having the ability to acquire enough food to meet the needs of all household members because of scarce resources. In addition, the cost of living, transportation and human capital factors such as educational attainment and employment have been linked to food insecurity. Barnett and Adger (2007), Scheffran et al. (2012) and Qureshi, Dixon and Wood (2015) stress that economic development, peace, human development and security all rely on nations being food secure. Food insecurity is an extremely complex problem or challenge involving many factors and issues that cannot be solved by one sector or institution alone. In addition, climate change undermines human security by reducing the supply of natural resources that are crucial to sustaining livelihoods and this could increase the risk of violent conflict. This situation may also undermine the capacity of governments to act in ways that promote human security and peace. Phillips (2009) maintains that food insecurity may also include issues of distribution of resources, production of food, climate change, land ownership, human rights, and economic and social development.

The Human Sciences Research Council (HSRC) (2004) in South Africa points out that food security has come to represent an incontrovertibly salient governmental priority, and despite the country being considered self-sufficient in respect of food production, food insecurity continues to remain a substantive development challenge. Yaro (2004) in Norway argues that enough resources exist in the world to satisfy basic human needs, but that inequalities and policies prevent the realisation of this goal; rights-based advocates seek policies and laws to ensure the right of each individual to enjoy food security and access to other basic amenities. Furthermore, Yaro (2004), in Keen (1994), has stressed that a lack of lobbying power within national and international institutions is the main reason for food insecurity in many weak states. In addition, structures, institutions, organisations, and processes, or the wider government environment that regulate households' access to and use of assets, define their livelihood strategies.

The Food and Agriculture Organization (FAO) (2003) of the United Nations (UN) points out that those public institutions have a continuing and unique role to play in promoting rural development and food security through focusing on public funding, extension and communication services. Different international organisations and non-governmental organisations (NGOs) are trying to find ways to assist governments to catalyse their countries' energies to fight against food insecurity and poverty. It is significant that addressing food insecurity challenges has remained the priority of all spheres of government however, it is notable that government food security interventions in South Africa particularly in rural areas are failing to make a positive impact on the lives of rural communities in particular.

1.2 Background to the problem

In South Africa, the Department of Agriculture (DoA) (1997) states that their department pledged to support the World Summit Plan of Action at the Rome Declaration on World Food Security 1996, by promoting optimal allocation and use of the public and private sector to achieve food security. Food insecurity affects people who cannot access adequate food because of poverty, socioeconomic factors, climate change and the structure of the food system that exist within the country irrespective of food availability,

and even if food supplies are adequate and markets are operating well. Hendriks et al. (2016) assert that food insecurity in South Africa is not a single experience but a series of experiences reflecting a decreasing supply of basic foods complemented by a process of decision making and increasingly constrained household resources. The Department of Agriculture (2002) states that food security occurs when the entire populace has physical, social and economic access to sufficient, safe and nutritious food. In addition, the South African Constitution (Act 108 of 1996) specifies in Section 27 that citizens have a right to access nutritional food and places a burden on the State to make good on this right within available resources. However, Warshawsky (2015) argues that while South Africa has developed many policies to alleviate food insecurity, it is likely that food insecurity remains high at household level due to inequality in the country's agricultural systems.

Institutions are established to implement policies, including those related to food security and poverty reduction, and their main role is to translate policies into sets of operational rules, plans, programmes, and projects as well as to implement them. These institutions should support and provide services that can be used as tools to improve rural livelihoods by allowing rural farmers to generate income through providing valuable public goods (Binam et al., 2017). Furthermore, the HSRC (2004) states that food security is no longer seen simply as a failure of agriculture to produce sufficient food at national level, but a failure of institutions to guarantee access to sufficient food at household level and this translates into the need for formal and informal institutions to collaboration in devising effective ways of creating access to food.

Bonti-Ankomah (2001) maintains that the current increased rate of unemployment levels in South Africa lead to a decrease in the average household income and food expenditure. Many rural people depend on wage incomes. Warshawsky (2011) asserts that in South African cities, households are food insecure since they cannot access a regular supply of nutritious food as a result of insufficient purchasing power in formal and informal food markets. Maxwell (1996) states that Oshaug has identified three kinds of households: "enduring households" which maintain household food security on a continuous basis; "resilient households", which suffer shocks but recover quickly; and "fragile households"

which become increasingly insecure in response to shocks. This confirms that responsibility for intervention should lie not with the government, but also with communities, for example by strengthening the moral economy whereby people will have equal economic opportunities.

Institutions are the structures that enable access of people to assets, to voice, and to power over their own lives, and that regulate competing claims to limited resources. Agricultural and rural extension programmes are needed to reach out to those in rural areas who often enough constitute the majority population. It is fundamental for government to address those institutional, governance and politico-economic factors that tend to exclude individuals and population groups from progress. Warshawsky (2011) states that for those urban dwellers without any income at all, such as the elderly, disabled and orphans, various government departments, private sector businesses, NGOs, and civil society organisations (CSOs) run many different programmes, including feeding programmes and social assistance, improving urban agricultural activities and food price control. Food insecurity is the most important and continuous problem facing rural communities, particularly in developing countries.

It has been noted that food insecurity in South Africa, mostly known as rural poverty, affects 13.8 million people, and these people remain in need of food assistance. Furthermore, Kepe and Tessaro (2012) argue that in South Africa the food crisis has been associated with rural communities in South Africa, where they lack social and economic access to sufficient, safe and nutritious food. Stein (2016) further argues that economic growth does not always have the ability to influence the state of food insecurity since people who are food insecure are the poorest of the poor with little access to assets including capital, education, health and land which could improve food security because economic growth does not reach them. Guthman, Morris and Allen (2006) in California point out that different institutions support the notion of improving the affordability of food they provide, and most have made an effort to do so, although these efforts vary with institutional capacity. Interestingly, community food security and sustainable agricultural movements have made a strategic alliance, combining the goals of farm and

food security in their boards and projects which address issues of food access and affordability for low-income people at the household level. Shimelis and Bogale (2007) point out that the challenge of inadequate growth of food production, high population growth and inappropriate government intervention in the economy has made the achievement of food security a difficult goal.

Bonti-Ankomah (2001) argues that the threats to food security arise from a combination of factors such as infrastructural and institutional insufficiencies, and food insecurity is highest among the African population and rural households. It is further stated that while South Africa produces sufficient food at national level, this does not guarantee food security at the individual or household level. Ensuring access to food at the household level depends not only on secure food supplies but also on stable demand or purchasing power. In addition, Statistics South Africa (SSA) (2000) states that about 35% of the populace, or 14.3 million South Africans, are still exposed to food insecurity.

Interventions that tackle food insecurity have been developed at the community and governmental level to facilitate access to food by providing an immediate response to the need for food through the establishment of community and home gardens. These interventions are meant for empowerment, supporting the development of skills that allow communities to steadily improve their food insecurity status (Roncarolo, Bisset and Potvin, 2016). The Integrated Food Security Strategy (IFSS) (2002) was formulated by the South African government as a food security intervention to reprioritise public spending to focus on improving the food security conditions of historically disadvantaged people.

This policy aims at improved spending in social programmes of all spheres of government, such as school feeding schemes, child support grants, free health services for children aged between 0-6 years and for pregnant and lactating women, pension funds for the elderly, community public works programmes, production loan schemes for small farmers, infrastructure grants for smallholder farmers and the presidential tractor mechanisation scheme. However, Devereux (2016) suggests that food security

interventions should promote sustainable livelihoods rather than creating dependency through handouts and avoid providing temporary support or assistance to alleviate food insecurity. He further advocates public works programmes as the response to poverty and food insecurity through the participation of poor people to do heavy manual labour for low income thereby avoiding dependency and promoting economic growth. This indicates that food security interventions should also address issues such as the introduction of microfinance access programmes particularly small farmers or rural farmers and educating them on sustainable agriculture as well as crop diversification to improve production. In addition, Elliott and Dunning (2016) emphasise that food security intervention should aim at sustainably reducing hunger and food insecurity by promoting inclusive agriculture sector growth to improve nutritional status at all levels.

Drimie and Rugsemoa (2010) assert that the IFSS was formed to restructure food security programmes into an efficient framework through public-private partnerships., However, in South Africa, more than ten government departments which manage food programmes are limited by their uncoordinated and inefficient systems. The financial resources available to reduce the high rate of food insecurity have also been questioned. Moll and Tilburg (2006) highlight the fact that rural finances are composed of formal institutions, informal intermediaries and enterprises and households demanding financial services as well as financial relationships. It is evident that there is a limited presence of formal institutions such as banks and commercial institutions which offer a range of services to small businesses and Co-operatives for enabling them to sustain their businesses. This further results in the exclusion of a large proportion of rural people from formal financial services.

De Cock *et al.* (2013) in South Africa assert that the challenge to the public and the private sector for profit and for civil society as a whole is to ensure the welfare and productivity of those on the periphery of society, whose problems and requirements increasingly spill over into mainstream populations. Whatever the reasons, these multidimensional problems result in the vulnerability of people and consequently affect families, communities and eventually the nation. It is further stated that the South African

government had committed to halving poverty between 2004 and 2014 through achieving the vision of the IFSS (2002), which is enhancing access to food security by all South Africans.

Furthermore, Shimelis and Bogale (2007) in Ethiopia maintain that numerous attempts by the government and NGOs to ensure rural household food security by credit provision and small-scale irrigation schemes are in smooth operation and are well monitored. On the other hand, the DoA (2006) points out that the majority of the population, especially rural people, are affected by various factors such as lack of infrastructure, poor access to markets and lack of institutional support and services. In addition, the cause of food insecurity or hunger in South Africa is not a shortage of food but rather inadequate access to food by certain categories of individuals and households in the population. Stein (2016) claims that private economic actors intervene between producers and consumers, profiting by underpaying producers and overcharging consumers. This situation indicates that governments have insufficient control over governing food systems which will benefit the poorest of the poor. It is further stated by Devereux (2000) that structural factors such as weak institutions, notably markets and land tenure, and uncooperative or inconsistent government policies contribute to food insecurity as both cause and consequence.

Van Zyl and Kirsten (1992) state that to ensure the accessibility of a sufficient, nutritional diet it is essential to have adequate food available so that the individual is able to obtain it. Access to food is possible via production or the earning of income which could be exchanged for food. It is further stated that food security involves assuring both an adequate supply of food and access of the population to that supply, usually through generating effective demand via income growth or transfers. Food security is therefore influenced by both micro- and macro-factors, ranging from support institutions available to small farmers and merchants to trade policies that affect the overall rate of growth and distribution of income.

Koch (2011), on the other hand, maintains that the primary objective of the IFSS is to overcome rural food insecurity by increasing the participation of food-insecure households in productive agriculture sector activities and creating linkages that will bring growth and development benefits to all citizens. However, Hendricks et al. (2016) note that the South African government has no reliable and accurate system for analysing the conditions of the food insecure and it has no up-to-date food security information system. Furthermore, the FAO (2014) states that unstable government institutions in conflict and post-conflict countries, over-centralisation, corruption and insufficient political commitment to address poverty are factors leading to food insecurity, and also represent considerable obstacles to donors and the international community in providing effective emergency relief and a sustainable basis for economic growth. Nunnenkamp (2004) stresses that poor policies are the symptoms of longer-term institutional factors, and correcting the policies without correcting the institutions would bring little long-run benefit. On the other hand, Grindle (2007) and Helal (2016) suggest that food security could be achieved through good governance which is key to the following components: transparency, accountability, community participation and respect for the rule of law.

South Africa committed to supporting the World Food Summit Plan of Action that was summarised in the 1996 Rome Declaration on World Food Security. South Africa has also committed to the promotion of her best allocation of natural resources and the efficient use of public and private sector resources to attain international food security goals. In addition, the South African government is dedicated to creating a supporting political, social and economic environment, and to implementing policies to eradicate poverty. However, this indicates that South African government has undergone a number of changes with a view to reducing food insecurity that citizens still experience, particularly those in the most vulnerable communities in rural areas.

1.3 Statement of the problem

Food insecurity is high in rural areas and it affects all levels of social and economic life. The fundamental problem or cause of food insecurity is that poor households are unable to purchase food despite its availability. South Africa as a country has a food secure status, but at the household level, people are food insecure. SSA (2014) showed that the unemployment rate stands at 25.2%, making food insecurity a growing problem within the country. It further states that government and other institutions need various interventions and programmes to reduce vulnerability, to manage food insecurity and improve the welfare of citizens.

In general, during the apartheid era NGOs and other civil organisations failed to recognise the rights of poor rural people to food security. NGOs and CSOs are likely to be poorly financed. They are dependent on resources that are internal to communities and located in the lower-income areas which they serve. Notably, local institutions are unable to take a leading role in rural development through enhancing food security programmes. The study acknowledges the existence of co-operatives in South Africa but they are generally unable to expand and develop a rural economy such as agriculture, which is known as the traditional approach to rural development. This situation indicates that there is a lack of alignment, coordination, and integration of government food security interventions and this creates a stumbling block to the improvement of household food security.

It is also noted by the FAO (2001) that vulnerable groups are predominantly found in rural areas. It is further assumed that food insecure people are found within larger population groups that are exposed to vulnerability factors such as low income, insecure land tenure or a deteriorating natural resource base. The FAO (2003) asserts that in many countries as many as two-thirds of the population are "dirt poor", with minimum access to basic needs including adequate nutrition, clean water, proper sewage, and healthcare. This clearly indicates that the problem of food insecurity is a massive one. As already indicated, food insecurity results from various factors, some of them not generic but created, such as poor governance and lack of institutional support. Poor countries with a

weak government capacity tend to depend on food aid as a means of coping with nutrition and food supply shocks. However, this dependency might also have a negative impact on the price stability and local availability of food in the longer term.

This study, therefore, intends to analyse institutional gaps and constraints to gaining access to food and bringing about necessary improvements. The main concern of the study is to analyse ways of improving food security through enhancing institutional support, by improving rural livelihoods and strengthen access to rural credit facilities.

1.4 Aim of the study

The aim of the study is to analyse how food security is affected by institutional gaps, using uThungulu District as the case study.

1.5 Specific objectives

The study objectives are as follows:

- To identify institutional gaps that affect access to food and productivity leading to food insecurity.
- To analyse institutional gaps that hinder access to food security in rural areas and their effect on communities.
- To assess the effectiveness of the policies and strategies aimed at addressing the institutional gaps contributing to food insecurity.

1.6 Research questions

This study seeks to address the following questions:

- How do institutional gaps contribute to food insecurity in the uThungulu District rural area?
- What institutional support services are available and to what extent have these services enhanced food security in rural areas?
- What are the most effective approaches to promote and enhance food security?
- What are the current strategies and processes in place to eradicate institutional gaps?

1.7 Assumptions of the study

In order to analyse the institutional gaps that contribute to the situation of food insecurity, two main assumptions have been formulated and will be tested. It is assumed that:

- Adequate institutional services will improve access to food by individual households.
- Lack of communication between institutions and the community constrains food security.

1.8 Intended contribution to the body of knowledge

In general, food insecurity is seen as a common problem affecting developing countries, especially in outlying areas. The contribution of this study is to assist develop new approaches to enhance food security at household level in rural areas. Furthermore, it suggests how hindrances of food security such as institutional gaps could be addressed. This research would result in an independent and original contribution to the body of knowledge and scholarship in the fields of food security, agriculture, economic development, rural development and other human science disciplines. This research intends to analyse the institutional gaps that contribute to food insecurity, and the focus is on rural areas which have not been well-researched to date. The research uses research approaches to find out why institutional policies and programmes do not meet the needs of societies and communities. It is hoped that the results of this research would suggest solutions to all relevant stakeholders who have an interest in food security and insecurity.

1.9 Research delimitations

This study focuses on institutional gaps and deficiencies in food security in uThungulu District in northern KZN, South Africa. This means that the whole geographical area of uThungulu will be the target area. Food security issues from other geographical areas will be incorporated where the researcher is of the opinion that it may benefit this research, but the main focus will be on this geographical area (uThungulu District).

1.10 Significance of the study

The study anticipates adding to the existing body of literature, particularly on institutional gaps and food security status in South Africa and especially in rural areas. The findings of the study will provide insights to researchers, farmers, government departments, and policymakers on food security issues. Other interested groups such as the private sector and civil societies (large and small) might be assisted in alleviating food insecurity mostly in outlying areas. The findings of this study will support and suggest the development of interventions to change the existing situation and obstacles to enhancing food security.

1.11 Research methodology and procedure

The research design is an interpretivists approach that encompasses a combination of quantitative and qualitative research methods undertaken because they complement each other (Scrimshaw, 1990). Collinson (2003) asserts that a qualitative research design is the most appropriate to study rural households' livelihoods and food insecurity, and the uThungulu District is dominated by rural municipalities. This method was used to obtain primary data from participants in order to make rational and sound conclusions and recommendations. The researcher integrates quantitative perspectives to collect and analyse rural household data in the form of statistics, tables, and graphs showing how many people are food insecure.

1.12 Operational definitions

Although various institutions and organisations define food security differently, there is not much difference in the basic concepts. Food security as a concept originated in the 1970s, and since then it has been a topic of considerable attention (Gebrehiwot, 2008).

1.12.1 Food security

The definition adopted by the FAO (1996:56), that "Food security exists when all people at all times, have physical and economic access to sufficient, safe and nutritious food to meet the dietary needs and food preferences for an active, healthy life", will be used.

They also define food security not just in terms of access to and availability of food, but also resource distribution to produce food and purchasing power to buy food, where it has already been produced.

1.12.2 Food crises

A food crisis exists when an entire nation or sector(s) of it, for whatever causes, are engulfed by severe food shortages, which result in famines and even lead to massive dislocation of communities, without the apparent national capacity to cope with the problem (Abdullahi, 2008). Furthermore, Hendriks et al. (2016) understand food crises as and the causes of food insecurity in terms of a multiplicity of perspectives and have developed indices for use primarily in distributing development aid.

1.12.3 Food insecurity

Food insecurity exists when people are undernourished as a result of the physical unavailability of food, and lack of social or economic access to adequate food and utilisation (Mohammed, 2003). It is generally agreed that food insecurity is the most serious manifestation of absolute poverty, which afflicts an estimated 1.2 billion people in the world, and without a doubt it is a potent ingredient and cause of social unrest (Abdullahi, 2008). Furthermore, Tarasuk (2005) defines food insecurity as limited, inadequate, or insecure access of individuals and households to sufficient, safe, nutritious and personally acceptable food to meet their dietary requirements for a productive and healthy life.

1.12.4 Sustainable livelihoods

For the purposes of this study sustainable livelihoods are defined as the capabilities, assets, and activities required for a means of living. A livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term (Chambers and Conway, 1991:6). However, this explanation — which

incidentally leaves the significance of the word 'development' indeterminate – brings out the notion that the process of improving present living values should not be at the expense of the living standards of the future generation (FAO, 1994).

1.12.5 The household

In this study, the household is the most important institution in which rural people live. Pennartz and Niehof (1999) define the household as a social unit comprising individuals of varying age and both sexes who, over a long period of time, are enabled to pool income from multiple sources in order to ensure their individual and collective reproduction and well-being.

1.12.6 Institutions

For the purpose of this study, institutions, defined in the new institutional economics, are the rules which have been formulated to govern relationships between individuals or groups of people involved in transactional activities (North, 1900). In addition, Fukuyama (2004) describes these rules as constraining human choice and which permit collective action amongst a group of people in societies. These rules include formal institutions such as the constitutional, legal, and organisational framework for individuals' actions whereas informal institutions refer to codes of conduct, values and norms (North, 1990, Welter and Smallbone, 2011). Furthermore, Andrews (2013) asserts that countries suffer when the rules of this game are deficient and governments are ineffective or destructive.

1.12.7 Institutional gaps

For the purpose of this study institutional gaps are used in the same context as government failure. Therefore, the concept of institutional gaps maybe interpreted in various means to explain failures in social institutions such as political culture and social values and is also associated with policy argument to ensure social optimality (Stacey and Rittberger 2003, and Newig, 2013. Furthermore, society and institutions may fail in their actions however, they may also fail by not taking action. These failures occur when government intervention causes more inefficient allocation of goods and resources that

would occur without that intervention. Institutional gaps can reveal a lack of productive collaboration between stakeholders, undermining the potential for collaboration, and ultimately, sustainable resource management (Sokile *et al.* 2003).

1.13 Organisation of the study

The study comprises eight chapters. Chapter 1 provides an analysis of the background to the research problem, the aim of the study, specific objectives and research questions. It provides the assumptions of the study, how it will contribute to the body of knowledge, and gives a brief overview of the research delimitations as well as the significance of the study. This chapter also outlines the research methodology and procedures, food security operational definitions and the conceptual framework that describes food security concepts, as well as indicating how the study is organised.

The second chapter provides details of relevant and scientific literature reviewed in an analysis of institutional gaps on food insecurity. It gives an overview of the institutional gaps and food insecurity at the global, continental, national, provincial and local level, to engage in a critical dialogue with the intention to answer the research questions and accomplish the aim of the study. This chapter analyses these gaps by focusing on rural areas where the majority of the populace are food insecure due to inadequate support services from various institutions. South African policies established to eradicate food insecurity are also discussed.

Chapter 3 gives details of the theoretical framework of the current study, to establish a sound theoretical foundation upon which research questions and interviews were based. Two theories are discussed: the sustainable livelihoods approach and entitlement theory. The emphasis of these theories is clearly to make links and give suggestions on eliminating institutional gaps that contribute towards food insecurity. Some limitations are identified through critical dialogue, however.

Chapter 4 provides a brief overview of uThungulu District Municipality, the methodology, and methods used for data collection, sampling and analysis. Both quantitative and qualitative approaches were utilised for data collection and analysis.

The results of this study are presented in Chapters 5, 6 and 7. Chapter 5 presents the sociodemographic profile and activities of the participants, using data collected from questionnaires. Chapter 6 presents the main findings on the perceptions of key informants towards rendering of services, and Chapter 7 provides analysis and discussion of results based on the views of communities about governmental intervention strategies to address food insecurity. Chapter 8 summarises the vital arguments presented in the study and provides conclusions. This chapter responds to the research questions posed in Chapter 1 and presents recommendations as well as suggestions for future research on the topic of food security.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The main problem under investigation is that local institutions are unable to take a leading role in rural development to promote food security interventions. It is for this reason that this chapter reviews the effective approaches that seek to reflect on the existing food security strategies, identify gaps and bring about necessary improvements. Food insecurity results from different factors such as poor governance, a high rate of unemployment, low income, insecure land tenure and lack of institutional support. This chapter aims to critically review whether government interventions stimulate the rural economy and livelihoods through agriculture as a catalyst for rural development and food security. Furthermore, this chapter also analyses literature on institutional gaps and food insecurity at the household level, particularly in rural areas.

The critical points of current knowledge on and methodological approaches to institutional gaps and food insecurity-related issues particular to rural areas are being reviewed. The study is not only intended to identify gaps in the body of knowledge but also to make critical arguments on previous related empirical literature, governmental reports, policies, programmes, international project reports and other documents relevant to this study. The study engages in a critical dialogue with the intention of expanding the body of knowledge through identifying the weaknesses, strengths, similarities, and bias of relevant studies undertaken previously.

2.2 Description of institutional gaps with respect to food in/security

Institutional gaps are described as inconsistencies which partly explain difficulties such as the slanted distribution of resources which leads to institutional failures to promote food security in poor rural areas. These failures influence productivity, management, and resource endowments, as well as the wider workings of society and national and rural economies. Institutional gaps are infrequently well described however, discussion tends to focus on the effectiveness of institutions and the organisational capability of

governments. This includes issues such as transparency, accountability, and extent of decentralisation of decision-making, the strength and effectiveness of civil society organisations such as farmers' organisation and NGOs (Kydd and Dorward, 2001).

Institutional gaps are created when government interventions are unable to target communities facing common issues including poor agricultural market development, low farm productivity, poor access to nutritious foods and poor distribution of productive resources to overcome food insecurity and hunger. It explains various institutional gaps such as inadequate access to resources and misuse of resources that lead to food insecurity. Sumaila, Jacquet and Witter (2017) stress that misuse of public resources is related to corruption which poses a significant threat to food security, economies and local livelihoods. This is a reflection of a weak government that does not control and manage its resources towards achieving a better life for every citizen by creating equal access to utilisation of resources.

Misuse of resources transpires when public officers use public resources dishonestly for their personal gain. Individuals or large entities which act in an illegal manner undermine management of those resources. In this chapter inadequate access to resources is interpreted as an institutional gap because it promotes chronic food insecurity which arises from lack of access to productive resources to acquire and produce food. Metu, Okeyika and Maduka (2016) attest that inadequate access to resources has restricted the rural and small-scale farming sector's access to credit facilities resulting in low agricultural inputs with low government seed production. Furthermore, this shows that even though agriculture is being practised, there are important issues that need to be considered, such as failing to produce adequate food for own use due to inadequate institutional support.

Access to markets and purchasing power enables the populace to have access to adequate food, fulfilling their fundamental "right to food". Insufficient accountability in various institutions has contributed to the ineffectiveness of institutions to render services to communities to improve the quality of life of the people, including access to food and

nutritional security at the household level. Institutional gaps expose economic and political shortcomings towards achieving effective, reliable food security programmes for smallholders and vulnerable groups. Figure 2.1 illustrates the institutional gaps that contribute to food insecurity.

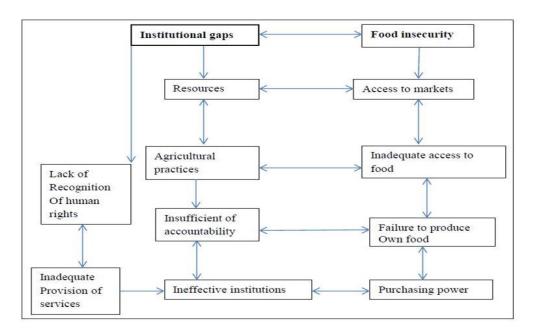


Figure 2.1: Institutional gaps and food insecurity (Source: researcher's own construct)

There has been an increase in the literature relating to food security and insecurity conducted by different scholars, but in South Africa, little research has been carried out on the contribution of institutional gaps towards food insecurity. Alemu (2015) attests that there is a small number of food security studies in South Africa, since many studies focus on poverty rather than food in/security, and tend to use poverty as a proxy for food insecurity. Scholarly writers, for instance, Devereux (2001), Fedderke, Perkins and Luiz (2006), and Barrios (2008), argue that institutions need to invest in rural infrastructure which can lead to economic growth and in turn ensure that households become food secure. Abdu-Raheem and Worth (2011) and De Cock *et al.* (2013) state that although South Africa is food secure as a nation, many households remain food insecure. Even though the right to food is a basic human right entrenched in the Constitution (No. 8 of 1996), food insecurity is still a worrying factor for the majority of households in South Africa, particularly in rural areas.

Evidence of this is that the Minister of the Department of Agriculture, Forestry and Fisheries (DAFF) Senzeni Zokwana (2014) has stated that over 226 million people in Africa are undernourished, while approximately 24.6% of the undernourished population is found in sub-Saharan Africa. The African challenge is definitely vital to mitigating food insecurity on the continent, and commitments were made by the heads of state and governments of the African Union to double those parts of their domestic budgets devoted to agriculture in 2010-2011. The Right to Food (2010) global initiative points out that states should facilitate sustainable, non-discriminatory and secure access and utilisation of resources consistent with their national law and with the intercontinental law to protect the resources that are essential for people's livelihoods. Governments should respect and protect the rights of persons with respect to assets such as land, water, forests, fisheries and livestock without any discrimination.

About 40% of South Africa's underprivileged population reside in rural areas and are dependent on the land for their livelihood. One of the reasons why most households are regarded as food insecure in South Africa is because that they are net consumers of purchased food rather than producers. As a result, about 13.8 million South Africans go to bed hungry every night. Having accepted that food security is a basic human right, it seems reasonable to conclude that the government alone cannot address the challenges of food insecurity and that partnerships need to be looked at, including with the business community, CSOs, and the private sector. The South African government still lacks specific and accepted methods to measure food security, and currently has no regulated way of monitoring the food security status of its population. This study maintains that rural households are severely food insecure.

2.3 Global food security crisis

International efforts to reduce world food insecurity have fallen considerably short of expectations and commitments. Sasson (2012) reports that in 2012 food insecurity was still a major global concern as one billion people are suffering from starvation, and concluded that we are still far from reaching the Millennium Development Goal (MDG)

number one, which is "to halve extreme poverty and hunger by 2015". It is further stated by the International Food Policy Research Institute (IFPRI) (2011) that public institutions are mainly for delivering rural services, supporting collective action and strengthening poor people's property rights as well as access to assets. Little is known about the various role institutions play in enabling the poor to accrue assets for the purpose of food security sustainability.

Furthermore, FAO (2015) asserts that food insecurity remains an ongoing problem in the world, with over 7.3 billion people chronically undernourished, and progress in reducing food insecurity unacceptably slow. Since the year 2000, food security has also become a more important item in the global agenda and the object of various intergovernmental processes. There is an improvement in a global agreement that the right to food is a critical dimension of food security because it clarifies the obligations of states to ensure that access to food (especially to the vulnerable groups in society) is not diminished by other policies. The linkage between food security and trade regimes has led to greater interaction among international and transnational policy actors. These institutions' support for global trade has been strengthened by the recognition of unbalanced power relations, where powerful food-exporting countries and several transnational agro-food companies disproportionately shape market outcomes (Margulis, 2013).

This suggests that both international and national institutions should initiate and enforce regulatory policies that profile the national and international economic environment that will address food insecurity and other poverty-related issues. In addition, global food security governance has attempted to widen and strengthen the participation and engagement of civil society actors or organisations in international food security on decision-making (Page, 2013). However, the absence of an authoritative and inclusive global body which critically discusses food security/insecurity has resulted in such issues being overseen, by default, by international institutions like the World Trade Organisation (WTO) and World Bank, for whom food security is hardly core business. The needs of food-insecure people need to be addressed by the UN institutions because free trade does not necessarily improve access to adequate food. The grouping of the

most powerful economies, like the G8/G20, and other economic actors like transnational corporations and financial speculators, are subject to no political control over the issues of food security/insecurity (Mckeon, 2013).

2.3.1 The effect of globalisation on food security

Messer and Cohen (2007) assert that food security and globalisation are interconnected because globalisation is promoting free trade agreements which inevitably produce inequality in terms of access to markets. It is debated by Bergh and Nilsson (2014) that globalisation has caused growth that has led to higher income distribution within countries. Whereas Wade (2003) reveals that world hunger, poverty and inequality are perpetuated by globalisation because of conflict of public policy relating to equal access to market forces. This clearly suggests that the absence of supportive public policies might contribute to market barriers and deprive poor people of the right to food and access to productive resources such as land. The escalating supply-side and demand-side pressures, such as sharp increases in population, globalisation and urbanisation, are contributing factors to mounting food insecurity.

Globalisation is also changing food security dynamics: the increasing integration of the world economy and culture may have led to increases in average incomes worldwide, but it has also led to greater disparities between the wealthy and the poor. Globalisation has also led to an increase in the volatility of global food prices as idiosyncratic economic shocks can affect the whole global food system (Misselhorn *et al.* 2012). However, there is broad agreement that the current levels of world food insecurity are unacceptable morally and ethically as well as from a social and economic development policy perspective, which makes food insecurity a priority in global governance.

Furthermore, the ties between food security and international finance are recognised by actors as significant and warrant international cooperation (Margulis, 2013). This reveals that there is a global policy vacuum which needs attention to address global food insecurity issues. In fact, there is wide acceptance among policymakers of the pressing need to reform the global governance of food security in order to address rising world

hunger and improve the efficiency of existing food security interventions (Mckeon, 2013). Moreover, Margulis (2013) has found that the overall scale of stakeholders' involvement in and the complexity of food insecurity are beyond the capacity of individual states to manage alone. Since then there has been a change from international food security institutions to a regime complex for food security, which has major potential for improving policy coherence and institutional architecture to address world hunger.

2.3.2 The impact of the global food crisis

The global food crisis has been described in terms of escalating prices and natural disasters that have led to high and unstable food prices which deprive poor people of access to food and make them more vulnerable. Unfavourable conditions, particularly climate change and natural disasters, have given rise to poor production and reduced agricultural yields. In addition, Clapp and Helleiner (2012) state that the global food crisis has brought destruction to world food markets and led to millions being in a situation of food insecurity. The study conducted by Akhter (2016) states that the food crisis is influenced by poor public policy interventions and non-competitive market behaviour where markets for food grain commodities are not co-integrated to accommodate smallholder farmers. This suggests that governments affected by the food crisis should cut off their global exports in order to maintain lower domestic prices to ensure an affordable supply of food in the domestic markets adequate to meet the needs of the local populace.

However, this does not satisfy the goal of dealing with the food crisis in the long term. Watson (2017) asserts that governments mostly focused on consumer and trade policies rather than on policies designed to increase agricultural yields, as an index of investment in agricultural productivity. Institutions failed to address the question of whether wages might be adjusted to higher food prices with evidence suggesting that agricultural wages should be adjusted even in the short term since they are too low (Headey, 2013). It is recommended that institutions design strategies promote productive farming and create

competitive spaces for smallholders in order to increase the efficiency of the food marketing system to alleviate food crises, particularly in developing countries.

Furthermore, food security institutions and other related institutions are mandated to ensure the availability, stability, and access as well as affordability of nutritious and safe food for all of the populace. However, many developing countries have failed to develop effective interventions for food price stability and food security because of large fiscal deficits as an outcome of financial crises (Grote, 2014). International and national institutions portrayed poor leadership to deal with and reduce the world's food crisis, food being a commodity for which the majority of the population have insufficient purchasing power. Food crises and shortages have become global issues with the unstable prices of food and other commodities in the period between 2006 – 2008 because of the economic recession (Holt-Gimenez and Patel, 2009).

2.3.3 The impact of the economic recession on food security

The economic recession of 2008 led to an increase of one billion people who are food insecure and necessitated a rise in food aid. Davis and Geiger (2017) and Antelo, Magdalena and Reboredo (2017) affirm that in 2008 the majority of the populace in both developed and developing countries were receiving food aid because of the social consequences of the economic recession, such as an increase in unemployment and decreased food security. This situation has led to riots in some cases and households being forced to buy fewer and cheaper foods, thus reducing the nutritional quality of their diets, particularly in developing countries. Findings by the FAO (2012) showed that the effects of the economic recession as indicated in 2010-2012 were that an estimated 870 million people around the world (12.5% of the world's population) suffered from chronic hunger as measured by deficient energy intake. However, in 2011- 2013 it was estimated that a total of 842 million people were suffering from chronic hunger; that is, regularly not getting adequate food to conduct an active life. It is also notable that in 2013-2014, 805 million people were chronically undernourished due to insufficient food (FAO, 2013 and 2014).

These above figures show a slight improvement in addressing food insecurity issues, and therefore NGOs were tasked to play a vital role in raising global awareness about the issue of food security/insecurity from a global perspective to address the effects of the economic recession. The economic crisis led to the formulation of new programmes and the reformation of old ones by expert panels through declarations and statements (Duncan and Barling, 2012). However, Acemoglu *et al.* (2003) and Rose and Spiegel (2012) argue that countries with inferior institutional features suffered from decreased macroeconomic vitality to the extent that after controlling for institutional differences macroeconomic policy differences were only playing a limited role in explaining volatility differences across the country. Furthermore, the study of Clapp and Helleiner (2012) indicated that even after the economic recession food prices within many developing countries remained high because difficulty low-income food importing countries had in accessing credit during the global financial crisis. Furthermore, the increased demand from China and India which caused rising prices which were completely unjustified because both aggregate and per capita consumption had fallen in both countries.

2.3.4 The contribution of BRICS to food security issues

The BRICS members, comprising Brazil, Russia, India, China and South Africa, have created constitutional frameworks to protect the right to food, since the global human rights organisation (United Nations) has taken on greater authority in the international governance of food security by advancing human rights in relation to food. These countries (Maiorano and Manor, 2017) are much more active and responsible for the drastic reduction in global poverty and food insecurity for the achievement of the first Millennium Development Goal (MDG) and the second Sustainable Development Goal (SDG). Duncan and Barling (2012) notably state that food insecurity has emerged as an international problem where global governance is applicable as a strong normative element, as a means for moving beyond the self-interest of nation states to engage broader societal actors in finding co-operative solutions to shared global problems.

Evidence of this is that BRICS have developed social programmes that provide income to households earning less than a certain threshold, their focus being on supporting children and elderly people as well as people with disabilities. Furthermore, it is crucial for these countries to pay more attention to investing in important public services that can act as catalysts for the alleviation of poverty, food insecurity by promoting equal access to productive resources. Chan (2014) states that in China the Chinese government also showed its concern about how to tackle issues of food insecurity by assisting developing countries. They have made efforts to develop a policy to promote food security through 'win-win' cooperation, adoption of a development-oriented food security strategy, formulation of an international environment that embraces equality and mutual benefit, and which aims to achieve comprehensive and balanced agricultural system.

The Chinese government's initiative to assist Africa to solve its food security problem is termed China-Africa agricultural cooperation. The Chinese strategy on food security governance is based on collaborating with international organisations, particularly those in association with the UN, to improve its international image and raise the volume of its international voice. It relies mainly on bilateral arrangements to secure its resources, including food, in order to meet its domestic consumption (Chan, 2014). The Japanese government, on the other hand, focuses on protecting domestic food production from international competition (Barclay and Epstein, 2013).

The policy of China has made them the world's largest producer and consumer of food, and this has had a major influence on global markets. This country is very involved in market change and international collaboration to improve international food security. The Chinese government made a commitment to improving international cooperation in food governance, and also leveraged its domestic successes to promote food security in the developing world (Koch-Weser, 2012). The argument by the international community suggests that food is available in the world but the major challenge is accessing it, particularly at the ground level. Although food has become a global governance issue,

there is still a lack of consensus on what policies developing countries should pursue to enhance food security.

2.4 Food security issues in South Africa

According to the Republic of South Africa (RSA, 2002) "food security is an economic and social right enshrined in the South African Constitution, a vital aspect of well-being and socio-economic development in poor rural and urban communities, and an essential element for achieving peace and prosperity in the region". Breslin, Delius and Madrid (1997) stated that the majority of people who are affected by high unemployment and vulnerable to inadequate basic services are black people in rural areas. By 1997 the South African government had formulated development strategies to strengthen or support vulnerable households through a programme of food support to assist marginalised communities.

However, it has been noted that domestic food products are being supplemented by food import options such as fuels and fertilisers, and this also affects the access to food due to high costs. The World Bank (2003) pointed out that basic services including education, health, food security, water and sanitation are the responsibility of the State, but these are systematically failing in South Africa and particularly the poor people in rural areas. Although South Africa is one of the countries that are sustaining the capacity to meet national food requirements, large-scale inequality and poverty means that the majority of its people do not enjoy food security or adequate access to food (SSA, 2011). Alemu (2015) supports this view, pointing out that food insecurity at the household level is becoming a major challenge, as the majority of the populace is becoming more food insecure due to low rates of agricultural production, low access to food resulting from low income, and poor roads and infrastructure facilities, particularly in rural areas.

Wills, Chinemana and Rudolph (2009) argue that South African policy frameworks for food security for individuals and communities focus on food fortification, food transfer programmes such as school-feeding programmes, and rural home-based gardens. Moreover, apartheid policies have left a legacy of inequality and poverty among the rural

communities as well as other disadvantaged groups, which have been stripped of their assets, particularly land, and distorted economic markets and social institutions. For this reason, the democratic government has paid more attention to prioritising public spending to improve food security conditions, particularly among the historically disadvantaged, with programmes such as school feeding schemes, child support grants and pension funds for the elderly, the working for water programme and the community public works programme (Sekhampu, 2013).

Duncan (1999) indicates that the Southern African Development Community (SADC) governments' major challenge is to develop new ways and techniques for achieving food security which is consistent with the changed circumstances and with approaches to economic management which are different from those used before. Furthermore, he states that despite this, the South African government has inspiring fiscal discipline, largely motivated by seeing long periods of inflation and the plight of some neighbouring countries which have resulted in large part from fiscal deficits. Schonfeldt, Hall and Bester (2013) have a different view, saying that many South African families are faced with the harsh reality of being drawn deeper into poverty and food and nutrition insecurity. One of the reasons is that this country still has a complex combination of developed and developing areas in terms of its people, economy and infrastructure.

Battersby (2011) argues that in South Africa food insecurity is still a thorny problem and has been the focus of State development as well as of non-profit organisations (NPOs). Labadarios *et al.* (2011) argue that the economic recession of 2008 resulted in steep food and fuel prices, high-energy tariffs and increasing interest rates, which have negatively impacted South Africans severely in terms of meeting their basic household needs. They further argue that in South Africa no national survey has been conducted to assess all the dimensions of food security, while some national surveys have included specific components of food insecurity. Misselhorn (2005) points out that food insecurity is multidimensional and requires broader analysis, beyond focusing on agricultural production. When discussing food insecurity issues the focus should be on economic dimensions (poverty, unemployment, inflation and market failures) and socio-political

factors (conflict, property rights, education and HIV/AIDS). In 2009 Misselhorn asserts that the real problem is to address the vulnerability to food insecurity, which is deeply rooted in structural socio-economic and governance factors that lead to ongoing livelihood failures and food insecurity.

Hamann, Giamporcaro, Johnston and Yachkaschi (2011) state that the South African government introduced black economic empowerment (BEE), the objective of which was to improve black people's participation in the formal economy, to address barriers to food security. Battersby (2011) argues that the South African government has an only limited understanding of the role of the informal sector, underestimates its importance, and fails to understand how it operates. This clearly indicates that the informal sector's role in food security is neglected as well as being a symptom of significant ignorance of the sector's role in the South African economy. Hamann *et al.* (2011) point out that the critical challenge faced by the South African government is land reform. Beneficiaries are struggling to develop and maintain effective production on newly acquired land, and they receive only limited government support, all of which impacts negatively on food security. The other challenge is how to build a partnership which is a credible, trustworthy commitment between the government and private sector in the politically sensitive food market.

It is now notable that South Africa does not have policies directly focusing on urban and rural food insecurity. However, international organisations like the FAO, World Bank and United Nations (UN) have documents on addressing food insecurity in rural areas and assisting small-scale farmers. Again, the South African government's responses to food insecurity are misconceptualised, mainly because the rural framing of food insecurity is linked to the persistence of the anti-rural bias; secondly, many programmes which are based on addressing food insecurity are housed in sections of rural development.

2.4.1 Factors contributing to food insecurity in South Africa

Shisana and Hendriks (2011) list the causes of food insecurity in South Africa which include such factors as economic stagnation, decreased formal employment opportunities, poor agricultural policies, lack of purchasing power and the devastating impact of HIV/AIDS. It is noted in Ncube and Kang'ethe (2015) that although white people in South Africa are a minority group, they still dominate as commercial farmers and are in control of produce with exorbitant prices that favour them as producers. Since the black majority have a poor socio-economic status, this leaves most of them vulnerable to food insecurity due to the fact that they lack purchasing power and ability to compete in the market.

Modirwa and Oladele (2012) state that the Western Cape government has established food security programmes aimed at reducing the problem of food insecurity and assisting people to sustain their lives. They further state that this province is affected by social deprivation, lack of job creation (particularly among the youth) and serious skills shortages, which are associated with being food insecure. Van Averbeke (2007) argues that income distribution in South Africa is also highly unequal between rich and poor, leading to urban migration of black people and the transfer of poverty from rural to urban areas. It has been noticed that Gauteng province is strongly affected by urban migration because it is known as the economic hub of South Africa. This province has adopted urban agriculture as a strategy for poor urban dwellers to alleviate food insecurity.

A report by Martin, Oudwater and Meadows (2000) states that in Pretoria and Cape Town urban agriculture has been associated with a lack of formal sector employment because it aims at the production of food for home consumption which enables households to save money on food expenditure. However, a report by the Programme in Urban Food Security (2009) clearly states that urban food gardens in Gauteng play a minor role in addressing food insecurity, and the province has encouraged different communities to produce food themselves. By contrast, Aliber and Hart (2009) indicate that 32% of black adults from rural areas in Limpopo are involved in agriculture, which contributes to household food security.

Oni, Maliwichi and Obadire (2010) indicate that most food security projects in Limpopo have failed to accomplish food security in spite of huge investment by government and that many of them are unsuccessful because of some socio-economic constraints such as lack of education. It was reported that many smallholders' organisations were unable to produce enough food to last a year, and the majority of them lacked access to credit to start them off. Francis (2002) states that local institutions and institutional change have an impact on North West Province residents' efforts to earn livelihoods. Due largely to the effects of apartheid this province has large numbers of people who are unemployed, and some rely mainly on resources coming from urban areas in the form of wages, pensions and seasonal labour on white farms. Altman (2009) and Dodd and Nyabvudzi (2014) point out that in the Eastern Cape the majority of the rural population relies on government grants which makes it difficult for them to be food secure. This is aggravated by limited employment opportunities and low wages.

Kwa-Zulu Natal is dominated by rural areas where people are struggling to access food, and as a result, the majority are food insecure. It is noteworthy that this is the third smallest province in South Africa, but it has the largest population. Most of these areas are associated with the insufficient development and poor service provision and delivery (SSA, 2014). Specifically, the province is facing a lack of or inadequate basic infrastructure and poor roads, shortages of water and electricity, inaccessibility to markets, lack of credit, the inadequacy of education and health facilities, as well as a scarcity of job opportunities (Kataneksza, Riddhima and Gary, 2012). Unemployment in this province is a matter of concern as it constitutes one of the major constraints that contribute to high levels of poverty and income inequality, decreasing the overall quality of life of the people (Provincial Growth and Development Plan (PGDP), 2014).

Kwa-Zulu Natal has established a Comprehensive Food Security Programme targeting vulnerable and food insecure households in rural areas, and vulnerable households were identified for relevant targeted food security interventions and social grants. The KZN government has mobilised traditional authorities and local government to provide land

and leadership to promote food production at a ward level (NDA, 2011). It is further noted that KZN's female-headed households and rural populace are economically marginalised which inevitably results in food insecurity because they are unable to purchase food even if it is available.

Table 2.1: Percentage of households experiencing inadequate or severely inadequate food access by province, 2014

Province	2011	2012	2013	2014
Northern Cape	29.7	28.1	30.6	29.3
Mpumalanga	26.1	25.7	29.5	27.4
Eastern Cape	25	28	29.4	29.7
North West	32.9	34.6	27.7	39.6
Free State	22.7	23.7	26.5	21.8
KZN	17.2	19.8	24.9	26.4
Western Cape	23.4	21.3	23.3	25.5
Gauteng	18.5	18.4	17.7	14.5
Limpopo	13.2	10.2	8.7	9.1

Source: General Households Survey, SSA, 2011, 2012, 2013 and 2014

Table 2.1 shows that food access problems in 2014 were the most severe in the Northern Cape, where 30.6% of households had inadequate or severely inadequate food access. KZN also shows a negative growth of households with inadequate or severely inadequate food access – 17.2 % in 2011 compared to 24.9% in 2013. These percentages of the nine provinces indicate that the South African populace continues to be food insecure, despite the fact that the country is known as being food secure at the national level (SSA, 2011, 2012, 2013 and 2014). South Africa's provinces are trying hard to reduce food inadequacy, however, but some find it difficult to improve the percentage of food adequacy, including KZN, the North West and Western Cape, as shown in the 2014 statistics. These figures suggest that the unemployment rate and income inequalities and poverty in many provinces are very high because of lack of availability and access to resources among especially the rural populace.

Faber, Witten and Drimie (2011) also state that in South Africa lack of producing food themselves or having low purchasing power in the market are the symptoms of being food insecure. In addition, lack of entrepreneurship skills in rural areas is a contributing factor which perpetuates food insecurity because people are unable to produce food for

themselves or develop skills to generate income. All provinces need to develop strategies for the creation of jobs through realising agricultural potential, enhancing industrial development through investment in key productive sectors, and promoting Small, Medium and Micro Enterprises (SMMEs) and entrepreneurial development. However, Moyo (2007) in Zimbabwe and Alemu (2015) in South Africa maintain that rural communities are characterised by poor infrastructural conditions, including limited access to new technologies, credit, storage facilities and transportation for inputs and outputs. This inadequacy leads to food loss and lowered food production that has negative implications for achieving food security. These factors indicate that rural communities lack institutional support services; as a result, even subsistence farming would be characterised by low yields, which perpetuates food insecurity at household level.

2.5. International community on food insecurity

The cooperation of international, regional and national governance on food security has led to an effective mechanism for addressing global food insecurity with the collaboration of a full range of stakeholders. Vulnerable communities are actively involved in work related to standard setting and policy formulation, implementation and monitoring of regulatory frameworks (Julio and Brauch, 2009 and Page, 2013). This clearly shows that international organisations are committed to making all aspects of food and hunger prominent issues in the public debate about food security, often pushing national governments and intergovernmental mechanisms to action. However, many countries, particularly in the developing world, rely on access to foreign capital (both private and public sector) to finance their development programmes and their recurrent expenditure requirements (FAO, 2010).

In spite of that, as a result of a historical bias towards agricultural production as the strategy for food security, the Department of Agriculture and Rural Development has stewardship of food security in the South African Government. In that department responsibility has been allocated to a directorate that is institutionally weak, with no real ability to compel other directorates (Hart, 2009). It is further asserted by IFPRI (2011) that in pursuit of economic growth an efficient and competitive market is problematic

because of poor infrastructure, insufficient credit and policy distortions that impose high costs on small-scale farmers and other entrepreneurs. Therefore, the South African and Ethiopian governments have put more effort into developing co-co-operatives as one of the main institutional vehicles for enhancing food security, particularly in rural areas.

Furthermore, global governance and the delivery of global public good are therefore essential underpinnings for the achievement of commitments made in support of country-led development processes (Page, 2013). The United States of America, in particular, has paid much public attention to global hunger and the need to support food production by small-scale farmers in developing countries by launching the Feed the Future Initiative in April 2010. This stresses the importance of small-scale farmers, especially women, in country-led programmes and a multi-agency, whole of government approach to global food security (Hansen-Kuhn, 2011).

Humanitarian food assistance is known as a strong and active international intervention that interacts with weak or failing governance at a local, national, and regional level, in a way achieved by few other international institutions (Hansen-Kuhn, 2011). Young and Maxwell (2013) state that poor governance occurs especially in developing countries in Africa, where local political and social institutions are unresponsive to or unrepresentative of their constituencies, lack accountability, and fail to ensure law and order and defend people's basic rights, including food security. As a result, West African countries have prioritised the need to coordinate national food reserve systems to support each other in cases of crop failure or other crises related to food security (Hansen-Kuhn, 2011). Furthermore, there has been an improvement of management systems for the international coordination of information on food and harvest production and national stocks, with a view to managing shortages and having reserve stocks available on a year-by-year basis, with greater coordination sought between the main international agencies (Lang and Barling, 2012).

It is noted by Hansen-Kuhn (2011) that this system does not replace international trade, but it can be an important means to stabilise national and regional food supplies. The World Food Programme's policy commitments to promote participation are intended to empower poor, marginalised communities and overcome gender inequalities. International organisations have to assist developing countries in developing frameworks as the tools to improve their system of governance towards achieving the international commitment to "right to food" (Bellows, Núñez and Viana 2015). This indicates that international programmes based on alleviating food insecurity in developing countries are not properly implemented because there is lack of monitoring and evaluation of food security interventions. Furthermore, Battersby (2017) argues that MDGs have failed to transform food and nutrition insecurity because of lack of consultation within the development of the MDGs and this has led to poorly formulated goals and failure to meet the set target. The World Bank and International Monetary Fund (IMF) have attempted to assist poor countries through establishing structural adjustment programmes to alleviate poverty, including food insecurity.

2.5.1 The background to structural adjustment programmes

Hurchzermeyer (2004) confirms that structural adjustment was adopted as a replacement of the basic needs approach, and was initiated by the International Monetary Fund and the World Bank. The structural adjustment programme has been adopted by various countries in response to the African crisis of the early 1980s characterised by a rapid decline in the quality of life of the majority of the African population, coupled with a decline in the rate of growth in all sectors of the national economies (Barwa, 1995).

This period was characterised by high rates of unemployment and food insecurity of the African population. It was assumed that adoption of adjustment measures would provide a macroeconomic environment that would be conducive to the small and informal sector entrepreneurs, which suggests an equitable distribution of the benefits of economic development and thus an improvement in the quality of life of people. Salehin (2015) points out that the main purpose of the structural adjustment was to stimulate economic growth by reforming macro-economic instruments in all major sectors of the economy,

including agriculture, finance, and trade, with an overarching goal of obtaining high economic growth. The establishment of this programme led to shifting of institutional support and resources from non-tradable to tradable sectors of the economy that resulted in improvement of production and distribution. Moreover, reforms were made in institutions to strengthen the capacity of the public sector generally and increase the efficiency of public enterprises, with improved institutions to support the productive sectors.

2.5.2 The impact of structural adjustment programmes on livelihoods

Weissman (1990) asserts that the poor majority would have been worse off without some form of adjustment to address external and budgetary deficits and increase incentives for production. However, structural adjustment has produced little in terms of poverty alleviation, and certain principles of this programme have even worked against the poor. Hossain, Uddin and Fakhruddin (2013) argue that social life in these communities has been affected mainly in terms of losing control over social and ecological resources. This programme is more an economic system than a market-driven and competitive one, by deregulating the financial sector, encouraging foreign investments, withholding subsidies to the agricultural sector and privatising State-owned enterprises.

Salehin (2015) argues that this programme has created social inequality because foreign investors have utilised their power and privilege to exploit the local marginal and small farmers to acquire necessary land areas for very low prices or no cost at all. This system has resulted in the deterioration of small and poor farming communities by their losing control over resources and power. Instead of enjoying a better life, many developing countries' communities were found to be struggling because resources were not owned by the local people and profit does not circulate back to the community.

Pandolfelli, Shandra and Tyagi (2014) have also found that structural adjustment is associated with lower levels of access to clean drinking water, inadequate access to nutritious food, and a generally dehumanising life of poverty and mortality in Africa. Kawamura (2015) maintains that structural adjustment has a negative impact on the

development of social protection programmes such food subsidies, particularly in developing countries, while populations in these countries hold the view that provision of social protection programmes is incumbent upon the government. These programmes have been strongly criticised by the IMF and World Bank due to the fact that they create a heavy burden on the government's budget and are regarded as inefficient in the process of poverty reduction.

2.5.3 Shortcomings of structural adjustment programmes to address developmental issues

Structural adjustment has failed to deal with key developmental issues to stimulate growth in developing countries, including rural areas, these issues include food production problems such as inadequate supply, weak credit systems and lack of storage facilities. However, Pandolfelli *et al.* (2014) assert that structural adjustment also weakened the ability of governments to deal with economic, social and environmental problems caused by the inherently unequal economic relationship between rich and poor nations, by requiring indebted nations to reduce spending on social services such as health, education and nutrition security.

Furthermore, structural adjustment has no special action to help the development of the rural financial market, and their liberalisation of credit allocation has had a negative impact on the role of the banks in rural credit because it has the tendency to crowd out agriculture from the banks (Mkandawire and Soludo, 2003). Furthermore, Moyo (2007) argues that structural adjustment programmes have not provided funding for financing land reforms and have even changed the role of government in agricultural production and food security to that of facilitator rather than a guarantor of food security, which it was in the past. Battersby (2011) asserts that structural adjustment programmes have contributed to African households struggling with food access and being unable to produce their own food. This programme has created many problems for poor countries and has made a negligible impact on improving the standard of living for poor people. The literature shows that this programme has perpetuated poverty and little that has been done to assist those affected countries to recover from the legacy of poverty created by

structural adjustment programmes. Therefore, SMMEs will contribute to the alleviation of food insecurity.

2.6 Interventions to enhance food security

The South African government has introduced different interventions to mitigate food insecurity through various institutions such as public and private institutions as well as encouraging communities to work together. This could be achieved by the interventions discussed below:

2.6.1 The contribution of Small, Medium and Micro Enterprises (SMMEs) towards food security

SMMEs make an important contribution to economic development, in that they promote food security through the generation of wealth, and they supply the rural populace with food as well as jobs. Antoni and Umejesi (2014) in South Africa concur that SMMEs in South Africa are viewed as skills developers, employment generators, promoters of economic growth and alleviators of cases of food insecurity. Du Toit, Erasmus and Strydom (2009) state that SMMEs integrate the resources of societies efficiently to produce goods and services for the society in which they operate. The South African government has established some policies to promote SMMEs in rural areas as a strategy to address poverty issues such as local economic development (LED) with food insecurity being the major challenge in these areas.

2.6.2 The role of Small, Medium and Micro Enterprises (SMMEs) in rural areas

Stevenson and Lundstrom (2001) argue that SMMEs policies do not stimulate economic development of rural areas and thus fail to strengthen access of the poor to productive opportunities or improve the overall standard of living of rural people. These authors further note that rural small businesses receive little attention or sometimes no formal professional training on how to operate their businesses, and they experience problems of lack of access to funding because financial institutions are disinclined to take risks. Peters (2009) in South Africa concurs that little support has been enjoyed by SMMEs in small towns and rural areas. Many services are available from local municipalities (LMs) and

they are aware of the problems encountered by these entrepreneurs. However, these municipalities do not have the capacity to render efficient or effective support to existing and emerging entrepreneurs.

Therefore, to resolve rural small businesses' failures and challenges, the inadequacy of appropriate skills needs to be tabled with the aim of supporting the growth of rural SMMEs. In the context of Pakistan, Hussain (2006) states that to overcome the challenges of SMMEs new special departments were formed to respond to SMMEs challenges by creating an enabling environment for banks to increase the flow of credit to SMMEs. Equally, Lundstrom and Stevenson (2001) assert that SMMEs are regarded as vehicles to address the challenges of economic growth and equity in South Africa in terms of access to important resources that enhance food security. Evidence of this is that the South African government has recognised the role of SMMEs as catalysts to grassroots economic empowerment, especially in rural areas.

2.6.3 The efficiency and effectiveness of Small, Medium and Micro Enterprises (SMMEs)

Fatoki (2013) indicates that the failure rate of SMMEs is very high in South Africa while Lightlem (2011) shows that 75% of new SMMEs created in South Africa fail within the first two years of operation, and only about 25% of these enterprises survive and become established firms. In addition, it is noted that the creation of new SMMEs occurs at a very low rate. It is crucial to develop a strategy on how to improve the survival rate of the few SMMEs that are created, which can assist in alleviating the high level of unemployment, income inequality and food insecurity in South Africa. Mutyenyoka and Madzivhandila (2014) concur that SMMEs are known for short lifespans, poverty wages, less production and precarious employment opportunities, and receive less financial and non-financial support. In addition, most entrepreneurs are unaware of State-sponsored programmes to help them, and most of those few who did apply for assistance received no feedback from governmental institutions.

Governmental institutions have been poorly managed and inefficient, and are run by political appointees rather than by experienced professionals (Ingle, 2014). Furthermore, Mutyenyoka and Madzivhandila (2014) in South Africa assert that this has created difficult situations in the socio-economic sector in terms of promoting agriculture, energy, manufacturing and mining, all of which lead to food insecurity. They further note that in rural areas most small enterprises consist of general dealers and *spaza* shops, and are unable to compete with larger shops in the cities.

2.6.4 Small, Medium and Micro Enterprises (SMMEs) in the form of spaza shops

Pereira, Cuneo and Twine (2014) assert that *spaza* shops and general dealers play a vital role in rural food security and promoting community-level food security, but it is noted that the development of local markets and meeting people's need for nutritious food are not being adequately addressed in South Africa. In the light of rural economies, socioeconomic benefits would be achieved if employment opportunities in particular are decentralised from provincial economic hubs to rural growth points and nodes. Fatoki (2011), Peters (2012) and Mutyenyoka and Madzivhandila (2014) further state that the lack of and poor access to credit are the core business constraints faced by emerging SMMEs and entrepreneurs, while the issue of high- interest rates underpins low usage of formal bank loans due to complex application processes, lack of collateral and credit history.

2.6.5 Small, Medium and Micro Enterprises (SMMEs) in the form of farming

Mmbengwa *et al.* (2012) point out that in many developing countries (including South Africa) where socio-economic problems are dominant, the farming sector plays a crucial role in enhancing food security and job and capital creation. They suggest that the African governments have to create an enabling environment for farming and SMMEs, to eliminate socio-economic problems. Equally important, African governments are recognising the economic and social benefits of investing in farming and SMMEs, especially in rural areas, with the intention of building the rural economy. Mago and Toro (2013) concur that it is incumbent upon the government to support the producers and public through its policies and institutions that will improve the quality and quantity of

outputs. The State should ensure that conditions enable entrepreneurs to expand their operations and deal effectively with the market.

2.6.6 The role of agricultural cooperatives in food security

Agricultural co-operatives are a form of business owned by the people who utilise its services and whose benefits are shared by the users. It is said that over 100 million jobs have been created by the formation of co-operatives globally, and they are recognised as a major source of income and employment, especially in rural areas (United States Department of Agriculture (USDA), 2002; International Labour Organisation (ILO), 2007). In an African context agricultural co-operatives are characterised by small family subsistence farming on less than five hectares of land with mixed farming systems, and the aim of these co-operatives is to help small and poor farmers without radically changing the distribution of economic power (Mujawamariya, D'Haese and Speelman, 2013). Furthermore, the FAO (2002) asserts that alleviating poverty and food insecurity involves enhancement of agricultural productivity and production and income generation among producers as well as among those in rural areas who do not work on the land.

The basic idea behind the formation of co-operatives is to promote self-help, such as free and equitable participation together with democratic self-management. It has been noted that co-operatives are being overloaded with expectations of providing solutions to all sorts of problems, with the intention of supporting the subsistence economy through empowering entrepreneurs. Furthermore, they are viewed as the vehicles for community development because they mobilise local resources to address community challenges such as food insecurity and unemployment (Zeuli and Radel, 2005; Rosner, 2012).

Vandenberg (2006) clearly states that co-operatives are an important means by which poor people group together to improve their economic situation. Co-operatives are common in rural areas, and they are critical in the removal of market barriers caused by slow economic growth where the majority of the poor live. Allahdadi (2011) argues that co-operatives in Iran play a helpful role for rural farmers through improving the stability of the farming sector, improving market access for their products and strengthening their

position in the agro-food chain. Co-operatives serve as a vehicle for rural agricultural development because the government assists them with production inputs such as fertilisers, seeds and equipment. However, co-operatives have been associated with public mismanagement due to low levels of supervision and corruption, and they lack entrepreneurial skills which make it difficult to uplift the standard of living of the poor communities (Rosner, 2012).

2.6.7 Challenges of agricultural co-operatives to food security

Allahdadi (2011) points out that political interference is a barrier to the functioning of cooperatives, because politicians use them as short-term political tools, and it has been noted that many co-operatives are suffering from government control. He further indicates that decisions in agricultural cooperative policy are mostly made by the government, and lack of community members' involvement in decision-making disempowers rural communities from decision-making related to alleviating food insecurity. Agricultural co-operatives that can provide a decentralised system of food and employment maintain a higher level of income and food security to sustain rural livelihoods (Chambo, Mwangi and Oloo, 2007, 2009).

Furthermore, co-operatives are unable to compete with private sector bodies such as multinational companies who use credit from major private banks, and prices are not on their side; this situation results in a high mortality rate for agricultural co-operatives. In the province of KZN, the agricultural sector is one of the most important in South Africa because it contributes about 4.4% to provincial Gross Value Added and produces almost 30% of the national agricultural output, helping to provide food security in the country. Hence this province realises the importance of stimulating commercial farming as a way of expanding agricultural production and enhancing the contribution of small-scale farmers within the sector. Co-operatives and emerging farmers need access to funding, land and an enabling environment such as skills training and mentorship to increase their production. If these needs are met, access to the trade market will improve (PGDP, 2014).

2.6.8 Land as an important resource in food security

Barriers to access and dispossession of land to black South Africans during the apartheid era have contributed to the food insecurity challenges that South Africa faces today. The property rights contained in the Constitution seek to redress the imbalances of the past. Moyo (2007) argues that land is the most important asset and forms the foundation for all human survival in terms of social and economic development. He further states that food security is achieved through direct production from the land and that access to land is important for the livelihoods of people.

According to the South African Constitution of 1996, Section 25, it is stated that "the state must take reasonable legislative and other measures, within its available resources, to foster conditions which enable citizens to gain access to land on an equitable basis". Toulmin and Quan (2000) correctly argue that land is a primary means of subsistence and income generation in rural economies; access to land and security of land rights are of primary concern in the eradication of food insecurity. In rural areas land is a basic livelihood asset, the principal form of natural capital from which people produce food and earn a living. Access to land enables family labour to be put to productive use in farming, it generates a source of food and provides a supplementary source of livelihood for rural workers and the urban poor.

Gathering fruit, leaves, grass and wood from common land is an important, regular source of income for women and poorer households. Most rural African households have access to a plot of land, plus a wider area of common land for grazing, gathering, and hunting. Moyo (2007) has suggested some critical strategies to improve food security by improving access to land by the majority of the black populace, supported by appropriate tenure policies. Another strategy suggested is further improving agricultural production through expansion of cropping areas by opening up virgin land and irrigation, increasing the cropping intensity or the proportion of cropping area in relation to other agricultural uses, and intensifying agricultural productivity through improved farming systems and inputs. However, this could be achieved only when land is redistributed to the previously disadvantaged populace.

2.6.9 Land redistribution within the small-scale farming sector

It is well recognised that severe land inequalities persist between smallholders, large-scale and State farms in South Africa. The smallholder farm sector is typically characterised as small but relatively 'uni-modal' and equitably distributed land holdings are situated within a 'bi-modal' distribution of land between the large-scale farming sectors (Jayne *et al.* 2003). Jayne, Mather and Mghenyi (2010) assert that redressing these inequalities in Sub-Saharan Africa is an important element of an effective rural poverty reduction strategy, yet despite widespread acceptance that 'pro-poor' agricultural growth is strongly associated with equitable asset distribution, surprisingly little attention has been devoted to quantifying land distribution patterns within South Africa's small-scale farming sector. They further argue that the productivity increases in smallholders and that successful reduction of poverty in China, India and Taiwan are largely due to the equal distribution of land. The economic analysis supports the view that the contribution of land to rural economic growth depends upon the security, duration and enforceability of property rights since these provide an incentive for agricultural investment and help develop markets to rent and sell land (Deininger and Feder, 1999).

Mbedu (2014) points out that the South African government committed itself to taking a lead in the programme for the redistribution of land, trying to reach a target of redistributing 30% of white-owned agricultural land by 2014. He further confirmed that this process should be well planned, efficiently managed and fully financed in order to enable fundamental social transformation to take place without disrupting food security initiatives and activities. Moreover, Fukuda-Parr and Taylor (2015) indicate that in South Africa the land redistribution programme and associated support to emerging farmers are the major elements of government policy related to production-based entitlement. However, this does not confirm that land redistribution would benefit food-insecure households, which are the poorest of the poor. Toulmin and Quan (2000) point out that conventional wisdom about rural development in South Africa has continued to argue in favour of replacing customary systems of land management with what are considered to be more secure forms of individual tenure through the issue of land titles. However, farmers have to be cognisant of climate change in order to maximise their production.

2.7. The influence of climate change on food security

International organisations such as FAO, the International Food Security Centre and United Nations emphasise that all people must be food secure because it is their fundamental human right to have access to food and nutrition security, and it is incumbent upon the State to prioritise and protect this right. Soussana *et al.* (2012) assert that irrespective of problems of climate change and the increasing world population, there would be several decades with food surpluses and low prices for food, and the unfortunate part is that food insecurity has been perpetuated due to inflation of food prices. Rockstrom, Steffen and Noone (2009) share the same sentiment, stating that increasing the global food supply is a key challenge because it is unable to accommodate a world population growing to nine billion or more by 2050 while preserving a safe operating space for humanity by avoiding dangerous environmental change. Already climate change is negatively impacting food production for the present population of the world.

2.7.1 The impact of climate change on food production

Chakraborty and Newton (2011) state that global food production must increase by 50% in order to meet the demand of the world's population by 2050. However, total food production alone does not define food security, since food must be both safe and of appropriate nutritive value. The findings of Nkonya, Gerber and Baumgartner (2012) indicate that an estimated one-third of the world's cropland is losing topsoil faster than new soil is forming, and many of the poor live on degraded land that negatively impacts on food production. It is reported by Hannah *et al.* (2013) and Moreland and Smith (2013) that agricultural productivity is declining due to climate change that has led to crop expansion into nearby natural habitats, as farmers attempt to compensate for falling yields by increasing areas under production and mounting risk of food shortages, especially in developing countries. In Niger, there is an extremely harsh climate, marked by a very limited and short rainy season, with an annual rainfall of 350–800 millimeters (FAO, 2012).

Smith *et al.* (2013) also indicate that land is declared as a limited resource, and only 134 million km² is suitable for food production due to climatic, soil and topographic constraints. European governments have been actively involved in policy and action to decrease greenhouse gas emissions. New international funding is being established to address climate change, and this funding needs to be prioritised to areas that are strongly affected by climate change (Hannah *et al.*, 2013). Since rural areas mostly depend on agricultural activities as their major economy, the climate change has increased the livelihoods of short-term crop failures and long-term production declines (Nelson *et al.*, 2009). This suggests that different stakeholders should develop strategies that will mitigate food insecurity among rural people since climate change has a negative impact on human well-being. This requires rural people to develop innovative techniques to improve high yields through practising crop varieties and mixed farming systems to improve access to markets.

2.8. The value of market access to food security

Many debates have taken place on the availability or access to markets, and this is noted by researchers as a critical challenge for communities and contributes to food insecurity. Kaganzi *et al.* (2009) note with concern that over the past 20 years, market opportunities for small farmers in Africa have changed due to the dissolution of government marketing boards, globalisation and market reform. Masuku, Selepe and Sabela (2014) state that the availability of market opportunities is crucial in the context of development and sustainment of a local economy, particularly in rural areas. It has been noted with concern that informal markets are more dominant because they are regarded as a source of livelihoods.

Furthermore, these kinds of markets are a part of everyday life and households' survival strategies in rural and urban areas, and very few people have access to formal markets, especially in the agricultural sector, because they are governed by high quality and food safety standards. The Civil Society Agriculture Network (2011) argues that even though small farmers have access to markets, private traders demand very low prices for their products which indicates that farmers do not have any say since traders have full control

of the market. It further states that small farmers are exploited when they try to sell their farm produce and feel cheated because the prices paid do not reflect production costs.

2.8.1 Strategies used by small-scale farmers to access markets

Barham and Chitemi (2009) indicate that in Tanzania small farmers decided to work collectively to improve access to the market, and the Tanzanian government led an evaluation programme which attempted to increase smallholder farmers' incomes and food security through a market-oriented intervention. The justification for this intervention was that it would promote rural employment and sustain rural agricultural growth. However, Markelova, Meinzen-Dick, Hellin and Dohrn (2009) argue that small farmers do have an opportunity to raise their incomes, which increasingly depends on their ability to compete in the market. It is a matter of great concern that in developing countries, especially in rural areas, small farmers are unable to compete effectively in the market.

2.8.2 Challenges faced by small-scale farmers in accessing markets

Kruijssen, Keizer and Giuliani (2009) report that developing countries are faced with limited access to physical and financial resources which creates a problem with effective product marketing, as they do not have the means to transport their products to formal and stable markets. They state that most rural populations also have limited technical skills, no access to training and little information about market requirements. Small farmers and other entrepreneurs need access to these markets, as well as adopt new marketing skills and strategies through collective action. It is further suggested that smallholders need to increase their participation in markets and ensure that they realise the benefits of market participation.

However, Hellin, Lundy and Meijer (2009) indicate that in order to make markets work for the poor the global agricultural economy needs to change how they respond to their needs and create new opportunities for rural producers. This shows that marketing for small-scale farmers is still a continuous challenge and it is not clear how this situation

could be improved by the government. If smallholders do not receive financial assistance, rural entrepreneurship, unemployment and food security would be not achieved soon.

2.9. Availability and accessibility of credit to improve food security

Money has been described as the lifeblood of improving food security, but lack of access to credit has been recognised as a major constraint amongst entrepreneurs or small farmers and individuals (Abu, Domanban and Sekyi, 2016). There is a greater need for credit in the developing countries, and it could play a major role in the reduction of food insecurity and other poverty-related issues since financial assistance provides the means for socio-economic improvement. Mailo, Halepoto and Shah (2014) indicate that it is imperative to state that the most applicable financial assistance for people in poor countries is microcredit, which is where they can borrow small amounts of money at low rates of interest, even if they have little or no collateral. This works through small banks like Ithala Bank in South Africa. Yuan and Xu (2015) point out that in China poor people are often excluded from formal credit and that this is more common among developing countries, particularly in sub-Saharan Africa, because they lack collateral or guarantors. As a result, the poor are not able to enjoy the benefits brought about by formal credit, which drives them to informal credit markets in order to alleviate their financial constraints.

2.9.1 Challenges faced by small-scale farmers in accessing credit

Munyambonera *et al.* (2014) confirm that in developing countries and especially in sub-Saharan Africa financial assistance is highly inefficient, and concentrated in investing in and developing urban areas. This indicates that poor people from rural areas will be trapped into food insecurity for longer, and suggests that government and the private sector need to promote LED particularly in rural areas, by improving entrepreneurial skills. Luan, Jia and Huang (2013) state that non-governmental microfinance has expanded rapidly by serving a mixture of poor and wealthy clients while formal financial institutions, on the other hand, have gradually reduced their loan services in poor areas and have targeted the wealthy. This indicates that government credit programmes in many developing countries have failed to meet the demands of the poor. However,

Fakudze and Machethe (2015) assert that creating access to formal credit for smallholder farmers can improve and increase agricultural production, and make this an engine for rural growth to boost food security. This clearly suggests that some strategies from the government are inadequate so it requires the assistance of civil society organisations (CSOs) to fast-track the process of food insecurity alleviation.

2.10 The role of civil society organisations (CSOs) in enhancing food security

Civil Society Organisations (including NGOs, civil-based organisations and social movements) play a vital role in addressing food insecurity problems faced by poor rural communities by improving food security and the nutritional status of poor rural households. Their interventions serve as a strategy to form partnerships with other stakeholders to increase access to food and relevant support services for poor rural communities in South Africa. It is clearly noted that governments are working more closely with CSOs and rely on them to gather information on local concerns and assist in delivering more relevant services. Warshawsky (2015) asserts that CSOs have emerged as key institutions to reduce poverty and promote development; on the other hand, CSOs have been limited by uneven service delivery and lack of accountability as well as capacity to produce social change. This author further note that CSOs are incompetent in attaining their main goals to alleviate food insecurity and poverty and promote development without the assistance of the private sector and government.

2.10.1 Limitations of civil society organisations (CSOs)

The National Development Agency (NDA) (2013) indicates that in South Africa CSOs are playing crucial and diverse roles in driving the food and nutrition security agenda in many parts of poor communities. It further notes that lack of coordination among the various stakeholders is one of the major challenges limiting the effective impact of food insecurity reduction. Warshawsky (2011) argues that new relationships are a clear cooption of CSOs by the government as part of a wider political agenda to limit their activism and restrict their role to that of social service delivery only. Interestingly, CSOs have recognised that government departments are faced with complex situations affected by the dynamics of the broader political economy, in addition to financial and

institutional capacity constraints. They feel that these delivery setbacks need more attention and possible solutions, which can be achieved through effective coordination with various key stakeholders. Kirkpatrick and Tarasuk (2009) indicate that CSOs initiated community food programmes that involve the provision and promotion of free, nutritious food to people experiencing hardship, with the aim of reducing food insecurity. They further state that CSOs are given limited budgets, with limited personnel available, which hinder their progress in addressing development challenges faced by the communities around them.

2.10.2 The impact of human capital on civil society organisations (CSOs)

Koc *et al.* (2008) concur that people who are employed by CSOs also sacrifice their personal time, energy and money and often work long hours. Just Food (2012) stresses that the local population should be directly involved in all aspects of the food system, such as food-related decision-making processes at municipal, provincial and national levels. Furthermore, CSOs support food security and determine where gaps exist, filling those gaps by developing new programmes that will improve access to foods which are both healthy and locally produced. On the other hand, CSOs are expected to coordinate community gardening and establishment of new programmes to encourage donations of fresh food to local food banks, supported by local community and local farmers' markets. The NDA (2012) has introduced a model (overlapped figure 2) which aims at alleviation of food insecurity through working with CSOs.



Figure 2.2: The NDA food insecurity alleviation model with CSOs (Source: NDA, March 2013)

This model (Figure 2.2) for food security aims at integrating subsistence food production and a market food system through creating economic opportunities for small-scale food producers or SMMEs by linking them to distribution networks. The NDA introduced this model to implement the following aims in food security:

- Backyard food gardens: This involves giving starter-packs such as gardening tools, including watering cans, wheelbarrows, hoes, twine, pitchforks etc. Training and support for food production are one of the services rendered to co-operatives and SMMEs by the NDA.
- **Community food garden:** This indicates that community gardens are acknowledged as a vehicle to achieve the goal of food security. Gardens which qualify for support from public institutions are those of five hectares and below.
- **Small grower support:** The government has paid more attention to supporting emerging farmers, in particular, funding and assisting them to find a reliable market which will enable them to sell their produce and compete with other producers.

NDA's model provides assistance to all food security programmes with the aim of capacitating and strengthening CSOs in order to improve food security. This model advocates for income generation which addresses wider developmental issues such as the empowerment of previously disadvantaged groups including women, black Africans and youth (NDA, 2012).

2.11 The role of women in ensuring household food security

In most cases, women are the key role-players in ensuring household food security. Butt, Hassan, Mehmood and Muhammad (2010) concur that women in Bangladesh are the main participants in food security projects, and they operate under great constraints, such as inadequate institutional support in agricultural and non-agricultural activities that ensure food security. In addition, Chiloane-Tsoka's (2013) findings show that women are not active in the economic activities that are part of the Department of Trade and Industry (DTI)-formulated South African Women Entrepreneurship Network as a strategy to provide mentorship and create more opportunities for women in business.

They further state that the majority of black African women use their pensions and social club donations to save in the form of *stokvels* as a way of starting their own businesses, due to the fact that they still face financial barriers and banks hesitate or are unwilling to provide loans to them as entrepreneurs. These factors suggest that the South African government needs to formulate effective financing strategies and establish sustainable institutions that support SMMEs which encourage poverty alleviation and food insecurity by ensuring access to resources such as credits and savings. Therefore, the cooperation SMMEs and agricultural co-operatives would enhance alleviation of food insecurity by improving access to resources.

2.11.1 Gender inequality in food insecurity

Some studies on food security, namely Selim (2014); Duffy, Murray, Nowak, Girvetz, Corner-Dolloff, Twyman, Huyer, Jarvis and Spillane, (2017); Rao, Pradhan and Roy (2017) and Sinclair Ahmadigheidari, Dallmann and Melgar-Quiñonez (2017) show that one of the key contributing factors to food insecurity is gender inequality in communities

and society at large, with evidence that the most vulnerable to food insecurity are women. Moussa (2008) states that gender inequalities are caused by States, private sectors and individuals; however, the responsibility of the State is the overall governance of society through addressing gender issues, by creating equal access to State resources such as employment, through establishing policies that will create an enabling environment for women. The FAO (2011) and Qureshi *et al.* (2015) point out that 43% of women worldwide are in agricultural labour, and this percentage rises as high as 60% in some African countries, and report that they are disadvantaged in many ways, including poorer access to resources, input and land as well as lack of a voice in decision-making processes.

Qureshi *et al.* (2015) further report that 22 national poverty assessments found that sub-Saharan African women were vulnerable to food insecurity, exclusion from social services, lack of ownership of productive assets and irregular income flows. Iruonagbe (2010a, 2011) reports that access to resources is very important in terms of promoting food security for both men and women; however, women encounter cultural constraints which result in a reduction of their productivity and suppression of their participation in decision and policy making. The findings of Olowu (2013) reveal that women farmers lack access to security of tenure or ownership, which limits their role in alleviating food insecurity and their participation in the market.

2.11.2 The effect of income disparities and division of labour on food security

Modirwa and Oladele (2011) state that South Africa has got the highest rate of income inequality in the world, with women earning less than men for doing the same job. What is sad about a gendered division of labour is that although poor women work more hours than men, their work is neither valued nor recognised as contributing to the economy. These authors further point out that the socio-economic status of women plays either a negative or positive role in food security, and most women have poor expertise regarding a range of productive resources, including education, land, information and financial resources. Surprisingly, Sidh and Basu (2011) point out that work performed by women

in rural areas is not recognised in the market as economic activity, in spite of the fact that women in these areas work longer hours than men. The overlapped Table 2.2 indicates the gendered division of labour.

Table 2.2: Division of labour among women and men in rural households (Sidh and Basu, 2011)

Women	Men
Daily household chores and care activities Cooking Cleaning and mopping (hygiene) Upkeep of house Care of elderly, sick, and children Weaving and stitching Food preservation	Daily household chore and care activities Taking children to school Major repair work
Farm and animal husbandry, daily work Preparation of fields, removing weeds Harvesting, transporting, and storing Kitchen gardening (fruit and vegetables) Milking cattle and milk processing Feeding cattle and cleaning cattle sheds	Farm and animal husbandry, daily sales Sowing Cattle grazing (done by elderly) Selling daily products on the market
Collection activities Water, fodder, and fuel (wood) Non-timber forest products Collection of honey	Collection activities Water for cattle Non-timber forest products Collection of various products
Occasional income and leisure Daily wage labourer Leisure activities and personal care	Market-related activities and leisure Gossiping at marketplace Leisure activities: indoor games (Playing cards, etc.)
	Indent Jobs in government and private sector Daily wage labourer Private business: shopkeeping

As indicated in Table 2.2, women's work does not contribute to the Gross Domestic Product (GDP) or add value in the market but is regarded as limited to the immediate household. It is further posited that in most household's women are the breadwinners, but due to the type of work, they perform they are associated with health problems, especially in the rural areas (Sidh and Basu, 2011). Furthermore, Olowu (2013) points out that women's role in providing food for their families has remained unrecognised by many

policy-makers, and another worrying factor is that social and cultural inequalities have a major influence over household decisions about food. Wilcox *et al.* (2015) argue that women are responsible for many agricultural projects and activities, but they lack training and this undermines the strength of the agricultural sector and has negative implications for agricultural development, productivity and food security.

In support of this Menon and Dixit (2013) emphasise that the Universal Declaration of Human Rights under Article 14 ensures the right of rural women to equal access to land, water, credit and other services, social security and adequate living conditions. Even though the issue of women and food security has received great attention, public and private institutions have failed to address gender inequalities in relation to access to food. Interestingly, the South African government has programmes and policies that ensure women's access to land rights and ownership, which should contribute towards women's economic development (PGDP, 2014). However, a lack of policy coherence means that women struggle to produce food, provide food and manage both household and community responsibilities (Taylor, 2007).

Qureshi *et al.* (2015) have noted with concern that governments seek equitable outcomes, including gender concerns, even though there are many social, institutional and political constraints to achieve gender balance. The World Bank (2013) stipulates that women's empowerment through targeted agricultural interventions and strengthening the capacity of women to provide for the food security of their families are the most effective ways of achieving food security.

2.12 Poor service delivery in food insecurity

When the newly-elected South African government came into power it was obvious that there was an absence of basic services such as water supply, proper sanitation and electricity in many rural areas (South African Human Rights Commission, 2000). Furthermore, African states do not have adequate access to financial and human resources to provide the services that would improve the lives of the poor. It is crucial for the government to prioritise the needs of the poor populace in order to promote social,

economic and environmental development. These developments have to be promoted in such a way that they address and alleviate food insecurity on the continent.

2.12.1 The role of local government in service delivery

Service delivery is the government's major task and good governance is indicated when services are rendered, particularly at the grassroots level, to improve the standard of living through, *inter alia*, provision of clean water and access to food by promoting rural agriculture. Service delivery is facilitated and implemented by local government through municipalities because they are closer to the local populace and better understand the challenges of their local people. Francis and James (2003) emphasise that local people should be involved in decision-making as a strategy to facilitate the active participation of communities, highlighting local priorities and helping to ensure that programmes are appropriate to local needs. Farkas' (2013) findings indicate that rural populaces are often disadvantaged due to financial and practical difficulties in providing services to remote areas, while urban areas encounter problems of rapid urbanisation that result in demand exceeding service capacity. Winters, Karim and Martawardaya (2014) state that poor service delivery is an outcome of budgetary constraints and therefore the government must make difficult decisions about which services they are going to prioritise for the community.

Nnadozie (2013) asserts that service delivery in South Africa should be a top priority for poverty and food insecurity alleviation, to redress previous inequalities in the access to basic services during the apartheid regime. Communities and individuals who are exposed to food insecurity must be active in their development when at the receiving end of governmental or institutional aid. Nnadozie further asserts that basic service provision in South Africa relates to the municipalities' capacity to deliver, but that they are hampered by lack of maintenance of existing infrastructure and institutional problems of corruption and mismanagement which perpetuate the vulnerability of the populace to food insecurity.

2.12.2 The effect of un/skilled local officials on service delivery

Koelble and LiPuma (2010) state that institutional shortcomings facing South Africa which affect service delivery are local officials' lack of skills, and lack of enforcement when it comes to financial management. Ramphele (2005) also comments on the fact that nepotism has contributed to a skills shortage, because skilled job applicants are unable to access the positions they apply for, and service delivery suffers. The general argument is that it is difficult to provide adequate services due to demographic pressures such as population growth and migration patterns. Koma (2010) has a different view from Ramphele, believing that local public institutions fail to render adequate service delivery to communities because of lack access to actual or tangible resources, such as human and financial resources and materials and technological facilities.

2.12.3 Lack of institutional support for the provision of services

Akpalu (2013) states that the majority of black people in South Africa dwell in rural areas and have limited or no access to support services such as information on input supply, new technologies, credit and market prices. These services are crucial in South Africa's economy and for the improvement of agricultural development and its performance to alleviate hunger. He further asserts that the role of government is to render services that would assist SMMEs and smaller-scale farmers to organise themselves into groups, with the intention of gaining access to finance and to the markets through group action.

Extension officers render services to disadvantaged communities, especially those in outlying areas, to equip them with the knowledge of how to manage local agriculture and natural resources as a group, such as forming livestock associations and water user associations. Ile (2010) asserts that the South African government must earnestly apply or consider all mechanisms that have delayed delivery. It needs to review its programme of action as well as its policies. These various arguments clearly show that there is a failure and lack of accountability by various institutions to improve service delivery imbalances and inequalities, especially among the previously disadvantaged communities. In such conditions, corruption tends to creep in and then dominate.

2.12.4 The impact of corruption on service delivery

Winters *et al.* (2014) point out that some governments have a problem with accountability: they are able to deal with or overcome the financial constraints but fail to utilise available resources to address the public's needs. The lack of accountability is mostly associated with corruption that reduces the provision of service delivery to poor communities and might lead to deficiencies in information transmission. Furthermore, Perez, Olle and Navarro (2012) assert that most local corruption scandals involve bribes received by governmental officials for their personal gain, and the population, in general, lacks the power to report cases of this nature. Corruption destroys the lives of communities and undermines the Constitution of the country.

Hardoon (2012) reports that corruption translates into human suffering, with bribes being extorted from poor families to get access to certain government services. Such practices result in failure in the delivery of basic services like education or healthcare and in alleviating food insecurity. Accountability from public institutions is necessary for successful economic development and the alleviation of poverty. Furthermore, Francis and James (2003) state that decentralisation of power to local people is considered as the cornerstone of good governance, promoting local accountability, transparency and empowering the local populace in the realisation of food security as a human right as stipulated in the South African constitution.

2.13 Inadequate accountability by various public institutions

Inadequate accountability by public institutions has led to the failure of policies to address issues of poverty and food insecurity that affect the poorest people, especially those in developing countries and in rural areas. Shaoul, Stafford and Stapleton (2012) state that accountability entails a relationship whereby some members are required by others to explain and take responsibility for their actions, giving reasons for their conduct. Ebrahim (2003a) and Wellens and Jegers (2014) state that accountability is achieved when organisations are held externally and internally responsible for their actions with the intention of shaping the organisation's mission, goals and performance.

2.14 Food insecurity as a human rights violation

Chapter 2, Section 27.1b of the South African Constitution, Act 108 of 1996, asserts that every citizen has the right to have access to sufficient food and water and that the Government has to take reasonable legislative measures to ensure that everyone has adequate access to food. This right to food is also recognised as official under international law and as a most important, fundamental human right, and is discussed in detail in Chapter 3 under the entitlement theory of Amartya Sen. Fukuda-Parr and Taylor (2015) point out that the right to food is also accepted as a core economic and social right in the Universal Declaration of Human Rights (UN, 1948) and the International Covenant on Economic, Social and Cultural Rights (UN, 1966). To achieve the right to food it is crucial to fulfil three elements: increasing availability; enhancing physical and economic access; and improving utilisation for effective nutrition.

2.14.1 Access to food as a human right

Nussbaum (2011) emphasises that the right to food is necessary for a life of dignity, which should be a political priority, and its guarantee should be in every national constitution. In general, the world produces enough food to feed everyone on the planet, but many people are food insecure due to the fact they lack access to it. It is further noticed that improving access to food for the vulnerable populace has been a significant development priority and has been recognised as a fundamental human right. However, Fukuda-Parr and Taylor (2015) argue that countries that produce insufficient food to feed or meet the needs of their populace must rely more heavily on foreign aid or global markets to ensure this. Furthermore, Menon and Dixit (2013) emphasise that the right to food has been declared a global independent right, and its importance has been stressed by various international conventions, declarations and summits.

Yigzaw (2014) confirms that it is the right of everyone to feed herself and her family in a dignified way through a set of means such as production, employment and having access to the market. The number of people who are food insecure globally indicates that governments are struggling or have a limited role in protecting and facilitating the realisation of this right to food. He further states that violation of the right to food occurs

when people simply starve (unwillingly) and the state fails to provide them with food. It is clear that to avoid violation of the right to adequate access to food requires the creation of an enabling environment for production, income generation and redistribution of resources to vulnerable people.

2.14.2 The role of the state in enabling access to food

Yigzaw (2014) asserts that to be free from hunger is a fundamental human right of every person, and it is incumbent upon the state to protect people from being food insecure. He further states that millions of people lack the means to obtain enough food because they lack power and influence in the formulation of institutions and policies at local, national and international levels. Current policies and institutions have not shown satisfactory understanding and responsiveness to their plight because they are designed for other purposes, and not everyone is willing to prioritise the food crisis as a matter of urgency. Vistro (2014) supports the idea that the State is responsible to protect its people from being food insecure. He further notes that the Global Network for the Right to Food and Nutrition is an initiative that mobilises CSOs and international social movements including poor people, food and agricultural workers, to hold states accountable for their promise and obligation to recognise and protect the right to nutritious food.

However, McDermott (2012) argues that the weakness of the principle of the international right to food is suggested by the UN Human Rights Council which expresses great concern about the world food crisis. He further states that international agreements bind states only to respect, protect, and fulfill the international right to food, whereas there is a lack of action and implementation in national legal systems to enable people to have access to enough nutritious food. Fukuda-Parr and Taylor (2015) state that the core and main principle is that governments have a human rights duty to promote the progressive realisation of the right to food by implementing public policies in the food sector. However, they further point out that the realisation of rights entails the need for governments to take measures to institute policies and institutions that are based on empowerment of poor and disadvantaged households.

2.15 Empowerment as a strategy in household food security

Empowerment as an important concept was initiated as far back as the 1970s, where schools of modernisation and dependence placed the cause of underdevelopment in the relationship between power and poverty. This concept, which emerged again during the failure of the development programmes of the 1980s, facilitates the understanding that the only way to break the cycle of poverty is through structural reform and a more equitable distribution of power (Gough, 2006). On the other hand, Lord and Hutchison (1993) confirm that empowerment is a social action process that stimulates the constructive participation of especially poor people and community organisations with the intention of improving the quality of community life and social justice.

In addition, Perkins and Zimmerman (1995) also maintain that empowerment focuses on identifying capabilities and exploring environmental influences of social problems, instead of blaming victims – which refers to powerless or poor people. Empowerment in this study is generally understood as empowering individuals, although it might include the participation of community organisations, while at the institutional level it might also involve collective decision making and shared leadership. At the community level, it would also include collective action to access government and other community resources that would serve as tools to address their social problems, including food insecurity. These processes of empowerment are the key elements for bringing about effective social change to gain access to resources and understanding the socio-political environment that would bring about the improvement of the quality of life in a community and to connections among community organisations.

2.15.1 The effect of empowerment on food-insecure people

Parpart, Rai and Staudt (2003) point out that empowerment is also concerned with the results that can produce greater access to resources and power for the disadvantaged, such food-insecure and powerless people. Gough (2006) maintains that empowerment of the poor increases their resources and capacity to participate, negotiate, influence, control, and ultimately demand accountability from the institutions that affect their lives. He further links empowerment with decentralisation as the means to achieve greater control

over decision-making at local level, and as a way for development programmes to respond better to the needs of the people.

To achieve empowerment requires a bottom-up approach whereby donors, government and external initiatives would involve communities in the process of decision making in order to improve the lives of the poor. Hur (2006) states that empowerment is most commonly associated with alternative approaches to psychological or social development and the concern for local, grassroots community-based movements and initiatives. Empowerment would serve as a mechanism to involve those who are excluded in the decision-making process, thus ensuring their access to political structures and the control of resource distribution.

2.15.2 The role of empowerment of women

Broadly speaking, women are the primary producers at the household level, and this emphasises the importance of empowering them to help overcome food insecurity. Friedmann (1992) and Cheater (1999) argue that traditionally disempowered groups gain influence when power relates to economic development. They further state that poverty should be seen not merely in material terms, but as social, political and psychological powerlessness. Fawcett *et al.* (1995) point out that community partnerships serve as catalysts where members take action to effect changes in programmes, policies and practices throughout the community. These changes reshape community agencies, institutions and civic organisations, and may enable them to address the issues of concern more effectively.

2.16 Governmental policies to address food insecurity

Ncube and Kang'ethe (2015) argue that governments have an obligation to address food crises to bolster and secure the lives of their people through the formulation and implementation of policies. Kepe and Tessaro (2012) assert that viewing South African food security policies clearly shows that the government has given the issue of food insecurity more attention, particularly in rural areas where the majority are vulnerable to food insecurity. However, Aliber and Hart (2009) indicate that these food security

policies do not have clear guidelines on how food security projects based on smallholder agriculture should align with land and agrarian reform projects in rural areas. The argument is that food security policies intend to improve nutritional safety nets by introducing food programmes which have balanced diets and provide food aid in collaboration with the private sector and other social organisations. Local communities are also encouraged to invest in agriculture as a vehicle towards LED, by providing support services that will increase their production, especially in outlying areas. However, Qureshi *et al.* (2015) argue that policies should influence how people, various sectors and institutions communicate with each other and provide incentives to improve food security.

Modi (2015) argues that it is estimated that millions of small farmers globally live in marginal environments, including rural areas, and lack policy and technical support for their indigenous farming systems. Qureshi *et al.* (2015) argue that effective policies are particularly crucial to economies consisting of smallholder farmers, who face increasingly volatile markets with price inflation and the impact of climate change. Figure 2.3 portrays what food security policies are attempting to achieve.

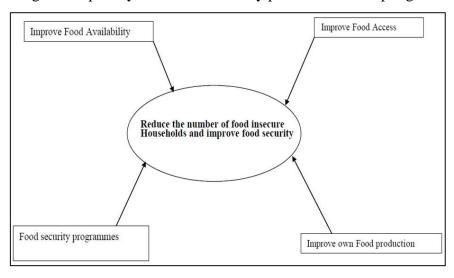


Figure 2.3 Elements of achieving food security

The government is introducing small farmers to new technologies that would assist them to maximise their agricultural production in order to be competitive in the market. With commercial farmers, production does not mean people (especially emerging farmers) are

food secure if they do not have access to participation in the market. Policies should ensure that small or emerging farmers are assisted to improve their capacity to excel in the market. South Africa has a variety of food security policies to ensure that all people in the country have physical and economic access to sufficient food at all times.

2.16.1 The role of food security policies in accessing food

The main aim of food security elements is to ensure sufficient food production at all levels, increase food availability, access, and food utilisation, and increase the efficiency and sustainability of food production, with the extension of improved processes through investment in agricultural infrastructure. Food security policies also focus on enhancing access to productive inputs including seeds, fertiliser supply and access to credit (Fukuda-Parr and Taylor, 2015). Altman, Hart and Jacobs (2009) argue that South African food policies focus on rural food insecurity with an emphasis on food production, not food access.

South Africa has progressively engaged in the fight against hunger and poverty through its policies and programme interventions. However, they further point out that in South Africa social and economic policies become conceptually delinked and, as a consequence, practical programme interventions to address food insecurity are reduced to a residual relief role. It is further noted by Alemu (2015) that national policy planning is limited as there is silence about the spatial dimensions of food insecurity in the country. Spatial studies of food insecurity would facilitate evidence-based policy planning that depends on reliable data to determine which areas, populations and households are food insecure.

The Agriculture White Paper (1995) commits the South African government to address both national and household food security. The South African government formulated a national food security strategy in 2002 that would streamline, harmonise and integrate the diverse food security programmes into the IFSS. The South African food security policies and strategies exist to ensure that relevant and important stakeholders reach a consensus on food security diagnosis. Food security policies are meant to improve South Africa's

adequacy and stability of access to safe and nutritious food at both national and household level (Department of Social Development (DSD) and DAFF, 2013).

2.16.2 White Paper on Agriculture 1995

Many African governments and international donors have attributed the problems of food insecurity and poverty in rural areas with poor agricultural input and low levels of economic development to the persistence of a farming system. According to the White Paper on Agriculture (RSA, 1995) "agricultural policy exists to ensure equitable access to agriculture and promote the contribution of agriculture to the development of all communities, society at large and the national economy, in order to enhance income, food security, employment and quality of life in a sustainable manner". The White Paper was developed to create an enabling environment which encourages all role-players in this sector, such as different State departments, farmers, agro-industrialists or farmers' organisations, to participate in policy formulation. In terms of the South African Constitution, agricultural functions fall within the competence of provincial governments and are one of the principles developed to reflect the importance of this sector of the economy and the different role-players within it.

Hendriks and Olivier (2015) point out that the main purpose of the White Paper is to ensure unbiased access to agriculture and promote the influence of agriculture in the development of all communities and society at large to build the national economy in order to improve income, food security, employment and quality of life. However, Altman *et al.* (2009) reveal that agricultural programmes concentrate on other sectors, including commercial and small-scale emerging commercial farmers and increasing production, competitiveness and land reform. This has not been achieved because little effort is made to improve agricultural support services, and the consequence has been that they remain very weak. Qureshi *et al.* (2015) emphasise that policies should ensure the provision of public goods, including technology, to facilitate changes in farming practices and ensure a sustainable farming sector that meets societal demands with the intention to reduce the level of food insecurity.

Furthermore, the White Paper (1995) states that the role of agriculture in the rural community must be coordinated with the roles of the other relevant government Departments, NGOs and private enterprises involved in strengthening and developing rural communities by alleviating food insecurity. However, Rodriguez-Pose and Hardly (2015) note that rural and small farmers are still unable to afford or access new technologies, while it is well proven that farming production is increasingly technology-intensive, which requires both education and upfront investment.

The White Paper (1995) also outlines that it is very important to develop rural infrastructure for agricultural development and services such as access to proper roads, telephone services, electricity and others that are non-existent or inadequate in most rural areas, and make it difficult for rural dwellers to compete in the market. In terms of production, the White Paper clearly states that the government is responsible to put in place agricultural production systems, and implementation will also be organised in such a way that it brings improvement to national as well as household food security. It further illustrates that in the case of natural disasters such as floods, runaway veld fires and severe drought, the government should assist farmers with farming and agricultural financing systems.

In terms of marketing, the White Paper proclaims that the agricultural marketing system should ensure equitable access to the market for all participants, and special attention needs to be given to small-scale farmers to assist them to compete in the market. It further indicates that the success of small-scale farmers lies in proper infrastructural and marketing support services such as market facilities, information, packing and storage facilities and transport services. Previously, many black farmers, smallholders and part-time farmers did not have access to financial services, so the democratic government has attempted to create an enabling environment for farmers to gain equal access to efficient financial services. Furthermore, training is being encouraged for new farmers so that they will understand how to calculate budgets and cash flows and the need to repay debt on time. Financial institutions, in turn, need to show greater flexibility in rescheduling loans

or adjusting the payback period to suit the cash inflow of the clients or farmers (White Paper on Agriculture – RSA, 1995).

2.16.3 Food security policy for South Africa, 1997 and 2012

Koch (2011) points out that during the apartheid era the black majority were intentionally denied access to assets such as land, livestock and markets. As a result of this, the democratic government has reprioritised it's public spending to focus on improving the food security situation for the previously disadvantaged sectors of the population. Therefore, the food security policy of 1997 (DRDLR) focuses on providing strategies on how to achieve food security at national and household level by looking at the concept of food availability, accessibility and utilisation. It clearly indicates that most South African households still experience poverty, manifested in food insecurity. Furthermore, the food security policy of 2012 (DSD and DAFF) asserts that the role of the government is to ensure that citizens are food secure through creating an enabling environment where all communities will be able to produce food and have control over its production. It is further indicated that this can be achieved through the increased production of affordable food, enhancing opportunities for entry into commercialised agriculture by subsistence and smallholder farmers.

This policy also addresses the importance of grain marketing infrastructure relating to questions of access, pricing, and the issue of public investment as being priorities, including productive infrastructure, health services and education, particularly in rural areas. This policy recognises that it is vital to promote access to support services by farming households through creating sufficient access to resources for poor farmers. It further states that small farmers' organisations are encouraged to participate in the setting of policy agendas and support programmes with the intention of achieving food security (DRDLR, 1997).

2.16.4 White Paper on Local Government of 1998

The White Paper on Local government outlines the roles of local government in encouraging community participation. It seeks to enhance service delivery and to ensure that political leaders remain accountable and work within their mandate. Furthermore, it allows citizens to have continuous input into local politics. The White Paper on Local Government (*Government Gazette* No. 18739, 13 March 1998) (hereafter referred to as the White Paper on Local Government) is a comprehensive policy document which deals with an entire sphere of government.

It further defines developmental local government as the local government committed to working with citizens and groups within the community to find sustainable ways of meeting their social, economic and material needs and improving the quality of their lives. The term "developmental local government" encapsulates a new mandate, which will be intrinsic to the role of local authorities (White Paper on Local Government, 1998). However, Mathekga and Buccus (2006) point out that the major challenge faced by local government is poor service delivery, which is caused by lack of community participation and engagement at the local government level. The Constitution of South Africa (Act 108 of 1996: Chapter 7) encourages the participation of local communities and community organisations in having an input into matters of local government.

Millions of people in South Africa live in dire poverty, isolated from services and opportunities due to the apartheid government system that did very little to assist those with the greatest need, particularly the black population, who were highly exposed to poverty and food insecurity. The White Paper emphasises that local government needs to speed up the process of meeting the basic needs of the poor promoting the growth of the local economy and supporting community organisations in the form of finances, technical skills or training. These activities would enhance the ability of the poor to make their needs known and to take control of their own development.

The White Paper further illustrates that socio-economic development and community empowerment are mainly directed at eradicating food insecurity and poverty and that women are mainly affected by this. It asserts that good basic services are recognised as a constitutional right and are essential to enable people to support their households, find employment, develop their skills or establish their own small businesses (White Paper on Local Government, 1998). Mathekga and Buccus (2006) argue that the White Paper on Local Government was initiated with the genuine intention of bringing about social and economic delivery at the local level; however, this has not been fully achieved due to lack of implementation of projects and programmes aimed at raising the standard of living.

2.16.5 Integrated Food Security Strategy (IFSS) for South Africa

It was apparent that most of the previous food security policies in South Africa had failed because at the household level people were still food insecure. The government, therefore, decided to formulate the IFSS, and its focus was on land reform, production of food, marketing of food products, and access to food legislation (DoA, 2002). This strategy adopted the approach of integrating public-private-civil society partnerships and focuses on household food security without overlooking food security national level. It further states that the expected outcomes from this strategy are greater ownership of productive assets and participation in the economy by the food insecure, and increased competitiveness and profitability of farming operations and rural enterprises that are owned and managed by or on behalf of the food insecure. Other important outcomes are improved levels of governance, coordination, and financial and administration of food security improvement interventions in all spheres of government, and between government and the private sector and civil society (DoA, 2002).

2.16.6 Institutional constraints on the success of IFSS

Drimie and Ruysenaar (2010) identified five institutional constraints that limited the success of the IFSS:

• The Department of Agriculture tasked to co-ordinate and facilitate the integrated strategy within government was unable to do so in an effective manner, as it

basically focused on developing the agricultural sector to reinforce food availability and neglected the necessary links to accessibility and utilisation. This caused unfairness and imbalance in the food security response since it concentrated mainly on agricultural production.

- The government had limited administrative capacity to co-ordinate food security programmes; as such, the management had no instrument to drive the process or resources to ensure that other departments contributed towards alleviating food insecurity according to their expertise. The emphasis remained on agriculture at the expense of relations or collaboration with other sectors, due to poor coordination of Directorates.
- There were no budgets for government spending on food security at any of the administrative levels. All funds were allocated by sector and financed by one entity, averting the emergence of joint projects and programmes.
- The major challenge that was identified as the minimal communication between various stakeholders, including government and civil society.
- The lack of food security policy or legislative framework made it difficult for the government to provide a clear line of authority, or to avert non-collaboration and implementation of relevant programmes in a disjointed manner. An emerging policy established later by the national DoA does not appear to address these institutional constraints adequately.

The Zero Hunger programme was then initiated in 2009 to strengthen and assist in the actualisation of the goal of the IFSS to increase food production and trade by emphasising utilisation of land and agrarian reform, ensuring land tenure for food security, enhancing the government's food purchase programme and improving production. This programme is aimed at reducing incidences of food insecurity through improving the capabilities of all South Africans to access nutritious food and to guarantee

the basic human right of access to adequate food. The successful implementation of this programme in South Africa would contribute towards the achievement of the Millennium Development Goals (DAFF, 2012).

Fukuda-Parr and Taylor (2015) also point out that Zero Hunger was established to address food insecurity by improving collaboration among national and provincial organisations and NGOs, as well as co-ordination of inputs and resources to increase household food security and rural development. They further indicate that the focus was to improve access to food, advance the food production capacity of households and resource-poor farmers and foster partnerships with relevant stakeholders within the food supply chain. This programme clearly asserts that the needs of people living in rural areas are different from those of people living in urban areas, which implies that a specific set of interventions is required for each case. However, Hendricks (2013) states that a major challenge to achieving food security is a failure to implement policies and the absence of broad partnerships.

2.16.7 Black Economic Empowerment (BEE) in South Africa

BEE was initiated to rectify the inequalities and imbalances in South Africa's economy and society caused by the apartheid regime which led to poverty and suffering in certain sectors of society. Kruger (2011) also describes BEE as an approach to ensure empowerment policies and strategic interventions that would be structured to enable the meaningful participation of black people in rural or underdeveloped communities that would foster employment and access to nutritious food. Ponte, Roberts and Van Sittert (2007) state that there is a huge debate that BEE cannot be understood separately from the role of the State because it shows the importance of recognising how different communities and groups work to further their interests through the State and its various institutions.

Initially, livelihood empowerment was designed to empower the extremely poor, increase basic school enrolment among children of poor households, improve households' supply of nutritious food and grow local economies. This encourages governments to develop

interventions focusing on mitigating poverty, providing free education and an agrochemical subsidy for farmers, distributing food and giving soft loans to those earning low incomes to help with the expansion of their small businesses. This kind of empowerment is an attempt to improve the purchasing power of the extremely poor through financial empowerment that would make the economically vulnerable self-reliant (Debrah, 2013).

2.16.8 Limitations of Black Economic Empowerment (BEE) on food security

Black (2002) asserts that economic growth has been wholly inadequate with large populations — particularly black society—living in extreme poverty, being either unemployed or underemployed, lacking access to food as well as being unable to effectively participate in the modern economy because of being economically disempowered. The current situation indicates that black empowerment amounts to little more than the enrichment of a few lucky black individuals, highlighting the need for empowerment policies to reach and reflect the needs of the poor and make a positive change in their lives. BEE was also established as the strategy to stimulate skills development, not just the transfer of equity. The development of skills should mostly benefit black persons, while the skills should be appropriate to the promotion of sustainable economic growth. Even before the existence of BEE, Black (1993) strongly argued that in order to achieve poverty reduction and food security it is crucial to improving people's accessibility to markets through appropriate economic empowerment programmes. BEE initiatives were criticised because only those people who belonged to the politically well-connected elite were benefitting. Black (2002).

It is noted that food insecurity is associated with societal problems like political marginalisation and economic inequality. Disempowered, food insecure people are not represented by different structures or institutions. People experiencing food insecurity in most instances are treated as subjects, rather than as participants in a process of making decisions that would improve the situation. The process of empowering people who are food insecure in decision making would assist institutions to understand the reality of the situation of food insecurity, and their interventions can be designed for communities as

partners (Pine and de Souza, 2013). Surprisingly, the common solution to the problem of food insecurity is usually charity, instead of looking at fundamental social, economic and political empowerment. This demonstrates that the problem of being food insecure is conceived of as an individual problem caused by personal failure rather than by pervasive structural factors including the missing role of the State.

2.17 Coping mechanisms for food insecurity

The livelihoods and survival of human individuals, households and communities are vulnerable to stresses and shocks because of pressures including rising populations, declining resources and unforeseen circumstances such as floods and droughts (Conway and Barbier, 1990). Chambers and Conway (1992) emphasise that livelihood sustainability has to include the ability to avoid, withstand and recover from stresses and shocks. Droughts and floods always have to affect livelihoods in agrarian communities badly, particularly in rural communities which are solely dependent on agriculture. Bola, Mabiza, Goldin, Kujinga, Nhapi, Makurira and Mashauri (2014) indicate that floodplains may be cultivated twice a year as a coping strategy during droughts, where lands are cleared for cultivation of various crops and some members of households move into temporary huts constructed near the floodplain to protect their crops from wild animals. Other strategies include late sowing, where farmers delay planting so that they can benefit from delayed rains, and the selling of livestock at the onset of floods or droughts at low prices and the money is mostly used to buy food.

Abdulla (2015) describes different coping strategies communities adapt to avoid being food insecure. The habitual strategies are reducing the number and size of daily meals and skipping and reducing food assistance to extend the availability of food for relatively long periods during lean times. When droughts are severe, purchasing of grains from the market and borrowing cash or grains as well as eating vegetables not usually eaten during normal seasons, are further methods of coping. Moreover, Paul, Hossain, and Ray (2013) add that during tough seasons people or households commonly sell productive assets such as mortgaging and land as a coping strategy. In addition, seasonal migration of labour

takes place where mainly males are forced to migrate to different areas particularly urban localities to earn money. Another option is a dependency on relief, where people rely on governmental or non-governmental handouts. Mase (2015) mentions that one survival strategy occurs when people engage in the informal sector as a source of earning income through self-employed workers producing goods and services without being subject to any particular laws, especially labour laws, in the absence of a social security system.

2.18 Conclusion

This chapter has focused on the institutional gaps or limitations that contribute to food insecurity, particularly in rural areas, in an effort to respond to the objectives of the current study. This chapter showed that very little research has been conducted on food in/security in South Africa, despite the fact that this country remains food insecure at the household level while being food secure at the national level. This chapter revealed that South Africa has good policies in place that attempt to address food in/security; however, rural households are still vulnerable and food insecurity remains an ongoing challenge. This chapter showed that there is a lack of collaboration between the government, the private sector, social organisations and communities to overcome food insecurity, a priority issue in global governance. Assistance is provided by international institutions like the World Trade Organisation, FAO and World Bank whose core business is to alleviate food insecurity, but there is still disagreement regarding which policies developing countries, which are more vulnerable to food insecurity, should pursue.

In most African states poor governance prevails, particularly in social and political institutions which lack accountability and fail to ensure that people's basic rights – like the right to food – are well protected. The South African Constitution specifies that food security is an economic and social right that needs to be enjoyed by all citizens, regardless of their socio-economic profile, and many programmes relating to food insecurity target rural areas for development because these areas are the ones mostly underdeveloped. It was also important for the South African government to initiate BEE

to improve previously disadvantaged people's participation in the formal economy to address the barriers to food security. Empowerment is a social action process that stimulates the positive participation of people and community organisations at the grassroots level, in efforts to improve their quality of life. Empowerment is promoted to overcome the challenges of powerless people without influence, in order to recognise and eventually use their resources to create wealth.

The chapter further showed that South Africa is one of the countries that have critical challenges regarding land reform, due to the fact that the majority of citizens have inadequate access to and ownership of land. The chapter showed that rural areas have insufficient development and poor service provisions, such as inadequate access to credit or financial assistance and lack of formal employment, which contributes to food insecurity. Formation of co-operatives has been treated as a helpful strategy for the rural populace to create job opportunities and a source of income, but one of the challenges is that the majority of co-operatives based in rural areas are struggling due to lack of entrepreneurial skills. The chapter indicated that governmental institutions lack monitoring and evaluation systems, and this leads to inefficiency, as the majority of office bearers are political appointees, not qualified, experienced professionals.

The next chapter focuses on the theoretical framework relating to food security and institutional gaps, with the intention of formulating problem-solving strategies in relation to factors that contribute to food insecurity.

CHAPTER 3

THEORETICAL FRAMEWORK OF THE STUDY

3.1 Introduction

Corley and Goya (2011) assert that a theoretical framework advances the knowledge-making process in a scientific discipline, guiding research toward crucial questions. Furthermore, theories help to identify which factors should be studied and how and why they are related. The good theory also states the conditions and boundaries of relationships (Hit and Smith, 2005). Among other things, a theoretical framework aims to indicate new theoretical linkages and provide clear implications of theory for problem-solving. In this section, the study uses theories to explain how institutional gaps contribute to food insecurity and why this problem occurs. This study uses a hybrid of two theories to understand and explain the phenomenon of food insecurity, focusing particularly on the institutional gaps that perpetuate it. This section further uses theories to help find possible solutions entailing the closing of existing gaps identified in the study.

The two theories used in the study are the Sustainable Livelihoods Approach (SLA) and Entitlement Theory. While the two theories have their respective autonomous existence, in this study they were used jointly to explain specific aspects that it would not have been possible to address by either of them separately. This is in line with the view of Banik (1993 and Thurmond, 2001) that theoretical triangulation provides a broader, deeper analysis of findings and a better explanation of the phenomenon.

3.2. Describing the Sustainable Livelihoods Approach (SLA)

Ashley and Carney (1999) state that sustainable livelihoods approaches developed three decades ago with changing perspectives on poverty, how poor people construct their lives and the importance of structural and institutional issues. Initially, this approach was developed when there was a huge debate about two concepts: livelihood and employment, to be replaced by livelihood in the 1970s. The dominant thinking of economists was urban-, employment- and industry-based, and part of the debate was to replace the word 'employment' with the word 'livelihood' because 'livelihood' represents and encompasses

far more complex, diverse realities of poor people than 'employment' does. Baumgartner and Hogger (2004) state that this approach focuses on people at all levels including individuals, households, stakeholder groups or communities where sustainable livelihood security may be gained in many ways. Chambers and Conway (1992) describe these ways as ownership of land, livestock, rights to grazing, fishing, hunting and stable employment with adequate remuneration.

Allison and Horemans (2006) view poverty from the perspective of being in a state of earning a low income and encompassing a lack of basic needs including access to food, shelter, health and sanitation. Krantz (2001) describes how the Sustainable Livelihoods Approach (SLA) was initiated and published in the Brundtland Commission Report by the World Commission on Environment and Development, as the method of linking socioeconomic and ecological considerations, which subsequently could be viewed as a policy advocating a process aimed at the achievement of sustainable livelihoods. He adds that this approach focused on livelihoods in rural areas and situations where people are farmers or make a living from some kind of primary self-managed production. In addition, this approach seeks to gain an accurate and realistic understanding of people's strengths and how they attempt to convert these into positive livelihood outcomes.

3.2.1 The effect of Sustainable Livelihoods at the household level

Ashley and Carney (1999) assert that sustainable food security and poverty alleviation can be attained only if external support focuses on what matters to people, understands the differences between groups of people and works with them in agreement with their current livelihood strategies, social environment and ability to adapt. This means that local people should be fully involved in any community development and their views should be respected, particularly their indigenous knowledge, skills and potential. It is crucial for external support to start with analysing people's current livelihoods and work towards supporting them to achieve their own livelihood goals.

The adoption of this approach would ensure full local participation in all community development projects through allowing communities to develop and enforce local norms for the use of resources as well as have greater control over their resources. However, Botes and van Rensburg (2000) note that the majority of development projects are initiated by outsiders who dominate decision-making as well as manipulate development processes. By contrast, this approach advocates respect for the capacities of local people to make their own decisions as well as to determine their own priorities.

3.2.2. Sustainable Livelihood Approach (SLA) framework

The Sustainable Livelihood framework seeks to take into account the different dimensions of people's livelihoods, the strategies used, objectives pursued and constraints that exist and in this way, it serves as a tool to better understand the circumstances of poor people at the household level. This framework is described as a way of looking at the complexity of people's livelihoods, especially those of the poor. Chambers (1988) describes livelihood as having adequate stock and flow of food and cash to meet basic needs. This concept was further improved by Chambers and Conway (1992) who indicate that livelihood comprises people, their capabilities and their means of living, including food, income and assets (natural, physical, human, financial and social capital). Furthermore, the emphasis of this approach is also on maintenance and enhancement of resource productivity on a long-term basis. The overlapped Figure 3.1 provides a diagram of the Sustainable Livelihood Approach (SLA) which is appropriate to the perspectives and realities of poor and food-insecure communities.

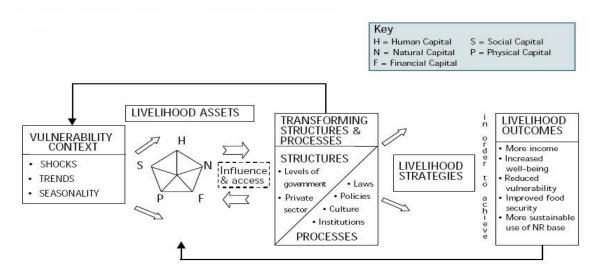


Figure 3.1: Sustainable Livelihood Framework (DFID 2001)

This framework is an attempt to demonstrate that livelihood is a strategy of making a living including assets, access to institutions and processes, and methods that a person uses to accomplish livelihood outcomes (Ashley and Carney, 1999). Policies, institutions and processes shape livelihoods by influencing access to assets, livelihood strategies and vulnerability. This may occur at different levels, from the household to the community, national, and even international level (International Food Policy Research Institute (IFPRI), 2002).

This framework shows that sustainable development objectives put poor people at the centre of progress but do not replace other improvement approaches without proper consultation. However, this approach also focuses on the various factors and processes that enhance poor people's ability to make a living in an economically, environmentally, and socially sustainable manner (Krantz, 2001). Furthermore, this approach employs a holistic standpoint in order to devise interventions that could be strategically vital for effective poverty reduction, such as food in/security either at the local or at the policy level. This indicates that the Sustainable Livelihood framework takes an integrated approach to poverty-related issues such as food insecurity rather than just a narrow set of indicators like income and productivity.

3.3. Vulnerability as an institutional gap

People's livelihoods are fundamentally affected by critical trends as well as by shocks and seasonality over which they have limited or no control. Babatunde, Omotesho, Olorunsanya and Owotoki (2008) state that the terms 'vulnerability' and 'food insecurity' are often used interchangeably. They describe 'vulnerability' as people's propensity to fall or stay below a pre-determined food security line, a critical problem among poor farming households in rural areas. Moreover, there is evidence that gender inequality perpetuates vulnerability because female-headed households are more vulnerable to food insecurity than male-headed households due to unequal access to productive resources. This situation has made the majority of women turn to casual agricultural labour as a means of livelihood. Chambers (1989) asserts that vulnerability is more often seen in developing countries particularly in rural areas where the populace are exposed to risks, shocks, stress and food insecurity which are outside their control. The approach seeks to provide a tool to identify the vulnerable groups within the farming society and assess factors which determine their vulnerability to food insecurity.

However, trends such as changes in population size, natural or human resources, national and international policies, governance and technology are important because they influence livelihood decisions. St-Germain and Tarasuku (2017) state that vulnerability is also realised at household level when there is inadequate and insecure access to food because of financial constraints and all three levels of government are unable to engage and assist with social security programmes to mitigate the vulnerability of poor people to poverty-related issues. Scaramozzino (2006) notes with concern that this approach mostly analyses vulnerability by focusing on poverty, rather than on food insecurity. However, Azeem, Mugera and Schilizzi (2016) suggest that government should go beyond merely observed food-insecurity to address the needs of the relatively larger population that is at risk of being food-insecure in the future. In addition, Scaramozzino (2006) advocates approaches that households, communities and public institutions can adopt in order to decrease the possibility of undesirable outcomes brought about by uncertainties related to future food insecurity, such as external shocks.

3.3.1 Shocks and seasonality in the vulnerability context

The SLA describes shocks as sudden, happening over short periods and including such things as human health shocks, natural disasters, economic shocks, crop and livestock health shocks which destroy assets, crops and lives. Dercon, Hoddinott and Woldehanna (2005) describe shocks as adverse events that lead to a loss of household income, a reduction in consumption and a loss of productive assets which consequently perpetuate food insecurity at household level. Kochar (1995) attests that crop income shocks reduce household wealth and that poor households will be unable to access institutional support such as credit and compensation to protect consumers from such shocks. Azeem *et al.* (2016) assert that in developing countries households are equally predisposed to different shocks such as floods and droughts. In addition, poorly resourced rural smallholders with limited land are especially exposed to external shocks preventing them from being productive. Their survival will be determined by power and institutional relations (Bohle, Downing and Watts, 1994).

The Sustainable Livelihoods Approach examines how shocks affect households and what measures have been taken by concerned institutions to develop programmes that will assist those exposed to shocks. Dercon *et al.* (2005) point out that some shocks are created by the ineffectiveness of governments and other institutions by creating limited access to inputs and decreases in output prices as well as making it difficult for smallholders to market their produce. Furthermore, this approach critically describes political and legal shocks as an institutional gap and inefficacy is understood as repossession of assets, as well as social and political discrimination by government authorities.

Seasonality refers to a periodic change such as the fall of prices in a certain season, seasonality of production and employment opportunities for labourers. The vulnerability is frequently seasonal in character. Seasonality in the form of price inflation has negative outcomes, including food deficits. Farmers are confronted by exchange entitlement failure, causing food insecurity particularly to poor people who have no purchasing power (Ellis and Manda, 2012). Seasonality of rainfall determines livelihood strategies of subsistence farmers in the dry season. In some cases, trends move in a constructive direction and some people are able to gain from them while others are unable to benefit as they lack assets and

strong institutional support. This suggests that vulnerability can be changed through transforming institutions and their policies by improving people's access to appropriate financial services and social programmes, such as providing compensation for crop losses as an initiative to assist in reducing the severity of shocks.

3.4. Access to livelihood assets

The SLA aims to improve access to resources and assets that enable deprived and disadvantaged populations to meet their needs. Poor people's access to any given category of assets tends to be very limited due to different policies that lead to negative livelihood outcomes. Norton and Foster (2001) note that the poorest people are usually disproportionately dependent on access to assets which they do not privately own and this suggests that they need access to equitable justice systems. The World Bank (2000a) acknowledges that rural communities in particular desperately need to improve their access to resources such as energy.

3.4.1 Asset creation and access to assets

In this study, context access is understood as an opportunity in practice to utilise a resource, service, obtain information, material, technology, employment, food and income. It is explained in Sen's entitlement approach that 'entitlement' refers to a tool in which access to resources and assets could be obtained (Chambers and Conway, 1992). Government policies should create and invest in basic infrastructure such as electricity and roads and livelihood programmes that enable poor people to create and access assets. However, Baumgartner and Hogger (2004) point out that people should also be capable of utilising the opportunity or resources created for them in order to improve their lives and develop strategies for sustaining it.

Chambers and Conway (1992) emphasise that the SLA supports equity in access to resources and assures sustainability and effective use of institutions for resource management and exploitation. However, the International Food Policy Research Institute (IFPRI) (2002) indicate that in many developing countries such as Zimbabwe the people's

access to assets have gender dimensions where women have less access to credit, compared to men. On the other hand, Allisson and Ellis (2001) argue that access to resources is enhanced or hindered by the policy and institutional context of livelihoods including several socio-demographic factors including gender, class, age and ethnicity. Furthermore, this approach has shown limited scope with regard to legal ownership rights and this indicates that public institutions should regulate access to common resources because the ability to escape from food insecurity is critically dependent upon access to assets.

3.4.2 Human and social capital as a livelihood asset

Human capital includes the skills, knowledge, ability to labour and good health that together make it possible for people to pursue different livelihood strategies and achieve their livelihood objectives. Schemes that support skills-education can help build human capital. Scoones (1998) asserts that people have access to different livelihood resources which sometimes are determined by institutional arrangements, power and politics. Human capital growth in most developing countries still lags behind compared to developed countries because of economic constraints as well as social problems that hinder economic development necessary for a better quality of life. This suggests that institutions should develop programmes that target developing communities based on management skills and the human capacity to increase opportunities for all poor people to have access to resources and to improve market participation levels (Bingen, Serrano and Howard, 2003).

Social capital is described as the social resources upon which people draw in pursuit of their livelihood objectives and which requires co-ordinated action. Networks and connectedness increase people's trust and ability to work together and expand family and friends. Membership of more formalised groups often entails adherence to mutually agreed-upon or commonly accepted rules (self-help groups, cooperatives) and exchanges that facilitate co-operation, reduce transaction costs and may provide the basis for informal safety nets amongst the poor (Scoones 1998; DFID, 1999). The issue of socio-cultural discrimination also hinders access to assets and other economic activities and this situation

leads to a disproportionate distribution of wealth and power in favour of the rich who become richer while the poor remain disadvantaged in terms of improvement of socio-economic status and access to nutritious foods. Bhandari (2013) argues that socio-cultural structures and policies may enable or hinder the access to assets and activities through social relations.

3.4.3 Natural capital as a livelihood asset

Natural capital is the term used for natural resources (land, water, air etc.) from which resources flow and services that are useful for livelihoods are derived. Natural capital is especially important to those who derive all or part of their livelihoods – such as farming and fishing – from direct use of resources. Gutierrez-Montes, Emery and Fernandez-Baca (2009) argue that most rural communities depend directly on local natural resources to sustain their livelihoods and this indicates that poor people continue to face threats to their livelihoods. However, livelihood activities may operate in a positive way to improve productivity by optimal use of renewable resources like air and river water (Chambers and Conway, 1992).

Natural capital management institutions should implement rules, laws and policies that enable people's access to various types of natural resources, which would clearly play a critical role in enhancing the livelihoods of rural households (Ellis and Allison, 2004). Inequality in accessing natural resources still remains a constraint in developing countries, particularly in rural areas. An example of this is that even though land may be available, poor people will not have secure tenure on it. This indicates that institutions need to enable secure access to natural resources, including land, in order to increase production in rural areas leading to larger sales of produce and higher incomes (Rakodi, 1999).

3.4.4 Challenges of natural capital towards Sustainable Livelihoods

Balancing the need for continuing development with the need to conserve scarce resources and protect the environment is one of the most important and serious challenges facing society, particularly in the rural areas of developing countries. Environmental degradation has reduced assets, savings, and the ability to enhance livelihoods and to assist others and has led to degrading agro-ecosystems (Gadgil and Guha, 1992; Doig, Jackson and Rai, 2005). It is further indicated that rural areas of the South have fewer sustainable livelihoods because their natural resources are exploited to meet the economic needs of the urban areas of the North. Gutierrez-Montes *et al.* (2009) attest that attempts to effectively manage natural resources are often undermined by the immediate need for local resources. Various international development approaches have shifted towards initiatives that address poverty issues and natural resources management in the context of community economic systems.

Brocklesby and Fisher (2003) point out that SLA focuses on linking socioeconomic and environmental concerns. International organisations such as the United Nations have raised environmental issues in relation to people and their livelihood activities. The Department for International Development (DFID) (1999) asserts that livelihood is more sustainable when an individual or household can face and recover from shock and stress or improve their resources and capacities without depleting their natural resources. Farrington *et al.* (2002), however, assert that urban areas are more affected by environmental hazards because these areas have high population densities which consequently lead to poverty. Urban poor people are more likely to be located on polluted land close to industrial facilities, or on hillsides and river plains which are susceptible to landslides and flooding. Furthermore, both urban and rural poor communities are susceptible to diseases resulting from lack of clean water and sanitation. These environmental hazards consequently incur high medical costs, entail loss of income through illness and may result in a major shock to the household economy.

3.4.5 Physical and financial capital as livelihood assets

Physical capital is described as the basic infrastructure and producer goods required to support livelihoods and that help poor people to meet their basic needs and to be more productive. The Sustainable Livelihood Approach encourages governments to develop processes that would make available affordable transport, safe low-cost housing, adequate clean water and access to information, all of which are essential for sustainable livelihoods.

This approach advocates helping to provide access to appropriate infrastructure that enables poor people to achieve their livelihood objectives and improve services to empower them to meet their needs. Rakodi (1999) affirms that an improvement in access to basic infrastructure, such as electricity supply and roads, is crucial for poor people to pursue their livelihoods and reduce household food insecurity. Furthermore, institutions must ensure the availability and accessibility of physical capital and the financial resources that provide poor people with various livelihood options. Such services enhance opportunities for diversification of economic activities by both farming and non-farming households.

Money can be used for direct achievement of livelihood outcomes, for example when food is purchased to reduce food insecurity. The Sustainable Livelihood Approach emphasises that it is necessary to obtain financial assistance from the beginning of any livelihood in order to plan properly and achieve the desired results. However, it has been observed that it is very difficult for poor people to access financial support from institutions because they suffer from weaker collateral positions (Carter, 2003). It is clear that few people collect all their income from any one source, hold all their wealth in the form of any single asset, or use their assets in just one activity. This approach seeks to improve the asset holdings of the poor, either by endowing them with financial support by different institutions to increase the productivity of assets they already possess or to provide them with assets not yet possessed (Barrett, Reardon and Webb, 2001).

3.4.6 Comparison of SLA to International Organizations: UNDP, CARE and DFID

The three international organisations (UNDP-1990, CARE-1994 and DFID-1996) influenced the conceptualisation of the Sustainable Livelihoods Approach (SLA) and were established to alleviate poverty through understanding the existing livelihoods of the poor. United Nations Development Programme (UNDP) indicates that livelihoods are the means of activities, entitlements and assets from which people make a living. In addition, the UNDP programme has a combination of support activities to improve the sustainability of livelihoods among poor and vulnerable groups. It aims to further strengthen the resilience of their coping and adaptive strategies (UNDP, 1997). Furthermore, the emphasis of UNDP was on developing strategies that enhance

macroeconomic growth, community development, and community-based natural resource management.

Cooperative for Assistance and Relief Everyone (CARE) as an international NGO focuses on assisting the poorest and the most vulnerable through the regular development and relief programmes. By stressing the importance of empowerment as a basic dimension of its approach, this NGO has placed emphasis on strengthening the capability of poor people to take initiatives to secure their livelihoods (Krantz, 2001). Moreover, CARE has addressed household livelihood security by emphasising a capacity-building approach to development and treating people more as agents in making their own livelihoods than as passive recipients of external help.

Drinkwater and Rusinow (1999) affirm the fact that CARE has focused on personal empowerment in enhancing people's confidence and skills by enabling them to overcome economic constraints. Personal empowerment is meant to improve poor households through stimulating their existing income-generating activities. Social empowerment has also been used by CARE to strengthen community organisations by providing capacity building to plan and implement their community development projects. Ashley and Carney (1999) elaborate on the objectives of the Department for International Development (DFID) by indicating that poverty reduction will be achieved only if external support focuses on what matters to people through proper consultation with them. Poor people themselves must take an active role in identifying and addressing livelihood priorities by working with various stakeholders (public and private sector) at multiple levels.

3.5 The SLA in rural areas

Rural populations are facing rapid erosion of sustainable livelihoods due to poor access and management of land, water, pasture, forest and food because of the unsustainable exploitation of rural resources. Rural people have limited ability to generate income and they rely on consumption strategies. Tackle, Bukhari and Fisher (2013) state that inadequate basic infrastructure and limited access to services contribute to levels of

malnutrition and food insecurity that are often high in rural areas. Chambers and Conway (1992) argue that the needs of rural people receive less attention by political organisations and government because of bias in favour of urban communities. Doing, Jackson and Rai (2005) note that rural people's priorities are to receive adequate food supplies, decent meals, proper shelter, safe potable water, free education and health-care. Chambers and Conway (1992) state that rural livelihoods can include cultivation, herding, forestry, hunting, gathering, wage labour, trading and hawking and artisanal work that help them to meet their needs.

Agriculture is a livelihood that contributes to increasing food security for farm households and society. It is stated by the Food and Agriculture Organization (FAO) (2012) that many rural communities need to be assisted to understand agriculture as a business and build capacity to improve their knowledge of various farming methods. The International Food Policy Research Institute (IFPRI) (2002) alludes to the fact that insufficient support from the government, particularly in Mexico, to support poor farmers has contributed negatively towards agricultural production. It further notes that many small-scale farmers prefer to obtain assistance, such as seed supply, through informal social networks of family and friends, rather than through official government channels. Some programmes do not take sufficient account of the livelihood strategies of farm households and communities. Baumgartner and Hugger (2004) argue that programmes should support farm households, particularly small-scale farmers, in the continual adaptation of their survival strategies towards the goal of attaining sustainable livelihoods. This implies that their livelihood is gained through farming and they are also incorporated into commodity and labour markets.

Farrington, Ramset and Walker (2002) state that one aspect of rural livelihoods comprises rural people commuting to work daily and go to urban markets for the purpose of buying and selling rural produce as well as seeking services from government institutions such as hospitals, banks etc. Satterthwaite (2000) states that rural people have access to land for housing but limited access for commercial farming, and their access to infrastructure and services is limited because of distance, low density and limited capacity to pay for those services. He further mentions that rural areas have fewer opportunities for earning income.

Furthermore, rural communities mostly rely more on self-provisioning and depend more on access to natural capital as the basis for their livelihood.

Allison and Ellison (2001) emphasise the livelihoods approach as an attempt to improve rural development policy by removing access constraints to assets and activities and identifying ways of making livelihoods as a coping mechanism. This confirms the importance of rural people developing various livelihood strategies and refraining from depending on a single livelihood strategy such as unreliable wage work or subsistence farming. However, Farrington *et al.* (2002) note with concern that formal institutions are the principal barriers to livelihood approaches in rural areas as government departments are mostly found in urban areas. However, governmental institutions are supposed to have programmes that encourage sustainable livelihoods among rural households by improving resource availability.

3.5.1 Farming as a livelihood strategy

Fukuda-Parr and Taylor (2015) and Ncube and Kang'ethe (2015) point out that social transfer entitlement in South Africa is mainly in the form of social grants as the primary government policy to measure and address food security. These grants have been recognised as the support system for poor and marginalised populations, including those in rural areas. Only 30% of the population depends solely on grants for their livelihoods. Fukuda-Parr and Taylor (2015) allude to the importance of own production entitlements as a strategy to alleviate food insecurity, but Altman *et al.* (2009) argue that poor households, particularly in rural areas, mainly produce for themselves, which does not necessarily mean that they are more food secure. This entitlement is more concentrated among small-scale farmers who are engaged in subsistence production: however, in South Africa food production has been dominated by commercial farmers and farming has not been the dominant source of rural livelihoods. Devereux (2009) argues that food production is the main source of food for the sector of the populace mostly vulnerable to food insecurity: small farmers.

Misselhorn (2012) also argues that increased food production remains a vital strategy in the effort to reduce food insecurity, and it has been noted that the sub-Saharan region has been affected by declines in food production due to lack of support from various institutions. Fukuda-Parr and Taylor (2015) note with concern that traditional or subsistence agriculture has been deteriorating at an accelerating pace due to increased migration from rural areas. Those who choose to remain in outlying areas are less willing to participate in farming for their own production.

Ncube and Kang'ethe (2015) also note the troubling trend that only a small portion of people are still making a living from farming, and this has crippled communities in their attempts to solve issues of food insecurity. This confirms that sometimes own production cannot be an effective solution to food security due to the fact that agriculture is a marginal sector of the economy, even in rural areas. Warshawsky (2015), however, argues that although rural communities use various livelihood strategies, small-scale farming remains a critical source of income and food access for many rural areas in South Africa. Devereux (2009) states that a decline of traditional or subsistence agriculture has been caused by the removal of agricultural loans, reduction of public support to small-scale farmers and a decrease in the use of agricultural inputs such as seeds supply and agricultural materials, resulting in a decline in agricultural yields.

3.6 The role of institutions in enhancing sustainable livelihoods

Institutional sustainability is attained when prevailing structures and processes have the capacity to continue to perform their functions to meet the needs of society, particularly the poor. This can be achieved if the country has well-defined laws, participatory policy-making processes and effective public and private sector organisations that create a framework within which the livelihoods of the poor can be progressively improved (Drori, Meyer and Hwang, 2006). Evidence of this is that the Food and Agriculture Organization's (FAO) objective is to eliminate hunger, food insecurity and malnutrition in the entire global society through engaging political, private and governmental institutions to work together with communities to develop solid and stable partnerships.

Institutional sustainability further helps in enhancing the transparency, accountability and responsiveness of institutions. It provides a conceptualisation of organisational action that is explicitly concerned with the relationships among individuals and organisations or the communities and societies in which they operate. Organisations are clearly understood as working to achieve legitimacy that depends on conformity to rules established in fields, communities and societies (Shadnam and Lawrence, 2011). The most important factor is that the Sustainable Livelihoods Approach portrays institutions as the management accounting practices that could shape governance of organisational activity (Burns and Scapens, 2000).

Public institutions such as the state have constitutional and governmental regulations which exert a strong influence in shaping the context of economic actions to reflect the needs of the poor people. For example, the South African Constitution (Act 108 of 1996) specifies in Section 27 that citizens have a right to access nutritional food, and places a burden on the state to make good on this right within available resources (North, 1991). Howlett (2003) emphasises that within the institutional context, administrative style is best regarded as a set of administrative routines and types of behaviour that are heavily influenced by the rules and structures of the civil service system in which they are located.

3.6.1 Processes of institutions in enhancing livelihoods

Processes such as floods and drought-relief programmes are established and implemented through structures which can help reduce the impact of external shocks. Public administration is driven by societal visions and political projects emanate from organisations that deal with public affairs that should be conceptualised as institutions that work towards addressing the needs of communities. (Brunsson and Olsen, 1997). In addition, institutions have influence over policy, political action and constrain or superimpose conditions of possibility for mobilisation and accessibility (Clemens and Cook, 1999). This affirms that public service organisations operate in strong institutional and weak technical environments, because they face greater demands for legitimacy than for efficiency and efficacy. Furthermore, public institutions depend on public opinion for their legitimacy and resources, and are subject to evaluation on the basis of their use of up-

to-date procedures and structures because they cannot (in most cases) be judged on the basis of profitability (Fernandez-Alles and Llamas-Sanchez, 2008).

It is noteworthy that the role of institutions in promoting and sustaining economic change has been an issue of interest especially in developing countries. The major role of institutions is to solve problems of co-ordinating agents' plans, help to promote co-operative behaviour and overcome opportunism and make agents internalise externalities and reduce uncertainty (Gagliardi, 2008). When considering the FAO's role as an international institution, it clearly indicates that their aim is to assist governments to collaborate more effectively with the food industry to improve smallholder productivity and access to markets.

3.6.1 Challenges of institutions in enhancing livelihoods

Casile and Davis-Blake (2002) state that public service organisations are more like non-market organisations. Non-market organisations are those that lack measurable and comparable economic and financial evaluations of their outputs. These organisations therefore seek to make themselves and their outputs legitimate through conformity with institutionalised practices. Najeeb (2013) concludes that the basis of this approach has been its ability to explain variations between international, national and local institutions in how they operate towards helping poor people develop different livelihood strategies.

Meyer and Rowan (1977) point out that institutions' success relies on factors other than efficient co-ordination and control of production activities. Independent of their productivity efficiency, organisations which exist in highly elaborate institutional environments gain the legitimacy and resources needed to survive. Moreover, Liu and Li (2010) affirm that the role of institutions in an economy is to reduce uncertainty and formulate stable structures that facilitate interactions which will allow all enterprises to play a more active role in improving economic growth and political stability in order to achieve food security. However, Scoones (1998) states that some institutions can restrict or reduce people's choice of livelihoods strategies e.g. in rigid caste systems or social systems that prevent women from doing certain activities.

Thoenig (2011) affirms that political and administrative organisations, conventions and procedures regulate the relationships between economic actors and the state, and are therefore path-dependent; whereas some public institutions (such as trade unions) have more influence than others. Economic associations of employers or of farmers may also generate public order and political legitimacy. However, Graftstein (1992) argues that public institutions are taken for granted and provide the infrastructure for collective action, whereas Thoenig (2011) argues that public institutions are considered as institutional actors in so far as their field units are appropriate and promote values and interests that are embedded in the local communities in which they operate. The Department of Agriculture, Forestry and Fisheries (DAFF) clearly indicate that their main role as a public institution is to promote effective and efficient governance that enables an environment for food security, sustainable employment and economic growth. In order to achieve food security, it is crucial that institutions understand the needs of society to be able to render the required services and make local communities participate directly in the decision-making process as a way of empowering them.

3.6.2 The effect of policies on Sustainable Livelihoods

One of the objectives of the Sustainable Livelihoods Approach (SLA) is to improve self-sufficiency in food grains through development programmes and policies reconciling the sustainability concerns of households in improving access to basic resources. This approach focuses on direct support by providing poor people with better access to the assets that act as the foundation for their livelihoods and assists governments and organisations to improve policies that influence access to assets as well as develop livelihood strategies that are open to people (DFID 1999). Responsible political structures can implement pro-poor policies leading to better livelihoods by creating the right to work and right to food and promoting awareness of human rights. FAO (2002) assert that the SL approach aims at identifying win-win policies that will reduce poverty and food insecurity and promote economic growth and environmental sustainability through understanding the livelihoods of the poor and identifying potential policy barriers. Evidence exists that the most common problems in development are that processes and policies do not work for the benefit of the poor.

As already mentioned, the SLA puts people at the centre of development and enables them to be influential in matters of policy and institutional arrangements that promote the agenda of the poor. This indicates that policies may help to shape people's access to assets and livelihood activities. Farrington *et al.* (2002) argue that policies have the potential to build the security of livelihoods of poor households. Some policies, for example, policies of liberalisation and structural adjustment, fail to do so and may even actively work against the interests of the poor.

Serrat (2008) points out that public institutions are responsible for setting and implementing policies and legislation, delivering services and performing all manner of other functions that affect livelihoods. It is further noted that policy-determining structures cannot be effective in the absence of appropriate institutions and processes through which policies can be implemented. Negative outcomes result from the failure of the prevailing elite-controlled governance to recognise the legitimate interests of the poor communities. This suggests that interventions for providing information to support more pro-poor policy-making processes are crucial to strengthening the contact between the poor and policymakers by increasing the accountability and transparency of public decision- making.

3.7. Entitlement Theory

Entitlement Theory was initially developed by Amartya Sen to address issues of poverty such as starvation, famine, unemployment, inequality and food insecurity as the major development issues that affect society. Entitlement is defined 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 has (Sen, 1981). The central issue in any theory of justice including entitlement is the unequal relations between people in political power, in social standing and in the command over economic resources (Chambers, 1989). Entitlement theory explains that a shortage of food is more likely to occur in a country where there is lack of democracy. Food insecurity occurs where there is no free space to engage in any livelihoods or to fight for social justice (Sen, ibid).

Furthermore, Entitlement Theory focuses on fair distribution to those who are entitled to their holdings and will benefit from this process, but unfortunately, not all countries and governments follow these rules. In addition, some people steal from or defraud others, prevent them from living as they choose, or exclude them from competing in the economy (Van der Veen and Van Parijs, 1985). This theory argues that people who have produced certain products and services have rights over them, and taking someone else's holdings violates their rights. Holdings to which people are entitled may not be seized, even to provide equal opportunity for others (Sen, 1981).

3.7.1 The lack of purchasing power: an entitlement failure

A person's entitlement is the full range of goods and services that he or she can acquire by converting his or her endowments, such as assets and resources. The theory aims at describing all legal sources of food, such as production-based entitlement (growing food), trade-based entitlement (buying food), own-labour entitlement (working for food) and inheritance and transfer entitlement (being given food by others) (Sen, 1981). It also emphasises that food ownership is one of the most primitive property rights, and in every society, there are rules and institutions that govern this right. In capitalist states these rules and institutions concern the regulation of ownership of some resources and acquisition of others through exchange (Elahi, 2006). Furthermore, Maxwell and Smith (1992) state that an individual's entitlement is embedded in his/her endowment, which is the resource bundle which is transformed via production and trade into food or commodities which can be exchanged for food.

Sen (1981) uses this Entitlement Theory approach to explain food insecurity or starvation and famines, to show that a person will be exposed to food insecurity if his or her exchange entitlement does not contain any feasible bundle, including enough food to sustain life. Fukuda-Parr and Taylor (2015) argue that high levels of income poverty and unemployment severely constrain households' capacity to purchase food. Furthermore, exchange entitlements have deteriorated due to price inflation that averaged 30% from 2003 to 2013, and prices have not recovered to their previous levels.

The South African Government has formulated a range of strategies including policies to improve exchange entitlements by creating employment opportunities as the principal remedy to address structural causes of food insecurity and strengthening market competition by expanding government procurement from small-scale suppliers in food retailing to ensure prices do not increase excessively. Furthermore, Tiwari (2007) emphasises the understanding of the structure of the ownership or entitlement systems within which food insecurity issues are analysed. This theory shows how changes in rural market structure, brought about mostly through government policies, have affected the ownership bundles of rural households.

Tiwari (2007) maintains that the Entitlement Approach is not restricted to material possessions, the economic entitlements of the individual or household extend to incorporate the individual's skills, education, productive ability and non-economic entitlements. Furthermore, this theory explains that the income and resource bundles such as assets and commodities which households can establish to control and secure their livelihoods. This theory points out that responsible institutions including government have failed to make economic progress by reaching the poorest households in rural areas.

Devereux (2001) states that different individuals and institutions exercise distinct claims over the same resources in developed countries, whereas in rural areas of Africa natural resources are owned or controlled by private individuals, households, extended families or lineage groups, communities, ethnic groups and the government. Conflicts in many different aspects can overtly occur at or between any of those levels, due to the fact that institutional ownership or control of resources such as land does not necessarily imply equal or equitable access to that resource by each individual member of those institutions. Tiwari (2007) emphasises that policies exist to address poverty issues such as food insecurity so this problem should be addressed in line with improving the entitlements of individuals and households.

3.7.2. Food insecurity as an institutional failure

Sen (1977) states that the majority of people in the world suffer on a regular basis from significant food insecurity because there are too many mouths to feed and too little food, as well as a sharp decrease in the food supply, particularly in developing countries. The Entitlement Theory approach focuses on the ability of people to command food through whatever legal means are available in that society. Food insecurity means that some people do not have enough food to eat, not that there is not enough food to eat. The law defends food availability and entitlement to it (Sen, 1981).

Devereux (2000) attests that food insecurity affects people who cannot access adequate food because of poverty, irrespective of food availability at the national level, such as in South Africa where although the country is known to be food secure, food insecurity is high at the household level. This point is supported by the work of Tauger (2003) who shows that the populations in developing countries are food insecure because of their degraded agriculture, with exhausted soils, low yields, and great vulnerability. This work describes in detail how new seeds, fertilizer and other technical inputs have increased production, food security and economic growth.

In addition, Dowlah (2006) concurs with Sen (1977) by stating that food insecurity or starvation is a function of entitlements; as such, disasters are caused not by food shortages but by the shortage of income and purchasing power, which depends on a person's ability. As was evident at the World Food Conference of 1974, the focus has shifted from expanding the production of food to a much broader concept of food security that involves access to, and not just supply of food (Fine, 1997). Ownership of food is one of the most primitive property rights, and in each society, there are laws and rules governing this right and the individual's entitlement to commodity bundles including food. Starvation is viewed as resulting from a failure to be entitled to any bundle with enough food. People's actual food consumption may fall below their entitlements for a variety of other reasons, including ignorance, fixed food habits and apathy (Sen, 1981).

In addition, Reutlinger (1984) agrees with Sen that people are food insecure because they do not have sufficient food entitlements and they are unable to produce adequate food or other goods and services which would enable them to acquire enough food. The aggregate food supply also affects food entitlements of individuals; however, individuals' food entitlements clearly also depend on many other factors, such as the distribution of physical and human assets, the productivity of these assets, and the prices of commodities including food and services. Furthermore, a decrease in food availability plays only a minor role in precipitating the chain of events that causes large numbers of the rural populace to be unable to secure enough food. This theory notes that governments recognise too late the need for more food to reduce hunger, while they focus on declining food supplies rather than on food prices and rural incomes.

Sen (1981) notes that when there is a situation of food insecurity, food is often exported from places worse hit by famine to other regions that do not suffer food shortages. Although those in famine-struck regions may be said to be in the greatest need, food – like all commodities in markets – goes to those with the ability to pay, and people outside the famine region are likely to be able to exercise this ability better than those within it (Peacock, 2010).

3.7.3. Food insecurity as an entitlement failure

Lin and Yang (2000) state that the problem of food insecurity has received much attention from economists because such crises continue to occur despite persistent progress in agricultural production technology. As in many developing countries, poor people are disproportionately found in rural areas, and anti-poverty policies must find a way to boost the level and/or the stability of income for the rural poor. Specifically, the majority of black South Africans live in poverty because they possess few assets and have financial constraints that limit their ability to use the assets they have (Carter and May, 1999; 2001). Furthermore, Frediani (2007) affirms that poverty and food insecurity is a result of government failure to employ market rules effectively, which can be seen as the deprivation of basic capabilities rather than merely low- income levels.

Another significant factor in Sen's theory is that it explains how to achieve gender justice in society (Nussbaum, 2003). It is noted that in Sen's work, an individual's freedom to transact in markets is also instrumentally important in furthering the welfare of market participants and in promoting the process of development. Women's freedom to participate in markets is not only of intrinsic importance but is instrumental to the process of development of female participation in labour markets, which could reduce the level of food insecurity in society because of the significant role they play in making food available in households (Peacock, 2010). However, Nussbaum (2003) cautions that this theory does not specify to what extent equality of capability ought to be a social goal, or how it ought to be combined with other political values in the pursuit of social justice.

3.8 Limitations of Entitlement Theory

To be able to understand this, Osmani (1995) states that it is crucial to note that Entitlement Theory is unambiguously microeconomic, in that it is built upon the modern technical apparatus attached to general equilibrium theory of neoclassical economics, both in form and initial content. Devereux (2000) points out that the weakness of the Entitlement Theory approach is that it is silent about such apparent violations of the fundamental right to life. Devereux (1996) asserts that this theory ignores possibilities for weaker claims over resources, such as control and access, and further notes that it fails to consider contexts where property rights are exercised institutionally rather than individually.

It is noted that if a household has endowments such as livestock that can be exchanged for food, then the Entitlement approach predicts that this will happen. Sen also developed the new concept of "extended entitlement" to accommodate "socially legitimated" entitlements to food that were not conferred by the market mechanism (Dreze and Sen, 1989; Devereux, 2000). Moreover, Devereux (2001) notes that this theory ignores possibilities for weaker claims over resources, such as access and usufruct rights, as well as contexts where property rights are exercised institutionally (such as common property regimes) rather than individually, as depicted by the diagram below.

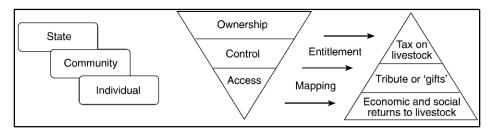


Figure 3.2: Endowments, entitlements and communal land (Source: Devereux, 1996: 13)

He further states that in most cases in African rural areas natural resources are owned or controlled by private individuals, households, extended families or lineage groups, communities, ethnic groups or tribes and the State. It is clear that conflict at or between these levels could easily occur, because institutional ownership or control of a resource such as land does not necessarily imply equal or equitable access to that resource by each individual member of that institution.

Bromley (1989) and Devereux (1996, 2001) state that private and state property regimes, entitlements and ownership are vividly defined in individuals or state institutions. In open access regimes, entitlements are freely available to whoever chooses to take advantage of the resource. Lastly, common property regimes are necessary to separate ownership, control of and access to a resource from ownership, control of and access to the utilities derived from that resource. In reference to South Africa, there is communal land that is owned by the state and controlled by traditional leaders and accessed or utilised by individual farmers, particularly white farmers. In return for allocating usufruct rights over land to local farmers, community or traditional leaders might extract rent for its use in the form of tributes, or the state might extract rent as a way of generating revenue and having control of the land.

Entitlement Theory has limitations in terms of explaining food price behaviours because it does not explain famine, a different phenomenon which often entails a disaggregated and multidimensional perspective distinguishing between different social groups and geographical areas. Price movements are usually imperative components in analysing food insecurity and famine, but sole concentration in terms of trade will only offer a partial picture of the entitlement pattern and high levels of income poverty and unemployment

that severely limit households' capacity to purchase food. Its limitation is that it contradicts the fundamental principle of market economy because the term 'exchange entitlement' is inconsistent with the principles of capitalism; the whole Entitlement approach is tantamount to the repudiation of capitalism and advocacy for the revival of socialism.

According to Elahi (2006), the government itself is the most extreme institutional arrangement that serves the dual purpose of forming and controlling the environment for voluntary exchange, but at the same time often intervenes in the market to improve market institutions or pursue political goals such food security, equity and poverty eradication. Entitlement Theory does not accept that endowments created by the market are legitimate, while at the same time it holds the system responsible for failing to meet the food entitlement of the poor populace (Elahi, 2006; Rubin, 2009). Based on these arguments, this theory is found to be an extremely important approach to food insecurity and famine analysis and it is regrettable that it falls short of being fully utilised in the general policy work on food in/security or famine. In order to achieve entitlement as a means of poverty alleviation and eliminating food insecurity, various institutions need to be responsible for the formulation of policies and programmes relating to elimination of food insecurity in South Africa and worldwide.

3.9. Overview of the supplementary value of theoretical triangulation

This section specifically highlights the areas which the two theories strive to explain in relation to the phenomenon of how institutional gaps contribute to food insecurity. Before doing so, it is necessary to indicate that food security is a contested and non-stable phenomenon that is demonstrable in the manner in which it is conceptualised, analysed and contextualised. Firstly, it is crucial to indicate that the complexity of food insecurity is evident from the assertions of Maxwell and Smith (1992) who view the constructs, poverty, undernutrition and vulnerability as closely intertwined. This complexity is increased by the view that food security is the most important, if not the only, dimension of the broader concept of livelihood security (Maxwell and Smith, 1992). Secondly, there are different ways in which food security is analysed. Though it differs in degree, and from

situation to situation, food security is often analysed using one or more different criteria, such as sufficiency, access, time and security, to name a few.

Thirdly, the context in which food in/security exists is not static but subject to fluctuation, since it is situation-specific. Additionally, while each household differs in relation to the food security-insecurity continuum, the individuals within a specific household may also differ from one another in the manner and extent to which they experience and cope with food insecurity (Maxwell, 1996). In summary, the three aspects covered above serve to broadly justify some of the circumstances that may require a synthesis of more than one theory. While this discussion was aimed at highlighting the general value of mixing the theories, the forthcoming section serves to identify the specific aspects that each theory purports to address or does not address in relation to this inquiry.

3.9.1. Sustainable Livelihood Approach (SLA) and food insecurity

The Sustainable Livelihoods Approach was used because it is genuinely trans-disciplinary as it focuses on the issues of poverty (food insecurity), environmental and economic issues. Food insecurity is not only the result of inadequate food production but it also relates to lack of livelihood opportunities because of poor accountability and legitimacy by institutions. Natural capital in this approach is considered as vital to food security but agricultural activities as livelihood alone cannot alleviate food insecurity (Bingen, 2000; Hesselberg and Yaro, 2006; De Haan, 2012). It is crucial to create an environment with wide choices for poor households because choice provides people with opportunities for self-determination and the flexibility to adapt over time. Furthermore, this approach helps in improving poor people's access to assets that assist in livelihood strategies and enhances responsive structures and processes based on the people's needs.

However, Hanazaki, Berkes, Seixas and Peroni (2013) assert that the sustainability of livelihoods relies not only on sustaining assets of natural resources but also on the ability to cope with and recover from shocks and stresses. Townsley (1998) further argues that this approach lacks gender visibility and is gender biased because men still dominate economic activities while women dominate household activities. Food insecurity mostly affects

women because they lack equal distribution of productive resources, land ownership rights and poor access to microfinance as strategies to improve their livelihoods (Oluoko-Odingo, 2011).

Caswell (1997) and Lenselink and Cacaud (2002) argue that this approach does not take into consideration the role of cultural, political and institutional history of the communities in explaining causes of food insecurity and how livelihood strategies will inform possible activities. Furthermore, food insecurity cannot be measured by regarding the head of a household as the only person responsible for economic activities because dependants and other household members also have a role to play in contributing to the household economy (Hussein and Nelson, 2016). Furthermore, a variety of activities does not help to make a living for the poorest of the poor since such people have no ability to make decisions in shaping their own livelihoods (Krantz, 2001).

3.9.2. Entitlement Theory and food insecurity

Adger (2006) affirms that Entitlement Theory and the Sustainable Livelihoods Approach are focused exclusively on the social realm of institutions, well-being and on class, social status and gender as well as natural hazards, as important variables to understand food in/security. He further points out that vulnerability to food insecurity is clearly elaborated as an institutional gap through Entitlement Theory, which sees it in terms of a set of linked economic and institutional factors. Entitlement Theory explains the link between a state of food insecurity and social disorder.

Entitlement imposes a legal obligation on the government to meet criteria in law such as social security. The theory focuses also on the meaning of "famine" which is a shortage of food severe enough to lead to starvation as a result of lack of entitlement. However, this theory is unable to explain why some people during famine actually have more food than usual, while other unfortunate people have nothing (Sen, 1981). Entitlement Theory explains the causes of food shortages and lack of access to resources by poor people unless they receive institutional support in the form of entitlement such as ownership of arable land. Therefore, through entitlement, they can avoid food insecurity. Elahi (2006) argues

that if the food availability decline approach can explain food price behaviour in all supply situations – slump, normal and boom – then this theory makes it difficult to analyse food insecurity and famine.

3.10. Conclusion

The Sustainable Livelihoods Approach is chiefly concerned with providing a variety of options in dealing with poverty issues including food in/security, as it presents different coping strategies as responses to shocks and stresses. The SLA located in rural contexts provides important insights about the reality of rural households since it explores aspects of their livelihoods which are commonly neglected. Institutions and related processes that form the environment in which livelihood strategies are pursued are considered central to the analysis. Entitlement Theory holds that everyone is entitled to the holdings they possess; however, not everyone respects entitlement as a rule because some people steal from others, enslave them and seize their products, preventing them from living as they choose. This theory is not restricted to equipment or possessions only, but also includes the economic entitlements of the individual or household and is extended to incorporate the individual's skills, productive ability and non-economic entitlements. The next chapter discusses the research methodology and tools used to align theories used in this study to achieve its objectives and provide answers to the study research questions.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This study is focused on the institutional gaps that contribute to food insecurity, particularly in rural areas. The emphasis is on identifying institutional gaps and assessing the effectiveness of the policies that address the hindrances to accessing institutional services that would improve the situation of food insecurity. This chapter describes the methods and procedures employed to obtain the data required for this study. It also provides a comprehensive standpoint on research methodology and justifies the choice of a mixed research paradigm, deemed to be an appropriate methodology for this thesis. It further covers the study area, research design, methodology, sampling method, data collection instruments, data analysis, reliability, validity, research ethics and limitations of the study.

4.2 The study area

The study was conducted in the uThungulu District which has an estimated population of 907 519, dominated by those residing in traditional areas (79.2% of households), with 18.1% of the population residing in urban areas. This district is a Category C municipality, which means that it is a District Municipality and shares executive and legislative authority with Category B, which are local municipalities (LMs). It is located in the north-eastern region of KZN province on the eastern seaboard of South Africa. It covers an area of approximately 8213 square kilometres, from the agricultural town of Gingidlovu in the south, to the Umfolozi River in the north and inland to the mountainous rural area of Nkandla (Integrated Development Plan (IDP), 2012/2013). The overlapped map depicts the uThungulu District, which consists of six LMs.

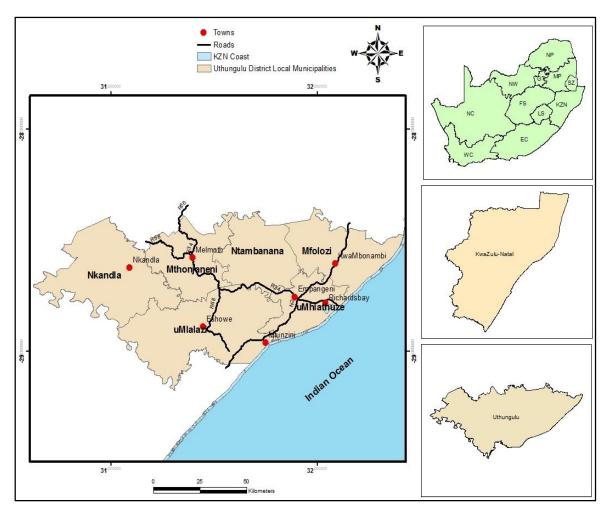


Figure 4.1: uThungulu District Map

The district consists of six LMs: uMhlathuze, Ntambanana, uMlalazi, Mthonjaneni, Nkandla and Umfolozi. It has the third highest population in the province after the eThekwini Metro (Durban) and the uMgungundlovu district (Pietermaritzburg and surrounding areas). The uThungulu District faces challenges in terms of service delivery, which are exacerbated by the geographical characteristics of mountainous terrain, large distances between rural areas and the urban centres, and prolonged periods of drought (IDP, 2012/2013).

KwaZulu-Natal (KZN) is the biggest province in South Africa, with the highest membership of municipalities in the South African Local Government Association. It has 51 LMs and 10 District Municipalities, as well as one Metropolitan Municipality. This

province has complex socio-demographic profiles, and 80% of the population live in rural areas. The study area is affected by drought, particularly deep rural communities living in absolute poverty, and their challenges are to provide basic services such as water, physical infrastructure and job creation as well as the need for growth in the small and medium business sector. Ncube and Kang'ethe (2015) state that in 2011 the World Food Programme pointed out that severe droughts have prevented the livelihoods of more than 13.3 million people in Africa. In the current study, traditional agriculture is largely practised in most rural areas of the tribal lands, and has enormous potential for growth as well as for the alleviation of food insecurity.

The participants who participated in this study were from all six LMs of uThungulu District. This district consists mainly of rural areas, with few areas being urban. The governmental institutions and other relevant institutions are based mainly in urban areas, but are expected to provide services in rural areas that would enhance food security to households as well as the community at large. The key informants in this study were located in offices in urban areas.

4.2.1 Economic status of the study area

The total size of the district economy, as measured by the total gross value added, has improved from R11.3 billion in 1995 to R21.4 billion in 2011, an increase of 90.4% over this period. The uMhlathuze LM dominates the economy of the district because the majority of international industries are allocated there, while the share of uMlalazi LM decreased from 16.2% to 12.1%, and Nkandla and Mthonjaneni account for only 3% and 2.6% respectively of the district economy. District SMME business support services and strategies are estimated at 74% of the turnover in uThungulu, generated by only 6% of the largest businesses in the area (uThungulu District Report (UDR), 2012, 2015).

Employment in the community and social services sector was 22 148, which overtook the agricultural sector as the main source of employment in the district. The number of employment opportunities in agriculture decreased from 32 459 in 2000 to 7043 in 2010. The uThungulu District Report (UDR) has further indicated that the majority of losses

were experienced in the informal agricultural sector, down from 5765 to 1867. However, a total of 2195 km² or 29.6% of the district land area is used for agriculture and forestry purposes, and 696.4 km² (or 31.7% of agricultural land) is used for subsistence agricultural activities (UDR, 2015).

It appears that at LM level the highest unemployment rates are prevalent in Ntambanana (33.1%) and Mfolozi (32.1%) as well as Nkandla (40.8%), resulting from a lack of formal sector employment. However, the study area is rich in commercial agriculture, based on two main mono-crops, namely sugar cane and forestry. Traditional agriculture is practised on most of the traditional authority lands in the districts, but the development of agricultural practice is hindered by a low skills-base and a lack of organised bodies to provide financial assistance and access to markets and market channels. The focus has been on traditional farming through assisting communities with modern farming systems in their community gardens as a means of providing access to food for the residents, the excess being sold in local markets (UDR, 2012; 2015).

4.2.2 Infrastructural development of the study area

A total of 66.5% of households in the district are provided with water through regional and local water schemes. However, 16.6% of households are still utilising untreated sources of water directly from springs, dams and rivers. The levels of access of households to water infrastructure vary greatly across the LMs in the district. It is clearly indicated that 75.8% of households in the district had access to electricity for lighting purposes, compared to the overall provincial rate of 77.9%: however, as many as 55.4% of households in Nkandla and 41.8% in uMlalazi still did not have access to electricity (UDR, 2015).

In terms of transportation and communication, the district has limited private vehicles, with only 21.3% of households owning motorcars. The majority of the population relies on public transport, mostly minibus taxis and vans, to access social and economic opportunities. One of the severe challenges within the district is the limited availability of

and access to information and communication technology infrastructure and facilities, which cripples proper communication with potential markets (UDR, 2015).

4.3 Research design and methodology

The main focus of this study is to research the phenomenon of the food in/security in rural areas in the uThungulu municipality and to find solutions to address the problems. This mixed methods study addresses the way that institutional gaps affect food security. The study research design guides the researcher in planning and implementing the study in a way that is most likely to achieve the intended goal (Burns and Grove, 1993). This study used both quantitative and qualitative methods comprising convergent parallel mixed methods where the researcher converges or merges quantitative and qualitative data in order to provide a comprehensive analysis of the study problem.

The research design of this study is exploratory and descriptive in nature, aiming to provide solutions regarding rural development with a specific focus on the northern Kwa-Zulu Natal region. In order to achieve the research objective and research questions, both empirical and non-empirical research were utilised. Empirical research was used to collect data which include socio-economic status, food security status and services rendered by various governmental institutions using a quantitative instrument. The study also used focus groups and semi-structured interviews to collect qualitative empirical data to explore the perceptions of participants towards the way institutional gaps contributed towards food insecurity in the study area. The reason for collecting both quantitative and qualitative data was to bring together the strengths of both methods of research since a combination of methods provides a richer base for analysis, and data from each method enabled comparison and validation of the study results. The non-empirical research was also used and consists of the following:

• Literature review: A comprehensive review of the information that already exists in the study field was conducted. The review involved a critical analysis of the study's background, definitions and theoretical perspectives. According to Maree (2016), a literature review provides an overview of scholarship in a certain discipline through

analysis of trends and debate. It describes past and current research on a particular topic. It is characterised as being critical and integrative and using mainly inductive reasoning. The main purpose of conducting a literature review is to provide a rigorous and rational review of previous research in the area of study, to identify the gaps in the extant literature and position the research in that wider context. It also ensures that important variables likely to influence the study are not left out. A literature review also helps develop the theoretical framework and hypotheses for testing and avoids trying to rediscover what is already known. Various literature sources were consulted which include books, journals, theses, articles, internet sources, relevant policies and legislation concerning institutional gaps and food security.

Furthermore, non-empirical research was employed in the analysis of two theories that were utilised to underpin the research problem of the study, namely: Sustainable Livelihoods and Entitlement Theory. These theories predict that socio-economic status and institutional deficiencies influence food security status at a household level. Many scholars (Moser, 1998; Nelson, 1998; Bebbington, 1999; Farrington *et al.*, 2002) in the field of food security affirm that SLA and Entitlement Theory can be used to analyse and integrate different research techniques, including a review of secondary, quantitative and qualitative data.

Documents or textual analysis: The second tool of collecting non-empirical data was to review documents such as policy documents, food security strategic documents and Integrated Development Plan documents. Bowen (2009) defines document analysis as a systematic procedure for reviewing or evaluating documents, both printed and electronic. Like other analytical methods in scientific research, document analysis requires that data be examined and interpreted in order to produce meaning, gain understanding, and develop practical knowledge. Researchers normally analyse documents as part of their study and include that information in their reports. Documents are a source of data, requiring the researcher to rely on the description and interpretation of data that is rich in argumentation. Document analysis is less time-consuming and more efficient than other research methods as it requires data selection,

instead of data collection (Bowen, 2009). This study also used documents as a data-gathering technique by focusing on written reports which included reports on food security published by different stakeholders.

4.3.1 Interpretivism approach

In order to achieve the objectives of any study, research should be based on some underlying philosophical assumptions about what constitutes accuracy and validity of the research findings and which research method(s) is/are appropriate for the development of knowledge. The researcher utilised an interpretivism paradigm which acknowledges and explores the cultural and historical interpretation of institutional gaps and food security/insecurity in uThungulu district municipalities. This assisted the researcher to understand and interpret the institutional gaps that exist within these municipalities and how they address issues that are affecting the poor with regard to access to food.

An interpretivist approach was further used to describe and interpret participants' perceptions, meanings, attitudes, beliefs, views and experiences in relation to institutional deficiencies that contribute to food insecurity. The participants were requested to describe, according to their own understanding, the institutional gaps in their area, in order to confirm their understanding of institutional gaps and how that affects access to food and productivity. The interpretivists' approach is more interested in understanding the social world in which people operate, produce and reproduce through engaging in continuous activities. Furthermore, this study employed an interpretive approach because it not only sees people as a primary data source but it also seeks people's perceptions on institutional gaps as a contributing factor in failing to achieve food security.

4.4. Sampling methods

A sample was drawn from the population of uThungulu District area at uMlalazi, uMhlathuze, Nkandla, Ntambanana, Mthonjaneni and uMfolozi and participants were selected as key elements for data collection. The target population was divided into homogeneous subgroups which comprised households, officials and co-operatives. The convenience sampling procedure, which is classified as a non-probability sampling

procedure, was utilised where the researcher identified community members who were conveniently available to participate in the study by stating their perceptions, views and opinions on the issues of the functions of government institutions and food in/security in the area of study.

Purposive sampling was used for government officials including municipal officials from local and district level, the Department of Economic Development, Tourism and Environmental Affairs (DEDTEA), Department of Agriculture, Forestry and Fisheries (DAFF) and Department of Rural Development and Land Reform (DRDLR) as well as from co-operatives (both registered and not registered). This sample was selected for theoretical reasons to provide the researcher with information on how participants view institutional support services that are available in the study area, and which institutional gaps contribute to food insecurity. This study also used snowball sampling by being referred to other co-operatives to provide additional information, including challenges from different wards and communities.

Probability sampling was also used to measure variables and generalise findings obtained from a representative sample from the total population. All the LMs of UThungulu District Municipality were represented in the study by participants, key informants and focus groups. One hundred and forty-seven out of 240 questionnaires were returned from households. Households were included because they are directly affected by food insecurity and mostly dependent on the services provided by the government. Socioeconomic status of households indicates institutional gaps due to poor living conditions, availability and accessibility of basic services. Nine key informants from different governmental institutions were included to give information on how the services were rendered, particularly those that enhance food security. Furthermore, they revealed the status quo of food security interventions and their impact on household food security by looking at accessibility, production and availability. Focus groups were included to indicate the role of government in their cooperatives and how the community benefitted from food security interventions. The overlapped Table indicates the sample population of the study.

Table 4.1: Selection of the study sample

Name of local	Number of	НН	Government	GO	Registered Co-	RC
Municipalities	Households	Sample	officials	Sample	operatives	Sample
	(HH)	Size	(GO)	size	(RC)	Size
Mfolozi	21 902.00	20	2	1	7	2
Mthonjaneni	10 805.00	15	2	1	5	1
Nkandla	22 666.00	16	1	1	6	2
Ntambanana	15 029.00	20	1	1	4	1
uMhlathuze	82 015.00	40	4	3	10	3
uMlalazi	34 389.00	36	1	2	7	2
Total	186 806.00	147	11	9	39	11

SOURCE: uThungulu District IDP, 2016

The literature recommends a sample size of between 100 and 200 when the researcher has no previous experience of data collection and limited resources to conduct a large survey (Carley and Harrison, 2003; Eng, 2003; Kadam and Bhalerao, 2010). In terms of the sample size in this study, a total of 240 questionnaires were distributed, based on a generally reliable method. The participants in this study were of different age groups and genders because all individuals are vulnerable to food insecurity.

4.5 Data collection instruments

A combination of methods was used in the study to collect data, as outlined below. In this study, the researcher used questionnaires comprising semi-structured questions to collect data from community members, and data were collected from key informants and cooperatives in the form of focus group discussions (FGDs) that took place in communities.

4.5.1 Questionnaire

Quantitative data was collected using a questionnaire that was written in English and translated into isiZulu; experts of these languages were consulted in the translation (Appendix 2). The back-translated version was checked against the original version. The data from a questionnaire were used to confirm responses and test the reliability of information obtained through qualitative data collection tools. The researcher used a self-

administered questionnaire that was delivered by hand and assisted those who were unable to read and write to fill in the questionnaire.

One of the challenges encountered by the researcher was that the majority of participants were unable to write and the researcher, together with his team, had to assist them in completing the questionnaires. The questionnaire had two sections: Section A related to demographic information (participant's gender, age, marital status, education level, employment status and income class), while Section B contained open-ended questions that allowed free responses and were recorded in the participant's own words.

4.5.2 Focus group discussions (FGDs)

A qualitative method was utilised to collect data through focus-group interviews with cooperatives from all six municipalities. IFPRI (2002) affirms that focus groups are the primary means of qualitative data collection, but are followed up with in-depth interviews. The focus group discussions (FGDs) included females and males aged 18 and over, and explored their views on the institutional gaps in governmental institutions. These co-operatives were selected because they had been affected by these institutional gaps since they were working with governmental institutions towards alleviating poverty and food insecurity within the uThungulu area. The researcher used open-ended, semi-structured questions and was prepared in advance. A high-quality audiotape was used to record the FGDs, which were transcribed and translated verbatim. Permission to use the tape-recorder was arranged beforehand with the FGDs and all participants gave their consent.

FGDs enabled the researcher to explore and prompt the interviewees for in-depth answers. The researcher experienced some challenges. Initially it was extremely difficult and time-consuming to set up a meeting with the focus groups, and some members were hesitant to meet with the researcher because they assumed that he was there for political reasons. However, the majority of the focus groups thought the researcher was there to assist them with their challenges such as access to credit, information and equipment to fulfil their project goals. The researcher repeatedly explained to them that he was not

from the government and that his intention was to conduct academic research, as stipulated in the informed consent form. It was also noted by the researcher that some participants were not willing to disclose all of their thoughts on the topic or themes.

4.5.3 Interviews

The researcher decided to use semi-structured interviews because of their primary strength of greater flexibility in the discussion by the interviewee on the topic and themes. The researcher undertook a process of arranging appointments with key informants from various governmental institutions to request them to participate in the study. The study involved them stating their opinions and perceptions on their institution's challenges towards meeting the needs of communities, such as food security, and other issues related to the study. Key informants were allowed to participate in a non-threatening environment, which were their respective offices. In this study, key informant's interviews allowed the researcher to follow up in more detail with individuals who had specialised knowledge.

The researcher also used semi-structured interviews to obtain rich descriptive data, which assisted him in understanding the challenges and gaps that contribute towards food insecurity and influence the effectiveness of the policies and strategies aimed at reducing it. The researcher used probing questions to obtain in-depth information. IFPRI (2002) confirm that semi-structured interviews allow the researcher to enter the process prepared with a key set of questions to collect data, but also enable him to follow up on relevant topics that emerge during the course of the discussion. The researcher requested permission to use a tape-recorder to capture the interviews in order to focus all his attention on the key informants. Full transcripts were made of the interviews.

4.6 Data analysis

The study employed both qualitative and quantitative data analysis. Data were analysed separately and then combined. Content analysis was used for the qualitative data, where the researcher generated themes from the interviews. The researcher started by listening

to the voice recorder repeatedly to internalise the content and transcribe it verbatim. Transcripts were read through carefully and ideas were written down in the margin as they came to mind, so that no data were left out. The researcher employed quantitative data analysis with the aim of reducing the data to a comprehensible and interpretable form, so that the data on the research problems could be assessed and conclusions could be drawn.

Since this study used both qualitative and quantitative data analysis methods, sequential data analysis was employed by the researcher which meant that the qualitative data were analysed first, followed by quantitative data analyses. After data collection, both quantitative and qualitative data were interpreted together. All quantitative data were cleaned and coded, and the Statistical Package for Social Sciences (IBM SPSS22) computer programme was used to develop descriptive statistics, percentages, frequencies, tables and figures. The researcher started by reporting the quantitative results and then discussed the qualitative findings in the form of themes that confirmed the statistical results.

4.7 Data quality control

Validity in this study means that the researcher checked for the accuracy of the findings by conducting a pilot study: if reliable, the researcher's approach was consistent across different researchers and different research projects (Gibbs, 2007). Validity and reliability were used in questionnaires, with the aim of collecting valid data from relevant participants. Content validity was judged by the research supervisors examining the answers provided by participants in the pilot study; most answers from different participants were similar to one another, meaning that the content was valid. The data collection tool was also tested for reliability, and specifically for internal consistency. The most important factor is that the data that were collected during this stage were not used in the actual findings; the purpose here was to find and correct mistakes before the actual data collection began.

In a qualitative study, validating the findings refers to the researcher's determining the accuracy or credibility of the findings. Assessing trustworthiness is the acid test of data analysis, findings and conclusions. The credibility of the study deals with the question of how the findings correspond with the reality. In this study, credibility was ensured through a well-defined research method, a research design that fitted the research question and the theoretical perspectives that were linked to the study objectives. Furthermore, in-depth interviews and focus group discussions were used to ensure the use of thick/detailed/in-depth descriptions of how institutional gaps affect food security.

4.8 Ethical considerations

The researcher adhered to the University of Zululand's Policies and Procedures on Research Ethics and its Policy and Procedures on Managing and Preventing Acts of Plagiarism. The researcher had permission (Appendix 3) for conducting research in an area from uThungulu District authorities. Participants were informed of the confidentiality clause. The researcher explained the purpose and the importance of the research to the uThungulu District and to community members, and why their area was selected for the study. All participants were assured that they could withdraw, even after consenting to cooperate in the research (Appendix 1). They were also informed that they should not write their name or organisation's name on the questionnaires, and that the raw data would be entered into the computer using codes. The IsiZulu version of the questionnaire was created to help those households who did not understand English well.

The researcher explained that the identity of individuals from whom information was obtained during the data collection process would be kept strictly confidential and that no information revealing the names of participants would be included in the final report or the study. The researcher requested permission to take photographs or pictures that assisted the study to build evidence. The study was approved by the Faculty Board of Arts, Higher Degrees and Ethics Committee (Appendix 4). The proposal and questionnaires were submitted to the Ethics Committee for approval and ethical clearance.

4.9 Limitations of the study

This research was limited in a number of ways. It was conducted in rural areas where it is sometimes difficult to get people to co-operate, because they do not always understand the value of conducting research and how they are going to benefit from it. Also, when rural communities are asked about development issues, they expect that they will be provided with the services that they are desperately looking for. Some governmental officials were hesitant to participate in the research because they were suspicious and thought they were being spied on, and that the researcher came from a certain political organisation, irrespective of documentary proof to the contrary.

4.10 Dissemination of research

Some of the findings of this study were disseminated through journal article publication, local conferences and workshops and the thesis will be posted on Unizulu Institutional Repository. The following articles were published in the accredited journals:

- Masuku, M.M., Selepe. B.M. & Ngcobo, N. (2017). Small scale agriculture in enhancing household food security in rural areas. *J Hum Ecol*, 58 (3): 153-161.
- Masuku, M.M., Selepe. B.M. & Ngcobo, N. (2017) The Socioeconomic status as a factor affecting food (in) security in rural areas, uThungulu District Municipality, Kwa-Zulu Natal, South Africa. *J Hum Ecol*, 58 (1, 2): 57-66.
- Masuku, M.M., Selepe, B.M. & Ngcobo, N. (2017). Status of Household food security in rural areas at uThungulu District, Kwa-Zulu Natal, South Africa. African Journal of Hospitality, Tourism and Leisure (AJHTL), Vol. 6 (2).

The findings of this study were shared with public institutions including local municipalities under uThungulu District to assist in policy formulation and reviews.

4.11 Conclusion

This chapter outlined the relevant methods and tools used to conduct this study. The methodology that was chosen for this study succeeded in satisfying the aim and objectives of the research, which were to produce relevant results to address the research problem and assist in solving the identified problem of institutional gaps that contribute to food insecurity, particularly in rural areas. This chapter clearly demonstrated that participants were not treated as objects – their rights were well respected and recognised, and all ethical issues were addressed accordingly. Data were collected from the participants using questionnaires and semi-structured interviews where questions were answered by key informants as well as focus groups. Both quantitative and qualitative data analysis tools were carefully used to analyse the data to identify the factors that contribute to food insecurity and achieve the study objectives. The results revealed by the current study follow in the next three chapters.

CHAPTER 5

SOCIO-DEMOGRAPHIC PROFILE AND LIVELIHOODS OF PARTICIPANTS

5.1 Introduction

This section reports on the analysis and interpretation of the demographic data collected within six local municipalities (LMs) of uThungulu District Municipality in the province of Kwazulu-Natal (KZN). It is based on the critical perceptions of the participants about the institutional gaps that contribute to food insecurity such as the lack of financial support, access to markets, high rate of unemployment and basic services for rural populations in the study area. Since South Africa is food secure nationally but food insecure at household level due to socio-economic factors that limit access to food for a large number of people who live below the poverty line, knowledge of socio-demographic factors is essential for understanding the challenges of food security in order to find and implement measures that will improve the situation.

Poor socio-demographic factors in this study affirm the food insecurity conditions within affected households. Socio-demographic factors have an influence on what kind of approach needs to be implemented by the institutions to overcome food insecurity, particularly in rural areas, by looking at the socio-economic status of the communities. Data were analysed and presented in percentages, graphs, tables and charts for interpretation and discussion. This chapter discusses the following: socio-demographic profile; small, medium and micro-enterprises (SMMEs) as livelihoods of participants to generate income; farming activities and significance between variables.

5.2 Socio-demographic characteristics of participants

The total number of participants that participated in the study was 147 participants, 11 focus groups and 9 key informants within the uThungulu District Municipality. The participants were requested to complete the socio-demographic questionnaire and other open-ended questions based on agricultural activities, small businesses and institutional services. Demographic profile is important in the study as it justifies the status of food security by indicating how many people are unemployed, uneducated and the income of

the sample population. Participants were assisted by the fieldworkers who were research assistants and by the researcher, as presented in the table below.

Table 5.1: Socio-demographic characteristics of participants

VARIABLE	SUB-VARIABLE	FREQ.	%
Gender	Male	36	24.5
	Female	111	75.5
	Total	147	100
Age (years)	20 - 29	44	29.3
	30 - 39	42	28.9
	40 - 49	23	15.9
	50 - 59	13	8.8
	60 and above	25	17.1
	Total	147	100
Education level	No formal education	15	10.2
	Primary education	28	19.0
	Secondary education	71	48.3
	Tertiary education	33	22.4
	Total	147	100
Marital status	Single	92	62.6
	Married	37	25.2
	Divorced	4	2.7
	Widowed	14	9.5
	Total	147	100
Employment	Full-time farmer	5	3.4
	Part-time farmer	17	11.6
	Formally employed	19	12.9
	Pensioner	19	12.9
	Unemployed	51	34.7
	Self-employed	36	24.5
	Total	147	100
Income (R) per month	0 - 700	49	42.2
	701 - 1500	29	25.0
	1501 - 3000	19	16.4
	3001 - 5000	9	7.8
	$5001 - 10\ 000$	4	3.4
	10 001 and above	6	5.2
	Total	116	100

The current study found that the majority of participants were adults, and services related to enhancing food security were predominantly performed by them. Fukuda-Parr and

Taylor (2015) also point out how poor socio-demographic factors lead to the loss of the entitlements of individuals and households, and how this impacts on hunger and food insecurity.

The current study showed that more females (75.5%) participated as compared to the males. Females were more interested in the issues of food in/security and they played a role enhancing household food security. These results concur with the findings of uThungulu Integrated Development Plan (IDP) (2014/15), which stated that women make up 53% of the population because of migration patterns. The study results show that there are still gender barriers, a finding that corresponds to global trends: internationally, 43% of women are involved in agricultural labour, with percentages as high as 60% in African states (Qureshi *et al.*, 2015). Qureshi *et al.* (2015) suggest that women empowerment is a crucial strategy for addressing high levels of food insecurity.

Halakakatti, Sajjan, Gowda and Kamaraddi (2007) emphasise that women in India play an important role not only in agriculture but also in non-agricultural activities, and they also contribute to making decisions that will bring in food at household level. It was discovered that rural women perform a large part of the work relating to the maintenance of agricultural assets and agricultural production, while their work is not recognised in the market as an economic activity. Qureshi *et al.* (2013) hold that women should have equal access to land, livestock, inputs such as seed and agricultural equipment and financial support to improve household and global food security.

The present study noted that institutional support would contribute to food security and livelihood generation among rural people, particularly women. The findings of Sridhar, Rao, Rao and Patil (2012) support the empowerment of women because it creates an enabling environment for them to undertake a number of tasks either individually or in groups, so that they have access to and some control over social resources. Ncube and Kang'ethe (2015) report that women in Africa are the worst affected by the food crisis, and this indicates that they are still denied equal opportunities with men in various spheres of life, including government and the private sector.

Of the participants, 29% fell between the ages of 20-29 years, 28.6% between 30-39 years and 15.6% between 40-49 years, and women were more involved than men in working with various institutions in different programmes that could improve the situation of food security, job creation and other projects that would stimulate economic growth. Most of the government programmes targeted the mentioned age groups because they have maximum potential to stimulate the economy of the country. Fukuda-Parr and Taylor (2015) reveal that food insecurity is most pronounced amongst the elderly, women, the disabled and groups living in rural areas. Nine percent of the participants ranged between the ages of 50-59 years and just 17% were aged 60 years and older, indicating that the life expectancy of the population within the study area is relatively low. This indicates that those aged 20-49 years (Table 5.1) are more affected by and concerned about how the services from different institutions assist in terms of reducing food insecurity, particularly at the household level but also in the community at large.

The results presented in Table 5.1 indicate that 48.3% of participants had secondary education and 22.4% went on to tertiary institutions such as universities and technical vocational education and training colleges, while 19% studied until primary level and 10.2% had no formal education at all. This indicates that the level of education in the study area is not low, although most participants did not proceed to tertiary level. Sridhar, Rao, Rao and Patil (2012) emphasise that in order to empower rural populations in developing countries, vocational training programmes are the most important tools to address the issues of unemployed women and youth and improve access to resources and the standard of living. Most of the participants (62.6%) were single, 2.7% were divorced and 9.5% had lost their partners. These results contradict the perception that in African rural communities' marriage is an important source of social status, particularly for women because in this way they earn respect and dignity in the community (Wolfe *et al.*, 1996).

The employment status of the participants is a vital factor, because it determines the purchasing power and access to food as well as indicating the quality of life in the community. Of the participants, 35% were reportedly unemployed and 24.5% were self-

employed; 12.9% were receiving social grants from the government and other 12.9% were formally employed by different organisations. Gollin (2008) discovered that many developing countries are dominated by people who are self-employed. Key informant (see Chapter 6) alluded to the fact that unemployment was particularly acute among young people in poor communities, where the unemployment rate often exceeds 50%, and there was little sustainability in the economy. He further stated that the South African education system does not prepare young people for the world of work and needs to make urgent interventions to improve this situation.

The findings of this study show that the percentage of people diverting to self-employment or entrepreneurship to generate income for uplifting their standard of living is low. The findings by Mohapatra, Rozelle and Goodhue (2007) are in line with this study's findings when they show that in most developing countries, particularly in rural areas, self-employment is still low because it is not well understood as a means of increasing rural income. Key informants (Chapter 6) emphasised that many people of uThungulu do not even consider self-employment as an option, but usually rely solely on getting jobs at established businesses. The current study shows that some people usually practise agricultural activities: 11.6% of participants were part-time farmers while 3.4% were full-time farmers. The study results confirmed the findings of Binswanger (2013) that there is a great need for other employment opportunities in the agricultural economy, where small farms are tended by part-time farmers. The study results support the view of Qureshi *et al.* (2015) that governments could support household resilience by paying more attention to agricultural and non-agricultural sector development that generates more employment opportunities.

This state of affairs suggests that the unemployment rate is high in rural areas due to a lack of skills that have negatively affected the employment conditions, and this situation shows that neither public nor private institutions are able to create job opportunities. The findings of uThungulu IDP (2014/15) state that half the people (50%) who dwell in rural areas are unemployed because of scarce skills, and industries located in the study area were forced to source labour outside of the region, to the detriment of local workers. It further indicated

that the agricultural sector in uThungulu District has contributed to the provincial economy by 4.7%, and it was noted with concern that small-scale farmers were struggling to gain access to the market due to strong competition with commercial farmers. Moyo (2007) notes that since South Africa has a high unemployment rate, food security at household level for the rural populace may be obtained through agricultural production.

Even though people are employed, this does not mean that their income is adequate. It is crucial to look at their earnings per month since this determines their purchasing power. Of the participants, 42% reported that their income was R700 or less per month, while 25% – farm workers and domestic workers – were earning between R701 and R1 500 per month. They clearly indicated that although they are employed, their jobs are not protected due to lack of representation by different institutions like trade unions and other government institutions such as the Department of Labour. Of the participants, 16% reported that their income per month ranged between R1 501 and R3 000, and only 7.8% earned between R3 001 and R5 000 per month.

The study's findings are in line with those of Gollin, Parente and Rogerson (2007) who argue that the majority of poor countries are in a situation of high food drain because of their low-income levels, a large proportion of which is spent on food. The current study further indicated that 3.4% of participants had an income ranging between R5 001 and R10 000 and 5.2% of R10 001 and above per month. This indicates that the majority of the population has low purchasing power which makes them unable to access nutritious food, and shows up the lack of institutional services that could improve their income. The result is that the rural poor in low-income countries are even more vulnerable to food insecurity.

The study's findings on income generated concur with those of Loopstra and Tarasuk (2013), who indicate that factors that make households food insecure in Toronto are low household income and lack of entitlement to home and land ownership. The participants in their study clearly stated that due to their low-income status they were unable to make savings or investments. Loopstra and Tarasuk's (2013) findings suggest that the interventions of different institutions aimed at increasing financial security of food-

insecure households would improve access to food. As a result of the poor socio-economic status of the majority of the people, the South African government has decided to encourage communities to establish co-operatives that will target improving income generation and productivity and reduce food insecurity, particularly at the household level.

5.3 Livelihood activities of participants

The participants in this study are engaged in livelihoods that attempt to address food insecurity through income generation. The table below portrays various livelihood activities performed by participants.

Table 5.2 Description of different livelihood by participants

Variable	Response	Frequency	%
Spaza shops	Yes	21	14.3
	No	126	85.7
	Total	147	100
Hawking	Yes	15	10.2
	No	132	89.9
	Total	147	100
Construction	Yes	26	17.7
	No	121	82.3
	Total	147	100
Catering	Yes	28	19.0
-	No	119	81.0
	Total	147	100
Renting out	Yes	24	16.3
	No	123	83.7
	Total	147	100
Selling firewood	Yes	13	8.8
	No	134	91.2
	Total	147	100
Carpentry	Yes	15	10.2
• •	No	132	89.8
	Total	147	100
Herbalist	Yes	6	4.1
	No	141	95.9
	Total	147	100

Spaza shop is an informal convenience shop business in South Africa usually operated from home for the purpose of supplementing household incomes.

The results indicated that the few of participants were actively involved in any type of business. Table 5.2 shows that high percentages of participants answered 'No' to most

questions in this area, meaning that they were not oriented towards entrepreneurial livelihoods. Very few of them had businesses. Pereira *et al.* (2014) note that in South Africa *spaza* shops have a positive influence on rural food security and strengthen community-level food security. Of the participants, 19% owned a catering company where they rendered their services to the local communities to generate income, while 17.7% were involved in construction and 16.3% rented out their goods, such as tents, chairs, and musical instruments.

Nine percent of participants used forests as a source of income by selling firewood, since these rural areas are well-forested. It is noted in Shackleton, Shackleton, Buiten and Bird (2007) that the majority of forests in South Africa, by their very nature, are located within rural areas which are relatively underdeveloped in terms of infrastructure, government services, markets and jobs. The study's findings concur with those of Ligthelm (2011) and Fakoti (2013) that in South Africa the failure rate of SMMEs is very high, and the majority fail within two years. Participants pointed out that it is challenging to start a business in a rural area because there is no support from governmental institutions and local people lack confidence in local businesses or branding. The study's findings indicate that there are few people who are involved in small businesses, and this is an indication of a lack of confidence in local brands. Stevenson and Lundstrom (2001) stress that people are discouraged due to the fact that rural businesses receive very little attention as well as a lack of support from financial institutions due to low willingness to take risks. This indicates that rural areas are still faced with numerous challenges that stunt entrepreneurial growth.

Du Toit *et al.* (2009) state that government has established a variety of policies to stimulate the growth of SMMEs and entrepreneurship as a strategy to address food insecurity and other poverty-related issues. These policies include Black Economic Empowerment (BEE), Broad-Based Black Economic Empowerment (BBBEE), the Accelerated and Shared Growth Initiative for South Africa (ASGISA), Growth, Employment and Redistribution (GEAR, the Reconstruction and Development Programme (RDP), and the National Development Plan (NDP). These indicate the importance of SMMEs which are viewed as

skills developers, employment generators, stimulators of economic growth and alleviators of food insecurity, as alluded to by Antoni and Umejesi (2014). Agriculture is used by the rural populace as a common livelihood to alleviate food insecurity and improve the rural economy.

5.4 Farming activities performed by participants

The findings indicate that participants rely on farming activities, such as crop and livestock farming, as a strategy to alleviate food insecurity. Poulsen, McNab, Clayton and Neff (2015) note that in South Africa farming activities may provide a source of food and income for households and assist in reducing food insecurity situations. Figure 5.1 below depicts what percentages of the study population were involved in agricultural activities.

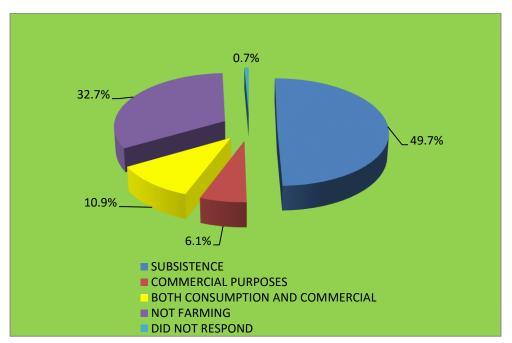


Figure 5.1 Crop farming in the uThungulu District

The findings show that 49.7% of participants practised subsistence crop farming, which comprised community and home gardens for subsistence purposes, while 6.1% were commercial farmers and 10.9% practised both subsistence and commercial farming. These findings support those of Baiphethi and Jackobs (2009) that the rural populace produces most of the food for consumption purposes through community and home gardens: however, these gardens are present in communities with higher than average household

incomes. Of the participants, 32.7% were not involved in farming activities, while 0.7% did not respond. This indicates that the majority of participants did not see agriculture as a means of improving their quality of life and as a source of income. Those who were practising both subsistence and commercial farming indicated that their gardens were open to the public to promote and secure the right to healthy and culturally appropriate food, and ensured that local farmers were in full control of all aspects of food production.

The participants that were practising commercial farming indicated that they were struggling to access markets because they were unable to meet the demands of the market and their produce did not meet required standards. Some of the participants were discouraged from accessing the market due to the fact that the price was determined by the market, and resulted in them failing to generate any income. The participants appreciated subsistence farming as a coping mechanism to alleviate food insecurity at the household level, since the majority stated that they had low purchasing power because of their poor socio-economic status. However, the participants reported that one of their major challenges was inadequate assistance from governmental institutions to promote and implement programmes that reduce food insecurity through subsistence farming. This is in line with the assertions by Devereux (2009) and Warshawsky (2015) that rural communities use different livelihoods and small-scale farming can provide a reliable source of income and food access for many poor people.

Of the participants, 58% revealed that they received free seeds from the Department of Agriculture and Rural Development (DARD) but the seeds were not up to standard, and growing them led to lower production levels. Of the participants, 42% pointed out that they did not receive a seeds grant from any governmental institutions, because they were not politically affiliated and therefore were deprived of such services. The findings of Pereira *et al.* (2014) show that the SADC regions are faced with the deterioration of subsistence agriculture that led to an increase in intervention by both public and private institutions to develop food security strategies. Some participants indicated that they were involved in livestock farming, as depicted in Figure 5.2 overlapped.

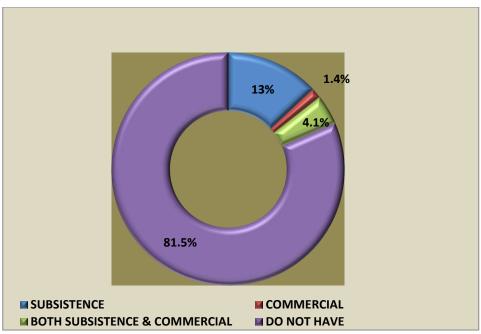


Figure 5.2 The status of livestock farming in uThungulu District

The study revealed that 81.5% of participants were not involved in livestock farming because of inadequate grazing land; the issue of livestock theft was also very high in the study area. The participants reported that the South African Police Services (SAPS) were unable to assist the community to prevent and control theft of livestock, especially cattle and goats. They were discouraged by these challenges from keeping livestock, and it was also difficult for them to maintain the animals' medication to avoid illness and death. The participants also pointed out that there was lack of support from DAFF in terms of provision of the necessary services, including vaccines and other relevant medication, as well as some training on how to maintain the health of the livestock. The participants further voiced the fact that due to serious drought and scarcity of water, livestock were dying at an alarming rate.

It was reported that 13% of participants kept livestock for subsistence purposes, and 4.1% indicated that they practised both subsistence and commercial farming, particularly at the beginning of the year when they wanted an income for school fees for their children. The participants also mentioned that regardless of the challenges of livestock they were a traditional asset and a family's inheritance: however, due to severe drought they had no choice but to sell them at a low price. The livestock farmers were advised by the

government to cut herd size as high temperatures sucked the moisture from pastures and left them without grazing.

It came out clearly that only 1.4% of participants were local commercial farmers and they sold their livestock to local communities at informal markets and at the bus and taxi ranks in the cities or town to generate income. They indicated that they did not have adequate resources, including financial input and support from various governmental institutions, to maintain livestock. Key informants (Chapter 6) stated that smallholder farmers had an important role to play in ensuring household food security and the overall growth of the agricultural sector in UThungulu District. This study's findings indicate that fewer households own livestock. Poulsen *et al.* (2015) indicate that women tend to participate more in crop and poultry production, while men are involved in livestock farming. Dovie, Shackleton and Witkowski (2006) point out that the majority of rural households in communal areas are dependent on resources from the local woodlands and livestock production. Masuku *et al.* (2014) found that rural areas had poor infrastructure, including the service categories shown in Table 5.3 below.

Table 5.3: Available services in the study area

Variable	Response	Freq.	%
Water supply	Yes	119	81
	No	28	19
	Total	147	100
T1 (' ')	Yes	134	91.2
Electricity	No	13	8.8
	Total	147	100
Public transport Road infrastructure	Yes	127	86.4
	No	20	13.6
	Total	147	100
	Yes	123	83.7
	No	24	16.3
	Total	147	100
Physical market	Yes	75	51
	No	72	49
	Total	147	100

Table 5.3 presents the available services in the study area and reveals that the majority of participants (81%) indicated that water was supplied in their area. However, participants stated that water was supplied only once a week, and they had to fetch it at community taps as there were no taps in their households. The participants also indicated that the majority of households (91%) had access to electricity and 86% of people had access to public transport.

These study findings are supported by Menon and Dixit (2013), who states that rural women and men must have equal access to land, water, credit and other important services that improve quality of life. Eighty-four percent of participants stated that they did have road infrastructure, while 16% indicated that roads needed to be built and maintained. Almost half of the participants had access to physical markets. Qureshi *et al.* (2015) point out that in many countries public investment in physical infrastructure, including irrigation facilities, has stimulated and reduced rural food insecurity, and that rural subsidised electrification has improved the availability of irrigated water. Inadequate physical infrastructure gives limited choices of shopping and access to food aid influences the shopping patterns of the participants. Figure 5.3 depicts where the participants purchased their food and their access to food aid.

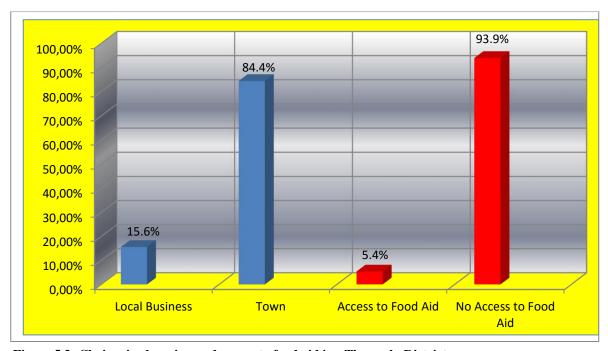


Figure 5.3: Choices in shopping and access to food aid in uThungulu District

Eighty-four percent of participants went shopping in town because of the variety of foodstuffs available, and they believed that it was cheaper than at the rural *spaza* or general dealers. They also insisted that rural shops were not up to standard because sometimes they sold spoiled food or food beyond the expiry date. They further stated that the infrastructure in these shops was extremely poor, including buildings, furniture, lack of electronic equipment and lack of variety of foodstuffs. Sixteen percent maintained that they used local shops because they were convenient. They further indicated that in rural shops they were allowed to buy food on credit and pay at the end of the month, and transport to town was expensive. Paddison and Calderwood's (2007) findings were in line with those from this study. They state that rural shops are disadvantaged because of geographical isolation and unfavourable cost structures, and negative stereotyping of rural shops is unfair since marginalised enterprises were unfavourably contrasted with more innovative forms.

Five percent of the participants reported that they received food aid from governmental institutions, although it was periodical (for example, when there were election campaigns, in the event of disasters and at Christmas) in the form of food parcels to address temporary food insecurity. Dercon and Krishnan (2005) assert that in Zambia food aid programmes are first to fill the food gap experienced by communities that are unable to produce or commercially import enough food to meet local demand, and governments determine how much aid should be received by vulnerable communities.

This is very different to the situation in Lesotho, where it is very difficult to deal with food security problems and therefore food aid in the form of free gifts, grants or low credit sales is an important mechanism to prevent mass hunger (Dercon and Krishnan, 2005). Furthermore, these authors argue that food aid is important to ensure adequate food security in the short and long term. Food aid continues to ensure access to nutritious food for vulnerable groups. While Ninno, Dorosh and Subbarao (2007) describe the purpose of food aid as a strategy for short-term emergency relief, food aid helps address medium-term food deficits. Governments in developing countries have adopted various strategies, including efforts to increase production as well as the public distribution of food. This

indicates that in the absence of food aid, nutrition and consumption levels are likely to drop significantly, increasing food insecurity. In order to determine the relationship between socio-demographic factors and livelihoods, a correlation analysis was performed. This was used to determine relationships between socio-demographic status and livelihoods.

5.5 Significant relationships between socio-demographic status and livelihoods

This section uses correlational analysis to evaluate statistically the relationship between two variables. In correlation analysis, a sample correlation coefficient is estimated. The sample correlation coefficient is denoted by r and ranges between +1 and -1, and quantifies the direction and strength of a linear association between the two variables. In this study, correlations were drawn between gender, age, marital status, education, employment, income, food aid, land access, *spaza* shops, renting out, crop farming, home gardens, physical markets, selling of firewood, financial assistance, seed supply, crop and livestock farming and catering. Only the significant correlations are reported in Tables 5.4 and 5.5 below.

Table 5.4: Significant correlations at p < 0.01

Variable	Correlation r	Significance, p<0.01
Age and marital status	0.605	0.000
Age and education	-0.549	0.000
Marital status and education	-0.239	0.004
Marital status and land access	-0.252	0.002
Education and income	0.298	0.001
Food aid and land access	0.236	0.004
Land access and crop farming	0.423	0.000
Land access and livestock	0.236	0.001

In Table 5.4 a strong positive correlation of 0.605 is observed between age and marital status; this is shown by high percentages of people between the ages of 20-29 years and 30-39 years, and a high percentage of unmarried people (62.6%), but shows no significance

when observed at the 10% level of significance. Age and education show a negative correlation and no significance when observed at the 10% level; this is because of low percentages at a tertiary level compared to secondary level. Marital status and education show a negative correlation and 4% significance when observed at the 10% level of significance, and also marital status and land access show a negative correlation and a 2% level of significance when observed at 10%. This is caused by the high percentage of unmarried people compared to married ones and low levels of tertiary education compared to secondary education. This further indicates that the marital status of the people affects their educational level as well as access to land.

Education and income show a weak positive correlation of 0.298 and 1% significance when observed at the 10% level. This is caused by the high percentage of people who have secondary education followed by primary education, and a high percentage of those earning R700-R1500 per month: the study indicates that educated people have a relatively high income. This is supported by Qureshi *et al.* (2015), who state that education is a vital factor in the food security status of households, provides greater employment opportunities and increases household income. Food aid and land access also have a weak but positive correlation, and 4% significance when observed at the 10% level of significance. This is caused by the high percentage of people who have no access to land and a very low percentage of people receiving food aid: this is expected because people who receive food aid will not have access to land, and those who have land access will not receive food aid. A study by Njuki and Sanginga (2013) confirms that in Kenya, Tanzania and Mozambique, the land is the most important asset to generate income to reduce food insecurities, vulnerability and risk at the household level.

Land access and crop farming are nearly 50% related with a 0.423 positive correlation, but show no significance when observed at the 10% level of significance. Land access enables people to practise crop and livestock farming, but in this study, more people have no access to land. However, land and farming have a positive relationship, which is why at 10% it is non-observable. Land access and livestock have a positive relationship and a 1% level of significance when observed at the 10% level. Many people have no access to land: in this

study, fewer than 50% had access to land, which indicates 1% when observed at 10% level of significance.

Table 5.5: Correlations at p < 0.05

Variable	Correlation r	Significance at <i>p</i> <0.05
Gender and <i>spaza</i> shops	0.174	0.035
Gender and renting out	0.176	0.033
Age and land access	-0.168	0.043
Marital status and income	0.192	0.039
Marital status and food aid	-0.167	0.044
Education and food aid	0.188	0.022
Employment and income	-0.231	0.013

In Table 5.5 gender and *spaza* shops show a positive but weak correlation and a 3.5% significance when observed at the 5% level of significance; this is further indicated when comparing gender and renting out, which also shows a positive but weak correlation (3.3% significance when observed at 5%). This is caused by the fact that more women than men were involved in the study, most of whom (14.3%) were not involved in *spaza*, while most were involved in renting out situations. Marital status and income also have a positive but weak correlation (and approximately 4% significance when observed at 5%); most of the participants were single (63%) and a high frequency of them earned R700-R1500 a month, which was the lowest income, showing that marital status has an effect on household income.

Education and food aid show a positive but weak correlation (with 2.2% significance when observed at the 5% level of significance). This seems strange because many participants are educated, which means better jobs, but the level of unemployment was very high while only 5.4% received food aid. Employment and income have a negative correlation and a low significance (1.3% when observed at the 5% level), caused by a low level of

employment with most participants earning R700-R1500 per month (the lowest level). Age and land access also show a negative correlation or relationship (4.3% significance when observed at the 5% level). This is because many participants fell into the 20-39 years' age range, and more than 50% had no access to land. Marital status and income have a weak positive relationship (with nearly 4% significance) caused by the high percentage of unmarried and low-earning participants.

5.6 Conclusion

The majority of participants were women, had a poor socio-economic status and as a result were more vulnerable to food insecurity: they were also more involved in services related to enhancing production of food. Most rural women are involved in agricultural activities, including the maintenance of agricultural equipment and agricultural production; however, their work is not recognised as part of economic activity. The results of this study confirmed that the majority of the rural populace had only secondary education, which limits their attractiveness to potential markets as well as giving them low purchasing power. The study discovered that a high rate of unemployment existed in this rural area due to the fact that public and private institutions did not provide job opportunities. Those who were employed were low-income earners without permanent jobs.

The study's results demonstrate that this sample of rural people was lacking in entrepreneurial skills, and their businesses were unable to compete in the market because they had numerous challenges to contend with. These included being unable to meet the demands of the market, the failure of their products to meet the required market standards and inadequate support from various institutions. Since agriculture is recognised as an important vehicle (for rural for enhancing the supply of food), the majority of rural people produced crops for consumption purposes. In this study, very few participants practised livestock farming as a source of income. In the face of these challenges, the effectiveness of the role of governmental institutions was unsatisfactory.

The next chapter further analyses the role of governmental institutions in alleviating food insecurity.

CHAPTER 6

PERCEPTIONS OF KEY INFORMANTS ON RENDERING OF SERVICES

6.1 Introduction

The previous chapter detailed responses from community members from all six local municipalities LMs within UThungulu District Municipality, where the focus was on their socio-economic status and participants' activities as a means of enhancing food security. This chapter focuses on responses from key informants (government officials) regarding their perceptions of the alleviation of food insecurity through the implementation of government projects and programmes.

The current study found different views among key informants on support services and challenges that were faced by governmental institutions, such as limited resources, lack of training and capacity building, and other factors that negatively affect service delivery. This chapter further describes how governmental institutions implement their strategies to alleviate food insecurity, particularly in rural areas or at the household level. Thoenig (2011) holds that governmental institutions are the champions in the promotion of values and interests embedded in the local communities in which they operate. In analysing services that were rendered by governmental institutions, this study gives more attention to the programmes that aim to alleviate food insecurity and that are associated with community development projects that benefit the entire community.

6.2 Services rendered by different governmental institutions

The key informants believed that governmental institutions were responsible for making and implementing decisions through responding to the needs of communities. Further, they need to be accountable and transparent when they provide services to the people. The main role of governmental institutions is to tackle issues that negatively affect communities, particularly social, economic, environmental and political issues, by making the effort to create policy and programmes that support the improvement of their standard of living. However, it is noted with concern in Pandolfelli *et al.* (2014) that structural adjustment has weakened the ability of governments to deal with economic,

social and environmental challenges caused by the inherently unequal economic relationships between rich and poor. Some focus groups revealed that their concerns as a community were not taken seriously by ward councillors, who kept making empty promises. Furthermore, the majority of focus groups stated that lack of support and mentorship was perpetuated by government officials and their institutions by not making regular visits to communities to check on the progress of community development projects. This goes against Chapter 2, Section 27.1b of the South African Constitution which states that government institutions are responsible for ensuring that all citizens have the right to access to adequate food and water, as well as other basic needs.

The South African Constitution also points out that it is incumbent upon those governmental institutions to identify the needs of the people in order to ensure social and economic development through encouraging them to participate in all community development projects and programmes. Govender and Reddy (2014) endorse this by indicating that the main function of government in South Africa is to provide a democratic and accountable governing body to deliver services in a sustainable manner and to promote social and economic development by engaging the communities involved.

Key informants revealed that the role government is to create an enabling environment where they link potential investors with local small-scale farmers within communities. Furthermore, the key informants reported that the aim of the Department of Rural Development (DRD) was to use mentors to replicate community and home gardens to assure food security in rural areas. In addition, there was a programme called Rural Enterprise and Industrial Development that contributed two million rands to revive irrigation scheme projects in Nkandla LM. Key informants illustrated the role of the local institutions as follows:

"If a chicken lays an egg, we should be able to prepare a chicken nest."

This means that the main role of public institutions is to create an enabling environment by making resources available and accessible to communities who are in need of them.

However, Battersby (2011) indicates that the South African government struggles to understand the value of the informal sector and fails to understand how it operates. She further states that food security projects were designed under poverty alleviation programmes focused on ensuring that every household must have food and be able to sustain themselves. One key informant argued as follows:

"I remember when I was working for Independent Development Trust (IDT), we had a programme of food security which was saying we should mobilise resources and start garden projects, and from the garden project we graduate them to form co-operatives. This approach eliminated so many groups' dynamics that led to dysfunctional of co-operatives."

6.2.1 Robot model on community projects

This study's findings concur with those of Alemu (2015) that rural communities in South Africa have persistent challenges including poor infrastructure, limited access to new technologies, credit, and transportation facilities for inputs and outputs. A key informant explained that their institutions used the 'robot' model to assist co-operatives or community projects: if the project was referred to as 'red', that meant it had many challenges (including infrastructure, water, roads, etc., which prevented the project from developing, and communities were advised not to proceed.

If the project was 'orange', its challenges were identified, focusing on key areas which comprised the institutional arrangements, where they checked if the project had community members who were committed, and legal status in that the project was registered with the Department of Trade and Industry (DTI). The key informants pointed out that many community projects had a common problem of mismanagement of funds, due to the fact that they were not trained in financial management: as a result, they distributed their profits without saving money to sustain the project. This pressing problem can be aligned with Govender and Reddy's study (2014), which found that it is the duty of governmental institutions and LMs to ensure social and economic empowerment of communities by providing necessary skills.

Key informants had a common understanding that if a project was 'green', it meant it was able to sustain itself, and it was important that it received some assistance to link it with the markets and relevant stakeholders that would help to sustain it. This model was mostly used in food security projects where communities and co-operatives were encouraged to produce more to feed themselves and for commercial purposes through creating easy access to markets for small producers as well as to upgrade what they produced. For example, *Grade A* produce must be linked with the formal market; *Grade B* could be taken to the informal market and *Grade C* could be used for own consumption. The important role of their institutions was to link communities with various stakeholders who were custodians of food security programmes such as the Department of Agriculture and Rural Development (DARD) and the DTI, concerned with the registration of community projects and small businesses as well as providing guidance on how to access markets.

Most of the communities formed co-operatives because they thought that there were huge grants from the government to support co-operatives, but the majority of them were unsuccessful. The study's findings indicate that communities had limited understanding of how to participate in the formal economy or market. Hamann *et al.* (2011) note that the South African government established BEE as a strategy to create an enabling environment for previously disadvantaged rural communities and the black majority to improve their participation in the formal economy and eliminate food security barriers, but this has not had the desired effect.

6.2.2 Participation of youth in food security interventions

Local young people were encouraged to come together to form co-operatives, not necessarily only agricultural ones, but also groups involved in non-agricultural activities. Key informants revealed that their institution was established by an Act of Parliament, Act No. 54 of 2008, to tackle challenges that the nation's youth are faced with, particularly in rural areas, including joblessness, poor health and food insecurity. Furthermore, governmental institutions, the private sector and civil society need to prioritise youth development and contribute to solving challenges faced by the youth.

Sekhampu (2013) notes that the South African government has committed to prioritising public spending to improve food security, particularly for the previously disadvantaged. Moreover, key informants specified that the youth were encouraged to become entrepreneurs with the help of support services, such as assistance with business plans, funding of registered businesses, and business training. They acknowledged that youth development is very slow because of an insufficient budget and inadequate skilled staff.

Government officials pointed out that their mandate was to equip local communities to start their own businesses through utilising natural local resources such as land and local talent in order to generate skills and income. Food security interventions and entrepreneurship were called 'mayoral projects', which means they were funded through the Office of the Mayor, and all age groups were eligible for assistance but the youth were prioritised. Furthermore, the local branch of the Department of Rural Development (DRD) had funding available to assist them to improve their organisation in terms of contributing to the local economy and food security. The study findings attest to the initiative taken by the government to mobilise local leaders, particularly traditional leaders and local government, and provide land to maximise food production at ward level (NDA, 2011).

6.2.3 Entrepreneurship as a food security intervention

Some of the key informants specifically alluded to the fact that their mandate as the Department of Economic Development, Tourism and Environmental Affairs (DEDTEA) was to grow the economy of the province, focusing on the uThungulu District, through establishing co-operatives and SMMEs to eradicate unemployment and food insecurity. However, individual projects were not supported because the mandate of government was to assist people in groups in the form of co-operatives, and SMMEs are businesses that generate profit to help address unemployment and food insecurity. However, Peters (2009) argues that South African SMMEs receive little support from government institutions located in rural areas, and the LMs are unable to stimulate entrepreneurship in these areas.

Furthermore, services that were rendered by the DEDTEA were to mobilise and form institutions called co-operatives and provide them with relevant training. The main aim of establishing co-operatives was to deal with the issues of alleviating food insecurity by working collectively and being able to compete in the market. During the month of June (youth month), they conducted campaigns to mobilise the youth to participate in food security and job-creating programmes. In August (women's month), women were encouraged to participate in any project and programme to uplift their standard of living and counteract their vulnerability to food insecurity. Breslin, Delius and Madrid (1997) noted that the South African government has initiated development strategies to stimulate and support vulnerable households through programmes that enhance food security to assist marginalised communities. However, some key informants indicated that their major problem was that community members disregarded government functions and initiatives unless told that they would receive food parcels or refreshments.

6.2.4 Municipalities on food insecurity reduction

The main purpose of the LM was to examine the economic environment by concentrating on positive and negative factors and coming up with strategies that would sustain the local economy. Therefore, key informants stated that the mandate was to address issues that affect rural areas directly, and in 2014 the Comprehensive Rural Development Programme was established as a strategy to assist the poorest municipalities. The overall poorest municipalities in the country numbered 27, with 10 of them in KZN. Nkandla LM was found to be one of the poorest, under the UThungulu District Municipality. The findings of the study confirm Wibowo and Alfen's (2015) findings that governments globally have limited resources, which makes it difficult for them to keep pace with the demands of communities.

Officials from districts specified that support services were provided to all LMs which fell into the UThungulu District, except UMhlathuze LM because it generated more revenue owing to the dominance of local and international industries. The other five LMs were classified as rural-based municipalities and small municipalities which had no

income generation and depended on government grants for survival. Food insecurity issues were effectively addressed by forming partnerships with Richards Bay Minerals in introducing services, such as mentorship programmes and training aimed at capacity building. It was indicated that various stakeholders, including traditional leaders (*Amakhosi*) and ward councillors, were actively involved in assisting local communities to benefit from such initiatives. Key informants strongly indicated that LMs were struggling to perform their services due to limited resources that served as an obstacle to the improvement of the lives of local people through enhancement of food security. However, Koma (2014) points out that Section 153 of the 1996 Constitution states that municipalities must structure and manage their administration, budgeting and planning process to give priority to the basic needs of the community.

Key informants indicated that municipalities established community gardens as the best strategy to help poor rural people who were food insecure, by improving access to nutritious food and enabling them to start small businesses selling fresh produce. Training was offered to agricultural co-operatives and emerging farmers by DARD and LMs on how to sustain their gardens and commercialise them in order to improve their income. Crossan, Cumbers, McMaster and Shaw (2016) raise the important point that community gardens are recognised as social action since they promote equality of participation in place and community making: Furthermore, they are seen as grassroots enterprises conducting private activity on public land. Some key informants who were extension officers observed that beneficiaries were linked with commercial farmers to learn how to grow quality produce and package it. Another important fact was that the district commercial farmers were encouraged to purchase from emerging or rural farmers to support them in generating income from their produce; however, prices were determined by the commercial farmers' market.

Key informants assert that these projects were not imposed upon local communities but were initiated by them. They had requested support from different public institutions that rendered services which reflected their needs. The mandate of the programme was also to develop rural enterprises by formalising the informal entities and trying to involve them

in formal business to maximise profit. This would be done by linking them with other businesses dealing with the same commodities. The key informant further stated that they profiled the community to understand their needs and suggest programmes that would reflect their needs. The main stakeholder in food security programmes was the Department of Rural Development (DRD), who came up with the slogan: "One home, one garden". This indicates the Government's efforts to protect people from being food insecure, which, as Vistro (2014) points out, is its responsibility. Key informants indicated that due to the existence of gardens, there is partial access to food, and healthy food consumption has improved.

6.2.5 Training and capacity building

Some of the key informants indicated that their institutions were offering short courses of a maximum of two weeks' duration at National Qualifications Frameworks (NQF) level 2, to equip those who lack business skills and up-skill those who are not oriented towards entrepreneurship. In addition, a partnership was formed with the Small Enterprise Development Agency (SEDA) to conduct pre-finance workshops based on how to compile an attractive business plan. Training was conducted according to the needs of trainees (community organisations such as co-operatives and SMMEs). Most of the participants were interested in catering, poultry and crop farming. Targeted groups were trained to sustain their projects by avoiding a waste of resources, and they were provided with financial education in order to sustain projects through making a profit. These findings are in line with the White Paper on Local Government (1998) that states that local institutions such as LMs must ensure that community organisations receive full support in the form of technical skills and training in order to meet their needs and stimulate the local economy.

6.2.5.1 Entrepreneurship training

The key informants indicated that institution focus was to create a community profile by conducting a needs analysis of communities. The focal point of the training was to assist potential entrepreneurs to start businesses that responded to the needs of the markets. Furthermore, training was specifically focused on financial management because most of the emerging entrepreneurs were unable to use their business finances to sustain their enterprise. It was important that the training put more emphasis on business diversification because almost everyone in the community was doing crop farming. This situation gives a clear indication that governmental institutions need to invest more in training that will equip the rural populace with business skills and instil a culture of entrepreneurship. The National Development Agency (NDA) asserts that training and support in food interventions is one of the services rendered to co-operatives and SMMEs to maximise their products and services.

Some of the focus groups insisted that they were hardly visited by officials from governmental institutions to provide them with training, which led to their organisations being unstable and facing problems, largely because of the lack of mentorship from the public sector. Furthermore, very few selected community members were trained, leading to a backlog of skills within the community and its potential entrepreneurs, and hindering the culture of entrepreneurship. This situation points to the lack of governmental mentorship programmes that would foster entrepreneurship as a strategy to eradicate rural poverty and food insecurity. The results of this study are similar to those of Crow, Conger and Wilson (2011) who found that rural areas in South Africa often faced severe shortages of government personnel to provide mentorship programmes. Key informants also expressed great concern that relevant training programmes for government employees – particularly those who work directly with communities – were inadequate, because some of them did not have entrepreneurship qualifications and were not effective as mentors.

6.2.5.2 Agricultural skills training

Key informants articulated that the focus? was to train unemployed youth and young emerging entrepreneurs, and they were identified to participate in agricultural paraprofessional departmental programmes. Some of these programmes were designed to train 20 unemployed youth per district municipality in crop farming and to be mentors of others to start their own crop farming in their respective areas. In addition, one focus group mentioned that they were assigned a mentor who was to provide them with technical skills to sustain their produce.

Key informants pointed out that the DARD trained smallholders and co-operatives on cultivating home and community gardens as a strategy to generate income, and during the training trainees were provided with materials such as fertilisers, seeds, farming equipment and insecticides. Training was meant to enable people to develop different methods to maximise produce and enhance food security at household level. The NDA (2012) emphasised that community gardens were recognised as a strategy to improve food security, and therefore members of community gardens need support from the agricultural sector. Key informants reported that they were tasked to co-ordinate agricultural activities but some officials had limited knowledge and skills in relation to agricultural activities and as a result, this project was largely unsuccessful due to their lack of agricultural expertise. This situation thus perpetuated the lack of support services from governmental institutions and food insecurity in communities.

Evidence for this situation was that when officials were tasked to guide smallholders and co-operatives as well as community members on how to run and sustain garden projects, the process failed because officials did not have the requisite expertise in what type soil type, fertilisers and seasons were suitable for cultivating different types of vegetables. It is noted in Salehin (2015) that institutions were made to support and strengthen the capacity of communities and their organisations to improve efficiency towards achieving a good image for public enterprises. However, the study's findings found that there were limited support services and no effective approach to promote the Local Economic

Development to enhance food security and uplift the standard of living in these rural areas.

6.3 Communication strategies with communities in food security projects

Key informants reported that communication took place through hosting workshops and meeting with ward committees, since LMs work with different community structures. The distribution of pamphlets was used as a strategy to communicate with local people to indicate services that were available and accessible to all community members. However, it was difficult to have consistent and progressive communication with communities because some governmental institutions had insufficient data management systems, including lack of information storage. This resulted in poor communication between various stakeholders. Tanner, Kim, Friedman, Foster and Bergeron (2015) show that a lack of sufficient infrastructure constitutes a major barrier to communication, leading to poor access to services. Furthermore, the lower socio-economic status of the rural poor makes it more difficult for them to access information from various institutions.

6.3.1 Methods of communicating with communities

Key informants stated that it was very challenging to communicate with rural communities through newspapers because they did not have money to buy them and seldom read them. The common strategy of communicating with communities was working with ward councillors and ward committees for disseminating information to beneficiaries. However, some key informants noted with concern the poor cooperation between ward councillors and LM officials because of political differences amongst office bearers and government officials. This situation has delayed the provision of services to communities, indicating that communication systems in government were not monitored for the benefit of communities.

Mathekga and Buccus (2006) maintain that in South Africa ward committees were elected to ensure community participation in local government processes but this outcome has not materialised. Many communities have adopted a "wait and see" attitude, where the government was expected to simply provide basic services without the

communities' inputs. In addition, most government policies and programmes were written in English which makes it difficult for the isiZulu-speaking rural populace to understand them. Some key informants stated that meetings were convened as a means of communicating with different stakeholders, such as *Amakhosi*, ward councillors, the ward committee and community members, about community development projects and programmes. In addition, local media such as community radio stations were utilised to disseminate information pertaining to rural development projects within UThungulu District.

Key informants indicated that the Nkandla area in particular was the under 18 traditional leaders (*Amakhosi*), and all community projects were introduced to them as a form of protocol that needed to be followed before the ward committee were given the go-ahead to implement them. Furthermore, municipality officials visited the communities every two months to track the progress of community projects and sustain effective communication. Programmes such as War Rooms, the *Sukuma Sakhe* Programme and Ward Task Teams (WTT) committees were formulated as communication strategies to disseminate information on support services from different governmental departments, all of which were represented. Importantly, the WTT and District Task Teams were tasked to communicate with community leaders, including traditional leaders (*Amakhosi* and *Izinduna*), to introduce new projects in communities by means of hosting roadshows. The study findings indicate the importance of communication, as alluded to in Firmstone and Coleman (2014), who state that the communication strategies of various public institutions play an important role in contributing to and understanding community needs.

6.4 Effect of inadequate institutional resources on food security projects

Key informants acknowledged that the main challenge and institutional gap was a shortage of staff with relevant skills which led to work overload. In addition, many posts in the government sector were unoccupied which led to an understaffed environment that compromised the effective implementation of community projects. However, Ramphele (2005) argues that South Africa's challenge has been nepotism that has led to skills

shortages and poor service delivery. Since food security and poverty are issues of development in all governmental institutions, lack of co-ordination of programmes amongst departments as well as overlapping of interventions were identified as having a negative effect on addressing the needs of communities. This has been noted in Mathekga and Buccus (2006): that LMs have been associated with the issues of a lack of technical skills and of properly trained personnel, resulting in poor service delivery.

6.4.1 Inadequate capacity to implement community projects

Key informants disclosed that lack of capacity to implement community projects was associated with inadequate knowledge and skills in community development projects. It was further indicated that the majority of workers in community development units did not have relevant qualifications in community development and furthermore were not oriented towards food security projects. Mathekga and Buccus (2006) emphasise that the presence of skilled workers and managers is critical to ensure that LM councils adopt sound programmes of action to connect service delivery and LED. Furthermore, Choo (2007) states that limited human resources and capacity mean top management often lack the first-hand experience of the problems affecting local people. This situation indicates that more skilled employees with experience in community projects or programmes need to be employed by the affected governmental institutions in order to improve service delivery.

Some key informants further alluded to the lack of visibility by institutions in communities due to inadequate fieldworkers and resources such as transport facilities for the successful running of community projects. In terms of agricultural projects, LMs always work with DARD for equipment such as seeds, fertilisers and agro-chemicals as well as garden materials. However, insufficient garden materials were reported by all LMs and community members and this jeopardised the delivery of support services to improve food security in the affected areas. Furthermore, their working environment characterised by inadequate office space was not conducive to the proper execution of community projects, since communities do not have proper facilities for consultations.

These findings concur with those of Koma (2010); that public institutions lack actual or tangible resources including human, financial and technological ones. This situation means people still rely on indigenous or traditional farming methods that fail to produce consistent quantities of produce. These findings are supported in Rodriguez-Pose's Mexican study (2015) where co-operatives and small-scale farmers in rural areas still lack access to new technologies. Other studies show that farming production is increasingly technology-intensive, which requires education and training.

6.4.2 Limited budget as a constraint in community projects

Key informants indicated that projects that were established to address food insecurity required a lot of funding, like the Eshowe Taxi Rank New Trading Facilities which comprise four anchor shops and 37 normal-size shops. This project was carried out by the UMlalazi Municipality in collaboration with the *Senzokuhle* civil-based organisation network and SEDA, and cost R10.5 million. Furthermore, LMs were unable to implement projects alone due to limited budgets despite high demands from communities. Key informants noted with concern that LMs had very limited budgets to render support services and sometimes had to rely on financial assistance from the DARD.

This situation mostly affected rural LMs with no means of bringing in revenue and who were reliant on government grants. Evidence of this is that all six LMs had their own food security projects of which there were estimated to be 125, of which only eight were funded in the 2014-2015 budget. This indicates how inadequate the South African Government's resources were to meet the needs of its people. The Social Rights Report (2000) indicated that African states, including South Africa, have limited budgets and lack human resources with relevant skills to provide the services that would improve the lives of the poor.

6.5 The impact of political interference on food security projects

One of the key informants criticised municipalities for not conducting feasibility studies; in most instances, they just implemented projects to score political points:

"I once worked at a certain LM where they were funded with R2.5 million to start a craft centre, but it was built in a location with a high rate of crime. Then I asked who would visit and purchase the crafts, because people are scared of even walking in that area. Then they simply said forget about that, we will build the structure and people will vote for us again."

This indicates that officials were prepared to ignore the actual needs of the community and enrich themselves by utilising the resources of the state to advance their own political careers. Focus groups (co-operatives) and participants pointed out that allocations of agricultural equipment and other services were associated with corruption by governmental officials aligned with certain political organisations. This process was driven and manipulated by politicians, including ward councillors and committees, and the beneficiaries were members of the ruling political party and allies of the ward councillors in that particular municipality. This bears out Allahdadi's (2011) contention that political interference is an obstacle to the smooth functioning of government due to the fact that politicians use projects and programmes as a means of gaining personal political advantages.

Key informants noted with concern that decisions of political officials (mayors and members of municipal councils) within municipalities had a negative impact on service delivery due to differences among political parties, and changes of political officials affected the sustainability of projects. This situation created negative perceptions for investors and discouraged investment in the economy of the region. The study findings concur with Ingle's (2014) findings that governmental institutions are poorly managed by political appointees because of lack of expertise. Some key informants strongly believed that political differences hinder food security because services that are supposed to be delivered to the communities are deliberately delayed due to differences among political heads. Moreover, traditional leaders and community members perceive the government institutions as political, led by a certain political party. It is mandatory for government officials to explain that they are not affiliated to any political party, but serve all people.

These findings concur with those of Warshawsky (2011) that the South African Government departments are faced with complex situations affected by broader political and economic dynamics.

6.6 Lack of community participation in food security projects

Key informants confirmed that some community members were not committed to sustaining their projects and failed to participate fully or work in groups, resulting in conflicts. These conflicts were reported by agricultural co-operatives where equipment was stolen by other members for personal gain. It was noted in the White Paper on Local Government (1998) that community participation was an important tool to meet the basic needs of communities. When there were public meetings people did not attend them unless the municipality provided food or entertainment, such as music. Mathekga and Buccus (2006) also noted with concern the government's observation that communities did not usually attend ward meetings and other forums through which the government programmes were communicated. In addition, lack of information was a major stumbling-block to community members' commitment. Francis and James (2003) suggest that local people should be involved in decision-making as a strategy to improve the active participation of communities.

Gough (2006) has noted that empowerment encourages poor people to participate, negotiate, influence and ultimately demand accountability from the institutions that affect their lives. Similarly, Hutchison (1993) has found that empowerment is a strategy for a social-action process that improves constructive community participation of poor people and community organisation with the purpose of improving quality of life. Some of the key informants in the present study argued that community leaders did not disseminate information to potential beneficiaries and some community members were not aware of the existing government projects and programmes. Kruger (2011) has cited BEE as a government intervention to enable the meaningful participation of black people and women in underdeveloped communities.

6.7 Conclusion

The results of this study demonstrate that South African governmental institutions had numerous challenges and limitations that contributed to food insecurity in rural areas. The government has undertaken sound initiatives to eradicate food insecurity at household level; however, the main challenges were the implementation and monitoring of those initiatives in an effective way that would contribute to sustainable rural development. Some of these projects were designed to link rural or small-scale farmers with commercial farmers to learn farming strategies and methods to produce quality produce that would enable them to compete in the market. One of the limitations that district municipalities and LMs had was the placement of food security projects under poverty alleviation programmes: this tended to create a conflict of competing interests, because poverty is too broad a category and food security did not receive the attention it deserved.

While some of these programmes reflected local needs, many were just initiated from the top by government without grassroots consultation and consequently lacked commitment from the communities. Another challenge was that all food security programmes and projects were based on agriculture, when there were opportunities for non-agricultural projects that would also alleviate food insecurity by generating income. Governmental officials had limited knowledge of how to deal with communities, and the government needs to invest in training in order to overcome their shortcomings. While the results of the study showed that governmental institutions did have food security programmes in place, the major constraint was a limited budget, which could not meet the numerous demands from communities. Other constraints were political intervention and lack of political understanding, because some traditional leaders identified government with the ruling political party and consequently rejected all its projects.

The next chapter focuses on the views of communities about the role of governmental institutions and their efforts as communities towards achieving food security.

CHAPTER 7

GOVERNMENTAL INTERVENTIONS TO ADDRESS FOOD INSECURITY

7.1 Introduction

Chapters 5 and 6 detailed responses from participants and key informants regarding socio-economic status and its contribution to food in/security. This section mainly focuses on how participants perceived the services from governmental institutions towards the alleviation of food insecurity. It also discusses the formation of community development projects, which were co-operatives that attempted to alleviate food insecurity by performing agricultural and non-agricultural activities. The current study found differences among focus group discussions (FGDs), but they all agreed that there were some gaps in institutional support services.

While food security and poverty reduction programmes which emphasised eradicating food insecurity at household level have been carried out since 1994, government's intervention has been noted as very limited. Gagliardi (2008) asserts that Government institutions are responsible for promoting and sustaining economic change, which has been an issue of interest in benefitting all citizens and creating equal access to resources. This chapter further describes the views of communities and governmental intervention strategies to address food insecurity and special attention is given to groups who were associated with development projects implemented in rural areas.

7.2 The role of co-operatives in food security projects

The study found that most co-operatives in communities were agricultural groups. These co-operatives were arranged into focus groups. Communities were encouraged by the government to start co-operatives as vehicles to enhance the development of small-scale farmers through inputs and outputs that would make a meaningful contribution to the market. This indicates that the formation of co-operatives, particularly in rural areas, was a strategy for alleviating food insecurity. This is supported by Kepe and Tessaro (2012), who state that government has taken measured steps to alleviate food insecurity in outlying areas where the majority are vulnerable. Table 5.2 indicates that there were 11 focus groups which were present during the interview sessions. The majority of members

participated actively during FGDs, raised their concerns and suggested possible solutions to overcome challenges.

Table 7.1: Description of focus groups

Focus group	No. of members
1	15
2	15
3	6
4	17
5	18
6	64
7	31
8	7
9	6
10	10
11	14

The focus groups indicated that the purpose of formulating co-operatives was to address food insecurity issues and uplift poverty-stricken individuals, particularly women and the youth, through sustainable job creation and community projects. The findings of the study concur with those of the United States Department of Agriculture (USDA) (2000) and the International Labour Organization (ILO) (2007) that agricultural co-operatives are formed as a business by a group of people who use its services and share in profits. The majority of focus groups, except non-agricultural co-operatives, were assisted by DARD to start agricultural co-operatives for both commercial and subsistence purposes. These groups were advised by extension officers and LED officials from LMs on the processes needed to start co-operatives. The main gap that was identified by focus groups was the lack of follow-up by officials to check whether the groups encountered any challenges that hampered the progress of their co-operatives.

The findings indicated that these groups were not properly oriented towards sustaining their organisations, because there were no proper, formal workshops and training to guide the emerging co-operatives. These focus groups reported that starting agricultural projects was not their will or intention, but the departmental officials used a top-down approach, imposing the idea of this kind of project on the local communities. While agricultural projects were recognised as the vehicles for food insecurity reduction strategies, the findings of the study indicate that a top-down approach had a negative effect because some projects did not directly address the needs of communities. For this reason, Uwizeyimana (2011) recommends a bottom-up approach, where people who live with the problems and understand them are in a better position to use their skills and understanding of the local context to formulate and implement appropriate solutions and policies.

7.2.1 Crop and poultry farming by uThungulu co-operatives

Non-agricultural co-operatives in the study area were dominated by the youth, whereas agricultural co-operatives were dominated by adults and elderly people. In addition, focus groups clarified that initially, youth wanted to start agricultural projects because their passion was to become commercial farmers, and some of the members had studied for a Diploma in Agriculture for this purpose. Figure 7.1 shows young people who participated in agricultural activities.



Figure 7.1: Focus group members preparing their produce

The co-operatives produced various vegetables such as tomatoes, green peppers, broccoli, onions, cabbage, spinach and other produce as portrayed in Figure 7. The focus groups indicated that they cultivated them on a seasonal basis. Some focus groups indicated they that lacked farming knowledge and guidance on what to grow in different seasons and which methods were most suitable for the maximisation of yields. Some of the focus groups opted for a mixed farming system which involved both crop (home and

community gardens) and poultry farming to address food insecurity. Mujawamariya *et al.* (2013) state that agricultural co-operatives in South Africa are characterised by small family subsistence farming on less than five hectares with mixed farming systems. Rosner (2012) alludes to the fact that co-operatives are being overloaded with high expectations for alleviating food insecurity and overcoming the subsistence economy through empowering entrepreneurs.

7.2.2 Pig farming by uThungulu co-operatives

Some of the focus groups were involved in piggeries and faced many challenges including access to pig food and pig pens. It transpired that focus groups had only a few pigs and limited assistance from the DARD to acquire more pigs and other related resources. In addition, focus groups reported that the DARD lacked capacity on piggery activities, and a lack of community empowerment in relation to pig farming was a serious problem. Significantly, pig farming is usually practised by specialised farmers who have the relevant expertise. Some key informants revealed that government had committed to providing incentives and capacity-building grants for assisting smallholders in pig farming.

The piggery group stated that community members had a negative attitude about pigs being farmed next to their residences. The focus groups explained that pig farming was time-consuming and more facilities were needed for efficient operation. Pigs had to be penned in separate facilities or even on different sites according to age which meant that people in a group were divided according to the life stages of the pigs. However, focus groups stated that due to limited facilities, instead of building separate enclosures for the different production phases, they opted for partitioning. Basset-Mens and Van der Werf (2005) note that pig production has a poor image with the public, and as a result the formation of new pig farms has become very difficult in rural areas because of the negative attitude of the local communities.

7.2.3 Sewing and other activities by uThungulu co-operatives

One focus group was involved in sewing and did not receive any support from the LM or other local private institutions. This group specialised in making school uniforms for local schools as the potential market and this sewing project was their sole source of income. The group operated their sewing business in a community hall without sufficient sewing equipment, comfortable chairs, cutting tables, sewing machines and storage units for material and other equipment. However, this group pointed out that their advantage was that they worked on this project within proximity of their residences and they were not renting a community hall. Veeranjaneyulu, Krishnaveni, Lakpathi and Rajanikanth (2014) report that rural people in India were trained for stitching dresses and were running their units at home in order to make a living. Some focus groups noted with concern that LM officials had limited capacity to support sewing businesses because they were biased towards agricultural projects and provided agricultural equipment and training.

Furthermore, the sewing group diversified their business by running a crèche as a second means of generating income and promoting education at a local level. Only the local community's children whose parents were unable to afford private child-minders were enrolled at this crèche, and most children were grant beneficiaries. The sewing and crèche projects were operated concurrently at the same venue, but sewing activities were sometimes interrupted by children demanding attention from their minders. This challenge made them unable to finish their sewing activities in the specified time and their customers were affected by not receiving their orders on time.

The focus group made numerous proposals to different government institutions, including the Department of Social Development (DSD), for assistance in the form of toys and foodstuffs for the children. In addition, the Department of Basic Education was requested to assist with a food security programme called the National School Nutrition Programme that feeds children from low-income households enrolled in public schools. However, this group was unsuccessful in their request because of government policies and procedures

which stipulate that only schools in the database of public schools were eligible for such assistance. Another focus group was involved in the construction of recreational parks, including fencing as well as paving, and their challenge was insufficient funding from various institutions in order to sustain their projects. Furthermore, this group clearly stated that LMs denied their participation in the tendering system and tenders were awarded to prominent local politicians.

7.3 The benefits to communities of co-operatives' activities

The majority of the focus groups stated that the remaining produce and products (including school uniforms) that were rejected by the commercial market were sold to communities at lower prices, so communities benefitted. Some of the focus groups donated their produce to households who were severely food insecure and public crèches also benefitted. However, Masuku *et al.* (2014) state that the majority of people in rural areas – particularly in the SADC region – lack purchasing power because of their poor socio-economic status.

The existence of co-operatives encouraged the idea of entrepreneurship in rural areas and members were remunerated. The focus group which offered crèche services pointed out that the local populace benefitted with the provision of a safe environment for local children who were given nutritious food under minders' supervision. Focus groups stated that the project of assisting agricultural co-operatives by supplying tractors and free seeds was initiated by the DARD only to assist co-operatives, however, local individuals in communities also benefitted from the use of tractors. Hendriks and Olivier (2015) point out that agricultural co-operatives exist to promote the influence of agriculture on the development of all communities, to build the national economy.

Focus groups stated that the establishment of co-operatives had made communities work together toward implementation of food security programmes, including initiation of businesses and self-advocacy skills among the rural populace. Disadvantaged people, including the youth and people with disabilities, were encouraged to participate in co-operatives in order to create economic opportunities to improve social conditions and

food security through enhanced growth and productivity. These study findings concur with Lingane (2015) and Warshawsky's (2015) that in South Africa small-scale farmers and co-operatives remain critical sources of income and create access to food in many rural areas. Furthermore, co-operatives were recognised as an innovative and powerful business model that could provide high-quality jobs and shared entrepreneurship opportunities to low-income people as well as local investors.

7.4 Limitations and challenges faced by co-operatives

It is clearly emphasised in the White Paper on Local Government (1998) that local government, including LMs, should fast-track the process of meeting the basic needs of the poor and growing the local economy, and support community organisations in the form of financial grants. The findings showed that the co-operatives had many challenges that served as obstacles to achieve food security and stimulate the local economy. This made it difficult for them to attain their goal of food security, but there were interventions by the government to assist co-operatives to attain their goals. Furthermore, the food security policy (DSD and DAFF, 2012) ensures that all citizens should be food secure through creating an enabling environment for all communities to produce more food and have control over their production.

Ortmann and King (2007) state that the government has committed itself to providing a supportive legal environment for co-operatives. A consideration of the efforts of the focus groups in this study indicates that promoting empowerment of co-operatives would benefit the rural populace because the majority of them depend on co-operatives and forming partnerships with public and private institutions towards attainment of food security and income generation. Lyne and Collins's (2008) findings share the sentiment revealed in this study, pointing out that few co-operatives survived the development-oriented stage because of weak institutions that were imposed on communities that were deprived of capital and lacking in business skills. Furthermore, all focus groups indicated that they had approached the Small Enterprise Development Agency (SEDA) several times for assistance to develop and find ways to sustain their co-operatives, but there was no positive response, due to the limited budget available.

7.5 Perceptions of co-operatives of service delivery by government institutions

The focus groups noted with concern that only two institutions, namely DARD and LMs, were active in terms of delivering services, although these services were limited. Focus groups pointed out that agricultural services were mostly dominated because rural areas were perceived as an agricultural zone.

7.5.1 Provision of services by the Department of Agriculture and Rural Development (DARD)

The DARD provided co-operatives with seeds and agricultural equipment including pitchforks, watering cans, wheelbarrows and other limited equipment which had to be shared with other groups. The NDA (2012) agreed that agricultural co-operatives should be given starter packs of gardening tools and equipment.

One focus group noted with concern that the unproductive use of arable land was caused by lack of support from the DARD that could have enhanced agribusiness development in the area. Furthermore, inconsistent support of co-operatives was problematic because most of the agricultural co-operatives had a short lifespan and were unable to sustain themselves. The focus groups stated that inadequate storage facilities had led to spoilage of produce, and consequently to food waste. Furthermore, the lack of affordable transport was an obstacle to market access, with the transportation of large amounts of produce (vegetables and fruit) too expensive for emerging farmers to afford.

These groups suggested that there was a need to establish facilities for value-added agricultural products that would benefit rural emerging farmers and co-operatives. On the other hand, key informants (Chapter 6) affirmed that some personnel in their unit (LED Unit) were not capable of facilitating agricultural projects. Another serious challenge was the high rate of crop thefts by local people, since most fields were not fenced, and this led to lower product yields. The study findings agree with the recommendation by Al-Hujran, Al-Debei Chatfield and Migdadi (2015) that in order to improve service delivery, institutions must create access to information and services and public governance.

7.5.2 Provision of services by local municipalities (LMs)

Some focus groups reported that the LMs provided them with uniforms to assist recognition in the market, and Cedara College of Agriculture provided training on food processing, marketing, and responsibilities of the members in the organisations (cooperatives). However, other focus groups insisted that they did not receive support or any kind of assistance from the LM despite of their efforts and proposals, all of which were made in vain. Some focus groups had wrongly assumed that the democratic government would prioritise the needs of poor people by addressing issues of basic services, particularly in rural areas that were neglected by the apartheid regime. It was also raised by the *Second Economic and Social Rights Report* (1998/1999) (South African Human Rights Commission, 2000) that government has to prioritise the needs of previously disadvantaged people in order to promote social, economic and environmental development in such a way that they alleviate food insecurity.

The study revealed that poor service delivery had a negative impact on individuals' and communities' ability to meet their basic needs, including access to food, education, employment, shelter, and other basic services. Section 152 of the Constitution of South Africa states that local government (municipalities) must ensure the provision of services in a sustainable manner and must ensure social and economic development for local communities. It is therefore crucial for local municipalities to support local communities including co-operatives that are working within the jurisdiction of the municipality as it is mandated in the Constitution and in the White paper on local government of 1998. Local government exists to perform economic welfare functions, social welfare functions and control and protection functions. The findings of this study revealed that to a certain extent co-operatives do receive support from municipalities, particularly through the provision of equipment, training and uniforms for their agricultural projects; however, some focus groups reported that they received no support or services at all.

7.5.3 Challenges of service delivery in local municipalities

Key informants (Chapter 6) presented various challenges encountered with service delivery, such as trying to mobilise various services when the Local Economic Development (LED) unit's focus was mainly on HIV/AIDS programmes. In addition, the LED unit had an outdated 2007 strategy that no longer addressed current issues such as mining (e.g. exploring iron mining) which had the potential to stimulate SMMEs and encourage investment. This indicates a lack of accountability and innovation from the government, and Shaoul *et al.* (2012) note with concern that this has led to policies failing to address issues of food insecurity and provision of basic services. Furthermore, grievances were raised by focus groups that some communities and organisations were denied access to processes and procedures of services by LMs and this was justified by limited resources. Winters *et al.* (2014) assert that poor service delivery is an outcome of a limited budget and leads to difficulties in prioritising community needs.

The study revealed that ward councillors were biased in terms of provision of services because some communities benefitted and others were left out because they were not affiliated to the councillor. Nnadozie (2013) maintains that, regarding municipalities' capacity regarding service delivery, they were congested by institutional problems, including corruption and mismanagement of funds, and this aggravated food insecurity. In addition, focus groups indicated that government officials hardly ever visited communities and officials faked records of community visits, when they had never shown their faces. Sometimes they were requested by officials to sign attendance registers and back-dated their visits.

The study findings confirm Koelble and LiPuma's (2010) view that public institutions – predominantly LMs – in South Africa were facing a lack of skills of local officials and a lack of enforcement when it came to financial management, resulting in poor service delivery. As evidence of this, ward councillors, who serve as the link between communities and LMs and are required to peruse government programmes that benefit local communities, failed to listen to communities' needs and excluded them from all the processes of decision-making. This was in spite of the fact that the White Paper on Local

Government (1998) stipulated that municipalities should encourage people to participate directly in all their programmes and to make sound decisions that would improve their lives and stimulate the local economy.

7.6 The effect of access to land on food security

Generally speaking, the issue of land in developing countries is a sensitive issue because it is at the heart of social, political and economic life in African economies. This is particularly the case in South Africa, where apartheid legislation withheld land from the black majority. Moyo (2007) indicates that land as an asset forms the foundation for all human survival in terms of social and economic development. Key informants (Chapter 6) alluded to the fact that the black majority were removed because of the Land Act of 1913, No. 27 that was introduced by the colonial government of the day. This history made it difficult for the democratic government to undo the legacy and reverse the damage done by this Act in terms of unequal land ownership.

7.6.1 Access to arable land for agricultural purposes

Key informants and focus groups indicated that the Comprehensive Agricultural Support Programme (CASP) was introduced to assist the populace that was previously disadvantaged by the Land Act of 1913 in terms of accessing arable land. CASP was the funding model that was established to identify the land that was available, and the DARD would fund the previously disadvantaged communities to utilise it for commercial farming and other businesses that would not degrade the environment. Toulmin (2008) emphasises that agriculture and natural resources depend on comprehensive availability of arable land for contribution to the Gross Domestic Product (GDP), employment, and national and household food needs. Focus groups and participants all indicated the status quo of accessing land, as depicted overlapped Figure 7.2.

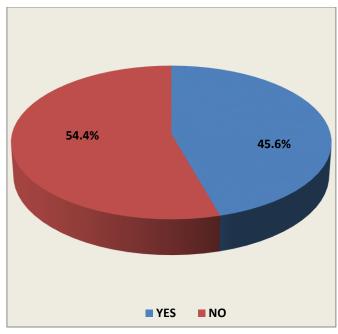


Figure 7.2: Responses to land access in uThungulu District

Figure 7.2 shows that more than half of the study population had no access to land for agricultural and commercial purposes. Key informants (Chapter 6) indicated that only 49% of black South Africans had land ownership, and the question remains as to what happened to that land. This statement was raised because those who benefitted from land redistribution were unable to use land productively in a form of commercialising and this led to the perpetuation of food insecurity.

However, Toulmin and Quan (2000) argue that in most instances land in South Africa is highly commercialised, being a primary means of subsistence farming and income generation, particularly in rural areas where the main purpose is to eradicate food insecurity. On the other hand, focus groups shared their sentiment that the policy of land redistribution was marred by numerous gaps: land was redistributed to people with no knowledge of farming. The government then made a blanket statement that beneficiaries were unable to use land productively. However, key informants argued that the land should not just be given to any community but to potential emerging farmers. Fukuda-Parr and Taylor (2015) observe that South African land reform policies have been supporting emerging farmers to improve their production-based entitlement.

Since land belongs to traditional leaders in rural areas, focus groups expressed their concern that they were deprived access to land ownership by traditional leadership so LMs were approached to assist requesting traditional leaders to allow people to utilise land for income purposes. Despite their appeals to the government for such permission, they were still not granted a title deed (ownership) and the opportunity to utilise it. The study findings confirm Jayne *et al.* 's (2003) findings that even though South Africa is a democratic country, severe land inequalities persist between small-scale farmers, commercial farmers and state farms. In addition, some of the focus groups were temporarily provided with access to land but advised to make an application to the Department of Public Works. This situation created instability in co-operatives, rural farmers and communities, affected the improvement of food production within rural areas and could well have had a detrimental effect on overall investment, productivity and food security.

7.6.2 Challenges to accessing land

What emerged as a major problem was that black farmers and communities lacked land ownership whereas white farmers and white people, in general, had access to land ownership. Some of the agricultural co-operatives rented 5-15 hectares of land from white people and they were struggling to pay rent because they were unable to compete in the market and make a profit. The other reasons were the fact that small-scale and rural farmers had poor farming skills and limited access to farming technologies to increase their farming outputs. Aliber and Hart's (2009) study confirms that food security initiatives or projects do not have clear guidelines on how co-operatives and smallholders' agriculture should align land and agrarian reform projects in rural areas.

Toulmin (2008) states that the majority of traditional leaders have claimed stronger rights over common resources such as land, and even allocated it to outsiders for personal gain. This leaves local communities vulnerable to dispossession by local elites and outsiders allied to local traditional leaders. This indicates that the issue of land, entailing agricultural productivity, remains a crisis and seriously affects food security at household level. The current study revealed that white commercial farmers were doing well

compared to small-scale farmers because of the latter's limited access to land as a resource for producing more food and other commercial outputs. Smith *et al.* (2013) point out that arable land has also been declared a limited resource for food production because it has been affected by climate change, including soil erosion and topographical changes which reduce food production.

7.7 Challenges to accessing financial support

People who are food insecure have been associated with lack of access to credit in the form of financial assistance from various financial and government institutions with low asset accumulation. Focus groups indicated that their request applications were declined because of low credit ratings. With government institutions, there was no feedback and the process was very slow due to red tape and bureaucratic processes that disadvantaged poor applicants. Yaun *et al.* (2015) state that poor people are often excluded from formal credit, and that this mostly occurred in African states. However, key informants (Chapter 6) believed that municipalities were responsible for providing people with financial support and assisting them with applicable skills for financial proposals (business plans). In addition, key informants expected municipalities to equip communities with business skills to promote rural entrepreneurship for income generation. Focus groups pointed out that one of the reasons for not accessing financial assistance was due to lack of training in how to create business plans and business proposals for funding purposes. One key informant stated:

"We are not a financial institution, we channel them to a right institution and we do assist them with applications for funding."

The study findings are to some extent similar to those of Barrios (2008), who notes that rural populations have a belief that financial support should be provided by government in the form of a grant. The overlapped Figure 7.3 illustrates what percentage of the study population had access to credit.

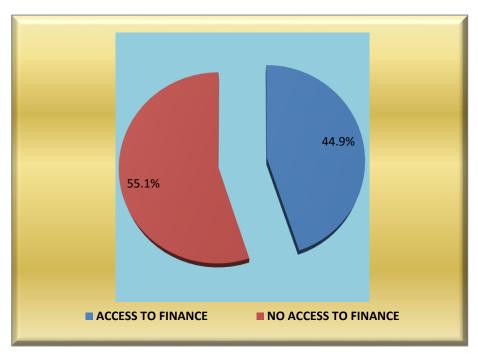


Figure 7.3: Access to financial assistance by the participants

The study showed that 55.1% of participants had no access to financial assistance because they did not meet the minimum requirements. The participants mentioned that the major constraints to accessing credit or being granted loans were poor socioeconomic status including unemployment and low-income generation. Only 44.9% of participants had access to credit in the form of short loans due to a low credit profile. Bruhn and Love (2014) point out the importance of improving access to finance for low-income people as a major factor in the alleviation of food insecurity.

7.7.1 Financial assistance for improving food security

Key informants state that the majority of rural people, rural entrepreneurs and cooperatives were unable to access financial support; as a result, the provincial government decided to form partnerships with financial institutions to offer credit facilities or financial support to small growers and potential entrepreneurs, particularly among the rural populace. This programme had low interest rates and those eligible had to be residents of KwaZulu-Natal (KZN) and run full-time, viable businesses, and be motivated to generate profit. Mkandawire *et al.* (2003) and Pandolfelli *et al.* (2014) note with concern that the international programme called Structural Adjustments failed in the

development of a rural financial market, which had a negative effect on the role of banks in rural credit.

The study's findings are in line with those of Fakudze and Machethe (2015) that improving access to formal credit for smallholder farmers would lead to an increase in agricultural production and help to eliminate food insecurity. The Small Business Development Agencies were tasked to work closely to support co-operatives in sustaining their businesses by being productive and facilitating access to the market. In addition, one of the agricultural co-operatives were funded by one of these agencies (NDA) with the provision of agricultural equipment including tunnels. However, key informants (Chapter 6) indicated that smallholders who had access to funding were unable to take advantage of the vast knowledge and technology available to increase their crop yield.

Yadav (2014) maintains that after all interventions, the rural populace, particularly in developing countries, are still in need of credit and microfinance programmes must ensure that credit is available to poor people to enhance their livelihoods. Focus groups pointed out that financial programmes were seriously needed to acquire capital to buy equipment and sustain their projects. Alamgir and Arorai (1991) and Masuku *et al.* (2014) suggest that to create an enabling environment for rural people, financial institutions need to be located in rural areas and to ease the criteria to guarantee that smallholders and the rural poor receive the essential credit in time.

7.8 Access to markets to alleviate food insecurity

Rural entrepreneurs and small-scale farmers always find it difficult to sustain their businesses because of limited resources and entry into formal markets and to compete with commercial farmers and well-established businesses. Focus groups indicated that they lack physical markets at which to sell their products, and therefore sell to local people at low prices, with the intention of alleviating food insecurity and cutting travelling costs to the city. Furthermore, key informants revealed that the UThungulu Fresh Produce Market was established at Empangeni town by the national and provincial

government to assist small-scale rural farmers to have a stable market for fresh produce, and serve as a job creation initiative. This initiative was aimed at improving access to formal markets. Moreover, key informants indicated that UThungulu District has signed a Memorandum of Understanding with the Department of Basic Education to commit themselves to support this initiative by purchasing produce there. Small-scale farmers and rural farmers were encouraged to work with agricultural co-operatives to ensure that quality food was produced to meet prescribed standards, and an amount of R11 million was set aside by the UThungulu District to support this programme.

Furthermore, this initiative suggests that challenges of small-scale farmers to access markets were on the priority list of the local government. Masuku *et al.* (2014) confirm that informal markets were more dominant than formal ones due to the fact that they were accessible by smallholders. Markelova *et al.* (2009) state that smallholders possess opportunities to raise their income by improving their ability to compete in the market. Key informants (Chapter 6) indicated that rural product marketing programmes were initiated through exhibitions within the province and smallholders and rural entrepreneurs were encouraged to participate. These programmes were intended to provide small businesses with opportunities to market their businesses and train them in how to network with other businesses. Fischer and Qaim (2012) maintain that improving access to markets has become a key element in strategies to promote rural development and the reduction of food insecurity.

7.8.1 Challenges to accessing markets by the rural and emerging farming sector

Focus groups further alluded to the major constraints in accessing markets, including lack of marketing of rural products, lack of co-ordination among different stakeholders and inadequate transportation for delivering their products to the market. In addition, markets determined the prices of their products for smallholders and rural farmers and the market prices fluctuate every day, which is problematic for the local producers. Allahdadi (2011) asserts that agricultural co-operatives, rural and small-scale farmers are unable to compete with commercial farmers in the market because the perception is that their produce and products are of lower value. Key informants (Chapter 6) shared the same

sentiment that rural populations who had businesses felt cheated because the prices were dictated and determined by private traders which meant that rural smallholders were exploited and unable to generate satisfactory profits. Qureshi *et al.* (2015) suggest that global markets can assist some local food producers to access larger markets as well as provide capital for investment.

However, key informants (Chapter 6) argued that agricultural co-operatives, rural farmers and smallholders were unable to meet the demands of the market due to the fact that they produced smaller quantities than was required by the markets. On the other hand, focus groups argued that failing to meet the demands of the market was caused by lack of support from different institutions, including lack of equipment, poor storage and packaging facilities as well as lack of orientation on how to enter and compete in the marketplace. One of the focus groups indicated that their prices were low compared to the prices in the cities because they were attracting potential local customers. Inadequate equipment, including sewing machines, made it difficult to meet the demands of the market. Barham and Chitemi (2009) maintain that the major obstacle faced by smallholder-led agricultural growth was the poor access to formal markets, which could exacerbate food insecurity, inequality of income and rural unemployment.

In addition, focus groups argued that lack of irrigation systems also affected them negatively since their main source of income was in the agricultural sector. Severe drought in the study area left livestock farmers with no option but to downsize their livestock herds and sell them at low prices. Forty thousand head of cattle had died, most of them reportedly in the study area. Furthermore, due to drought, the seasonal planting of grain was affected, including the maize crop which decreased from 14, 25 million tons to 9.84 million tons in 2015. This led to price inflation since the price of the maize in the market was 60% higher than in other years – and this situation perpetuated food insecurity. Qureshi *et al.* (2015) suggested creating access for smallholder farmers to local markets where they could participate in important services such as market information, farmer group marketing, financing of small traders and local storage facilities as ways of improving food security. Effective and well-functioning markets can

assist both consumers and producers to improve household food security through greater food availability and affordability.

7.9 Conclusion

It is most distressing that with all these initiatives the eradication of food insecurity at household level is still slow. This chapter indicates that there is limited government intervention in food insecurity reduction at household and community level while communities were encouraged to form co-operatives as a strategy to equip small-scale farmers to improve productivity. These co-operatives were initiated for commercial and subsistence purposes as well as for being able to compete with commercial farmers. However, lack of training, financial support and lack of access to land and any kind of assistance from government were observed as major constraints to improving food security.

Co-operatives were dominated by women and the youth as a government strategy to raise them above their previously disadvantaged status. However, communities were discontented about the poor visibility of government officials and unresolved issues of workshops and training, causing lack of knowledge and guidance on sustaining their operations. Other challenges aggravating food insecurity were that ward councillors used governmental resources for selfish political purposes so that certain communities were excluded from receiving services from LMs, and corruption as well as mismanagement contributed to poor service delivery.

The next and final chapter discusses services offered by various governmental institutions and their challenges with regard to the improvement of food security as well as service delivery.

CHAPTER 8

CONCLUSION AND RECOMMENDATIONS

8.1 Introduction

This study analysed the institutional gaps that contribute towards food insecurity in UThungulu District in KZN Province, with a focus on rural areas where food insecurity is perpetuated due to inadequate support services from different governmental institutions. This chapter addresses three aspects: first; it summarises the main findings of the research as guided by the study objectives and research questions formulated in Chapter 1. Second; the conclusions describe what the results mean regarding institutional gaps in the field of food security. Lastly, based on the results of this study, recommendations aimed at helping to alleviate food insecurity and improve provision of services by various institutions, as well as suggestions for further research in this area, are made.

The study has raised critical arguments relating to food security where the literature agrees that South Africa is food secure at the national level, but food insecure at household or local level. South Africa has various existing policies in the agricultural sector and others at both national and local level to address food insecurity by looking at imbalances in food production, food access and food utilisation. Governmental institutions maintained that the government has policies, programmes and projects in place to alleviate food insecurity in rural areas; however, there is little evidence that food security policies and programmes are being implemented effectively. This situation has attracted huge criticism, where the public asks why food insecurity is still a major issue at household level, particularly in rural areas, if the policies and programmes are operating. This study was formulated to find out what instigates the institutional gaps in this context, and how these contribute to food insecurity.

The combination of secondary and primary data was utilised for the purpose of fulfilling the research objectives. Primary data were collected from sampled community members, governmental officials and co-operatives within the study area; the instruments used for this were questionnaires, semi-structured interviews and focus group discussions to reflect on the institutional gaps and food security issues. Secondary data were gathered from various scientific sources, including academic articles, books, government reports, South African policies and UN reports related to the objectives of the study. The discussion that follows emanates from the study findings.

8.2 Summary of research findings

Food insecurity is a great concern across the world, where the levels of food insecurity are still unsatisfactorily high, developing countries being the worst affected. This study identified and analysed the effects of institutional gaps on food security in South Africa by focusing on factors relating to numerous governmental and community projects in an attempt to improve the food security situation. It is noted that very little empirical data were available to show the contribution of various institutions towards achieving food security. Although policies do exist, there is no clear or adequate evidence that communities are benefitting from government programmes. The study revealed that the participants faced numerous challenges in sustaining their projects, to the extent that these affected their food security status negatively.

8.2.1 Socio-demographic profile as a contributing factor in food insecurity

The study discovered that in order to understand food insecurity at household level, it is important to recognise the impact of the socio-demographic profile, because this influences what kind of services and approach can be used to improve the situation. The study findings revealed that the poor socio-economic status of people or communities had some negative implications for attaining food security and accessing services from governmental institutions. The study also revealed that females were more involved in and affected by food in/security issues and also had limited access to institutional services due to gender inequalities that emanated from traditional, patriarchal, societal norms. However, the study discovered that the South African Government has numerous policies that recognise women by giving them first preference in access to services. It further indicated that the efforts of rural women toward ensuring food security were still not fully recognised, since their power to make decisions at household and community level at large was limited. The study findings portrayed empowerment as a tool that could

be used by government to create an enabling environment to access and control resources that were available in the community, such as land.

The results indicate that those between the ages of 20-49 years were more food insecure than other age-groups, since the majority in this age-range were unemployed while others were self-employed but with businesses not stable enough to generate a steady, continuous income. The results indicate that although small businesses did exist, they lacked support from various institutions due to the fact that they were not sustainable and were also unable to attract the market. This indicates that rural entrepreneurship was not adequately supported by the government, and their activities were not recognised as a means of generating income. The majority of the study population had secondary high school education, and it was not easy for them to gain employment, particularly white collar jobs, due to inadequate skills. The results show that there were huge income inequalities: the majority in this study were lower-income earners, and very few earned a liveable income.

8.2.2 Availability of support services for rural agricultural activities

Agriculture is the predominant activity in rural areas, and is well recognised as a pillar of the rural economy and a tool to eradicate food insecurity. The results indicate that the majority of the study population were involved in crop farming, particularly community and home gardens for subsistence purposes; however, very few were practising livestock farming. This indicates that this rural population did not recognise agriculture as a source of economic support, including job creation. Furthermore, the study showed that one of the reasons that rural people did not commercialise their produce was because they were unable to produce enough to meet the demands of the market. A further reason was that the support from government was insufficient: almost half of the study population did not receive free seed from DARD due to political differences, and the free seeds that were supplied by DARD to some people were not up to standard.

Livestock farming in the study area was also under threat because of crime or theft, and also because support services such as medication and provision of grazing land from DARD were inadequate. In addition, most of the rural population believed that livestock was a traditional asset, and not appropriate for commercial use. The results further showed that the study area was very badly affected by heavy drought, and there were no relief programmes to assist rural livestock owners. It also emerged that rural agriculture was deteriorating as a result of inadequate support services such as financial input and agricultural equipment from governmental institutions. While the youth were in the majority, they seemed to denigrate agriculture as a source of income and a major strategy to eradicate food insecurity in rural areas, referring to agriculture as "the dirty hand's job".

8.2.3 Political interference and its implications for support services

The study also revealed that local government institutions such LMs were perceived as political institutions because the heads of these institutions were political appointees. Available evidence showed that services or projects rendered by LMs were politically aligned for political reasons, and did not reflect the needs of the local people. It further discovered that while UThungulu District was dominated by rural areas, these institutions were located in urban areas while being regarded as rural LMs. It has also been exposed that politicians as heads of institutions take poor decisions that do not reflect the needs of local people. The consequences are the implementation of irrelevant programmes or projects as well as the slow delivery of support services. Sometimes there were conflicts between heads of the LMs and traditional leaders if they had political differences or came from different political parties, and this further weakened support services provision.

Available evidence indicates that local people were suffering due to the decisions of the heads of LMs who had no expertise in community development or how to address community challenges. It was further revealed that they planned for periods of five years because their term of office was five years, so if a new political party came into power there was no continuity of programmes and projects. This indicates how instability and inconsistency in LMs hinders progress in alleviating food insecurity and poverty in

general, as well as creating a poor image and feeding investors' doubts about investing in that particular area.

The study discovered that ward councillors were meant to add value to improving the lives of local people, as they were elected to represent them in the LMs and to work together with ward committees as well as the local people. However, the evidence is that ward councillors failed to coordinate community projects set up by LMs or to mobilise local resources that would benefit local people.

8.2.4 The effect of limited human resources on capacity building

One of the major challenges of governmental institutions was the issue of understaffing and shortage of staff with the capacity and skills required to serve communities. Governmental institutions indicated that staff members were tasked to facilitate community projects, including agricultural projects, and conduct training in food-insecurity alleviation although they had no expertise in the field of food security and agriculture. The results show that various institutions organised training and workshops to empower people with different skills, yet the training sessions were conducted by unskilled personnel.

The LMs organised training for co-operatives, particularly to equip them with business skills and on how they could sustain their businesses in terms of using scarce resources effectively. Results further revealed that the people who were running co-operatives had no agricultural qualifications or expertise in the agricultural field which made the co-operatives dysfunctional. Key informants stated that unemployed youth and young emerging entrepreneurs were trained in crop farming and had to go back and mentor the other young people who were unable to attend the training. However, this plan did not succeed because the young people involved had been chosen because they were unemployed and not because they were skilled in or passionate about agricultural matters. Ultimately they could not achieve the objectives of the co-operative and could not even mentor their peers.

Focus groups supported the views of the key informants in that they were also not satisfied with the support given by various institutions. The majority of focus groups (10) stated that there was a lack of support and mentorship from all the institutions. In the results, only one focus group stated that they had a mentor who was sponsored by the NDA to provide guidance on how to run agricultural projects effectively. The focus groups revealed that as much as the various institutions provided training for cooperatives, they did not do a follow-up or visit regularly to check on the progress of developmental projects within the communities.

Furthermore, the results indicate that sometimes government officials rendered support to communities that were associated with certain political organisations, an ineffective approach to alleviate poverty and promote LED. All of these examples show that government institutions lacked an effective strategy to support and mentor co-operatives to benefit the people and eradicate poverty by empowering them with skills so that they could work independently and effectively.

8.2.5 Limited financial assistance as constraints to food security

This study indicates that LMs had a limited budget to render support to developmental projects. Key informants revealed that all six LMs in uThungulu District Municipality had their own food security projects, but most were not implemented because of limited budgets. The results also show that rural LMs relied on the government for funding, and some other projects were funded by the DRDLR. It was clearly shown that in addition to the fact that many municipalities had limited budgets, they also lacked staff with the financial expertise to ensure that funds allocated for developmental projects were spent effectively and efficiently.

The members of the focus groups indicated that they were struggling to receive financial assistance from various government departments, including the LMs. The focus group members revealed that even if they applied for funding they did not qualify because they were unemployed; they were also unable to write a business proposal and did not receive any training on how to do so.

According to the study, 45% of participants were able to access short-term loans while 55% did not have any financial support. Furthermore, all focus groups indicated that they did not have funding: whenever they wanted to distribute their produce they hired a car because they did not have assets such as vehicles and they could not afford to buy them. Further aggravating the plight of co-operatives hardest hit by lack of financial assistance, was the issue of political elites who were enriching themselves and their friends with state resources. The issue of financial assistance was therefore still a challenge in rural development projects, hindering people from sustaining their businesses and failing to help them eradicate food insecurity.

8.2.6 Poor service delivery as an institutional gap in achieving food security

The Municipal System Act (2000) was enacted to define how municipalities should provide services to local citizens. The Act made a provision that if municipalities were unable to provide certain services, they could enter into a service delivery agreement contract with external agencies to provide the services on their behalf. In terms of the White Paper on Local Government (1998), municipalities were firmly embedded in local communities and committed to working with citizens and other stakeholders to find sustainable ways to meet their social, economic and material needs and improve their quality of life. Despite these crucial policy tools that guide municipalities to provide better services for all, the results show that there was still a massive backlog in service delivery, particularly for development projects. While some services such as water, electricity, public transport, roads and physical infrastructure were available to the public, there were limitations to these services.

The results also indicated that water was not always available for public consumption, and was provided only twice a week. Electricity was available for the community but was not free, and while the majority of the study population was unemployed it was a challenge to access and utilise it. In terms of Section 40 (1) of the Constitution of the RSA (1996), local authorities constitute a distinctive sphere with a mandate to govern, provide services such as water, electricity, houses, roads and sanitation, and promote

social and economic development, but the results of this study show that these constitutional obligations were not being fulfilled in the area under consideration.

The findings of this study also revealed that corruption hindered the provision of services such as the allocation of equipment: certain members of the community received agricultural equipment while others were deprived. This clearly indicates that councillors were biased when allocating resources, which amounted to unfulfilled promises from the government, because constitutionally all the people should be provided with services. These results call for a change in ethics and moral attitudes by government institutions responsible for service delivery. Poor service delivery has a negative impact on communities and perpetuates food insecurity.

Poor communication between governmental institutions and communities was also identified as a challenge, because it affected the processes of service delivery. As evidence of this, communities revealed that government officials were not consistently visible to communities, and even their places of work were inaccessible. The study results further showed that there was a lack of communication between various important stakeholders, including community members, ward councillors, traditional leaders and LM officials. This was due to their differences, such as politics and the struggle for power between LM officials and traditional leaders.

8.2.7 Land as an important asset for improving food security

The results revealed that access to land was a challenge to the livelihoods of the people: food security was attained through direct production from the land. Some of the focus groups indicated that they were still renting land from white people at very high cost. They were struggling to pay the rent, and the land size was also very small so they were unable to produce adequate food and so could not compete in the market. The results further showed that the development of rural areas relied on agricultural production, but access to good quality land was a major constraint contributing to food insecurity.

Furthermore, the results clearly revealed that production issues including access to land, distribution of seed and provision of fertilisers were not the only factors leading to food security, but people tended to concentrate more on these factors. Other factors also affected people in rural areas – for example, they had inadequate or no facilities for storage, processing and marketing their products which contributed to food losses and further compromised food security.

The results also show that access to land in South Africa is a major constraint in poverty reduction, particularly in rural areas. People were unemployed and cannot put food on the table, but if they had access to land and other facilities to store, process and market their production, they could eradicate poverty to some extent, at least. These results indicate the need to improve access to land, particularly by the majority of the black population, which would help to improve food security.

8.2.8 Impact of access to markets on food security

The study findings showed that rural entrepreneurs and small-scale farmers have difficulty in accessing and competing in a formal market due to limited resources including proper transport facilities, the stigma attached to rural activities and products and poor communication between commercial farmers. The results show that the market determined the price for rural entrepreneurs and small-scale farmers; however, prices fluctuated which militated against profits and made them divert to informal markets. The findings confirmed that rural businesses lacked programmes to assist them to compete in the market, and training on networking with experienced and larger entities.

Furthermore, the study findings showed that small-scale farmers particularly were unable to meet the required standards of produce needed by the market, due to lack of storage and packaging facilities and branding their produce to attract the market.

The results also showed, on the other hand, that the government was trying to introduce rural entrepreneurs to the formal market; however, it did not have stable or confirmed programmes and policies that encouraged the market and commercial farmers to work together to improve the rural economy.

These results indicate that inadequate access to formal markets contributed to food insecurity for rural people. Food security cannot be achieved by producing for own consumption only: small businesses have to produce more food for commercial purposes to realise a profit.

8.3 Concluding remarks

South Africans are not yet free from being food insecure, and this applies particularly to rural people due to their poor socio-economic profile. The democratic South African Government has made positive contributions toward alleviating food insecurity in the country and has recognised food security as a fundamental or basic human right, as stipulated in the Constitution (Act 108 of 1996). However, this right is not being fulfilled due to many institutional challenges, since South Africa is a young democracy with many challenges still remaining in the wake of the apartheid regime. It is worth noting that improving availability and accessibility of land for previously disadvantaged and poor populations through the assistance of the government would greatly reduce food insecurity.

The study indicates that black South Africans, in particular, have difficulty in accessing quality land where their production could be maximised and they would be able to compete in the market with commercial farmers who own huge tracts of productive land. South Africa has formulated good food security policies toward ensuring sufficient food production at a national, provincial and local level so as to fulfil constitutional rights. However, the study showed that these policies were not well implemented because rural people were still vulnerable to food insecurity. This institutional challenge needs to be addressed as an urgent priority with special attention to rural areas.

It is also revealed in the study that food in/security is a multi-sectoral issue that needs to be tackled by all governmental departments. Currently, issues of food in/security were mostly aligned with the agricultural sector, and as a result, most of the food security projects and policies were based on agriculture. This indicates the lack of effective coordination between various governmental institutions who need to work together and pool their expertise to achieve food security with the full participation of local community members. Governmental institutions need to initiate strategies to collaborate with the private sector in boosting rural entrepreneurship as a catalyst to attract investors and mobilise local people to create local economic hubs from which they would benefit. This would encourage rural populations to commercialise their local resources and become more versatile in their efforts to generate income rather than relying only on farming as a way of life.

The study shows that in spite of the formation of co-operatives through the Co-operatives Act 14 of 2005 which aimed to support and strengthen rural agricultural development through improving the stability of the farming sector and removal of market barriers, the co-operatives were faced with numerous challenges such as a lack of entrepreneurial skills and inadequate assistance from governmental institutions, including production inputs and financial assistance. This indicates a lack of political will to use co-operatives effectively to address food insecurity by giving full support to providing solutions to problems that hinder the achievement of food security. The subsistence economy mind-set needs to be replaced with a more diversified model through empowering rural people and training them in entrepreneurial skills. It was also noted that governmental institutions, particularly at local level, lack accountability and many food security projects are not successful or stable as a result of political interference, leading to poor service delivery.

The overall conclusion of this study is therefore that governmental institutions together with co-operatives as well as local people should devise effective strategies that would address all the above-mentioned institutional gaps that compromise food security. All institutional gaps that hinder the progress of achieving food security at the local level,

particularly in rural areas, should be investigated seriously, and measures should be taken to overcome these in order to attain food security in outlying areas.

8.4 Recommendations

The following recommendations are based on the study findings, particularly regarding institutional challenges and limitations as well as those facing the community. It is recommended that concerted efforts be made to eliminate challenges to improving food security. However, both government and community have to play their roles in order to create an environment that allows people to have access to food, produce more food for both consumption and commercial purposes, as well as have access to support services from the government. To change the reality at ground level, further research needs to be conducted and policies reconsidered to improve current strategies and processes to eradicate food insecurity in the study area and nation-wide.

8.4.1 Recommendations for the Government and its institutions

- The South African Government should tailor food security policies for specific areas, take their particular needs into consideration, and refrain from 'top-down' control. Communities need to be allowed and empowered to use their indigenous knowledge to produce and have access to food. South Africa is known as the 'rainbow nation' because of its diverse racial and ethnic composition and different communities have their own unique ways of ensuring food security. For this reason, it is essential that communities themselves are involved in devising strategies appropriate to their own individual circumstances, of which they have the best knowledge.
- There is a need to determine new methods of financing or funding rural entrepreneurs and small-scale farmers. Cost-effective ways must be identified to help small-scale farmers to increase production so that they can earn cash as well as compete in the market, thereby improving food security.
- The government should be expanding the number of institutions committed to rural food security programmes. Also, these must be located in rural areas in order to give

the rural populace easy access to their services. Beneficiaries have to be actively involved in these programmes in terms of decision-making so that the entire community benefits.

- The government should address issues of food access and affordability for low-income people, particularly in rural areas where the majority of the population has a poor socio-economic profile. Programmes such as unemployment grants should be formulated and implemented to enable people to enjoy the right to food as stipulated in the Constitution. Food aid programmes should also be introduced when necessary to avoid hunger or famine.
- The government should change the method of budget allocation. Currently, urban municipalities receive huge budgets compared to rural municipalities. More money should be channelled to rural municipalities and institutions because they have limited resources and lack revenue streams as a source of income: in addition, the majority of their population lives in poverty. The government also needs to increase funding for agricultural programmes.
- The government needs to provide and sustain enough skilled human resources, especially in the agricultural sector. The government should train more local people and employ them as qualified personnel with community development skills. This would be a way of creating jobs in rural areas.
- The government should look into other approaches to food security, such as intensifying livestock production and assisting farmers to protect their animals against disease and theft.
- The government should commit to assisting and empowering people to maximise produce from their fields through introducing modern farming practices.
- Governmental institutions need to apply openness and transparency towards services that are relevant to uplifting the standard of living in the community.

• Lastly, the government should create programmes to empower rural co-operatives to sustain their projects, the existence of which should also create job opportunities, particularly for young people. This also requires the government to develop a programme that links co-operatives with commercial farmers and the private sector as a way of giving them easier access to the market.

8.4.2 Recommendations for the uThungulu community

- Community members need to change their mindset about the role of government towards service delivery and work towards self-sufficiency.
- Community members should learn to take the initiative to devise ways of improving their livelihoods and should avoid waiting for the government to do things for them.
- Communities should improve consultation with their local institutions in order to acquire more information with regard to the projects that could help them to earn a better living.

8.4.3 Recommendations for further research

The results of this research study have raised several questions that need to be answered by further research as suggested below:

- Investigating the implementation of food security projects and programmes in rural areas, and continuing to monitor and evaluate these.
- Analysing the influence of politics in measures to alleviate food insecurity in rural areas.
- Assessing the role of information communication technology facilities in marketing the products of rural agricultural co-operatives and networking with other stakeholders.

REFERENCES

Abdullahi, A. 2008. *Food security in Nigeria: how close are we?* Paper presented at Federal Radio Corporations Annual October lecture, 9 October 2008, Abuja.

Abdulla, A.M. 2015. Determinants of household food security and coping strategies: the case of Bule-hora District, Borana zone, Oromia, Ethiopia. *European Journal of Food Science and Technology* 3(3): 30-44.

Abdu-Raheem, K.A. & Worth, S.H. 2011. Household food security in South Africa: evaluating extension's paradigms relative to the current food security and development goals. *South African Journal of Agric. Ext.* 39 (2): 91-103.

Abu, B.M., Domanban, P.B. & Sekyi, S. 2016. Credit market participation by women-owned small-scale enterprises in Wa and Jirapa districts of the Upper West region of Ghana. *Ghanaian Journal of Economics* 4(1): 71-97.

Akhter, S. 2017. Market integration between surplus and deficit rice markets during global food crisis period. *Australian Journal of Agricultural and Resource Economics* 61(1): .172-188.

Akpalu, D.A. 2013. Agriculture extension service delivery in a semi-arid rural area in South Africa: the case study of Thorndale in the Limpopo Province. *African Journal of Food, Agriculture, Nutrition and Development* 13(4): 8034-8057.

Alamgir, M. & Arorai, P. 1991. *Providing food security for all*. International Fund for Agricultural Development, New York University Press.

Alemu, Z.G. 2015. Developing a Food (in) Security Map for South Africa.

Aliber, M. & Hart, T.G.B. 2009. Should subsistence agriculture be supported as a strategy to address rural food insecurity? *Agrekon* 48(4): 434-458.

Allahdadi, F. 2011. The contribution of agricultural co-operatives on poverty reduction: a case study of Marvasht, Iran. *Journal of American Science* 7(4): 22-25.

Al-Hujran, O., Al-Debei, M.M., Chatfield, A. & Migdadi, M. 2015. The imperative of influencing citizen attitude toward e-government adoption and use. *Computers in Human Behavior* 53: 189-203.

Allison, E.H. & Ellis, F. 2001. The livelihoods approach and management of small-scale fisheries. *Marine Policy* 25: 377-388.

Allison, E.H. & Horemans, B. 2006. Putting the principles of the sustainable livelihoods approach into fisheries development policy and practice. *Marine Policy* 30: 757-766.

Altman, M. 2009. Employment scenarios from 2014 and 2024 in the context of a global economic slow-down. Pretoria: Human Sciences Research Council.

Altman, M., Hart, T.G. & Jacobs, P.T. 2009. Household food security status in South Africa. *Agrekon* 48(4): 345-361.

Andrews, M. 2013. *The limits of institutional reform in development*. Cambridge: Cambridge University Press.

Antelo, M., Magdalena, P. & Reboredo, J.C. 2017. Economic crisis and the unemployment effect on household food expenditure: the case of Spain. *Food Policy* 69: 11-24.

Antoni, A. & Umejesi, I. 2014. Small towns and enterprises: a study of workplace relations in a rural town in South Africa. *Journal of Sociology and Social Anthropology* 5(2): 141-152.

Ashley, C. & Carney, D. 1999. *Sustainable livelihoods: lessons from early experience*. London: Department for International Development.

Azeem, M.M., Mugera, A.W. & Schilizzi, S. 2016. Living on the edge: household vulnerability to food-insecurity in the Punjab, Pakistan. *Food Policy* 64: 1-13.

Babbie, E. 2007. The practice of social research. Belmont: Thomson Wadsworth.

Babatunde, R.O., Omotesho, O.A., Olorunsanya, E.O. & Owotoki, G.M. 2008. Determinants of vulnerability to food insecurity: a gender-based analysis of farming households in Nigeria. *Indian Journal of Agricultural Economics* 63(1): 116.

Baiphethi, M. & Jackobs, P.J. 2009. The contribution of subsistence farming to food security in South Africa. *Agrekon* 4(48): 459-482.

Banerjee, A.V. & Duflo, E. 2007. The economic lives of the poor. *The Journal of Economic Perspectives: A Journal of the American Economic Association* 21(1): 141.

Banik, B. J. 1993. Applying triangulation in nursing research. *Applied Nursing Research* 6(1): 47-52.

Barclay, K. & Epstein, C. 2013. Securing fish for the nation: food security and governmentality in Japan. *Asian Studies Review* 37(2): 215-233.

Barham, J. & Chitemi, C. 2009. Collective action initiatives to improve marketing performance: lessons from farmer groups in Tanzania. *Journal of Food Policy* 34: 53-59.

Barnett, J. & Adger, W.N. 2007. Climate change, human security and violent conflict. *Political Geography* 26(6): 639-655.

Barrett, C.B., Reardon, T. & Webb, P. 2001. Non-farm income diversification and household livelihood strategies in rural Africa: concepts, dynamics, and policy implications. *Food policy* 26(4): 315-331.

Barrios, E.B. 2008. Infrastructure and rural development: household perceptions on rural development. *Progress in Planning* 70 (1): 1-44.

Barwa, S.D. 1995. *Structural adjustment programmes and the urban informal sector in Ghana*. International Labour Office, Development and Technical Cooperation Department.

Basset-Mens, C. & Van der Werf, H.M.G. 2005. Scenario-based environmental assessment of farming systems: the case of pig production in France. *Agriculture, Ecosystems and Environment* 105: 127-144.

Battersby, J. 2011. Urban food insecurity in Cape Town, South Africa: an alternative approach to food access. *Development Southern Africa* 28(4): 545-561.

Battersby, J. 2017. MDGs to SDGs – New goals, same gaps: the continued absence of urban food security in the post-2015 global development agenda. *African Geographical Review* 36(1): 115-129.

Baumgartner, R. & Hogger, R. 2004. *In search of sustainable livelihood systems: managing resources and change.* New Delhi: Sage Publications.

Bellows, A.C., Núñez, M.D. & Viana, S.G. 2015. 1 The evolving nature of the human rights system and the development of the right to adequate food and nutrition concept. Gender, nutrition, and the human right to adequate food: toward an inclusive framework. 47: 1.

Bergh, A. & Nilsson, T. 2014. Is globalization reducing absolute poverty? *World Development* 62: 42-61.

Bhandari, P.B. 2013. Rural livelihood change? Household capital, community resources and livelihood transition. *Journal of Rural Studies* 32: 126-136.

Binam, J.N., Place, F., Djalal, A.A. & Kalinganire, A. 2017. Effects of local institutions on the adoption of agroforestry innovations: evidence of farmer-managed natural regeneration and its implications for rural livelihoods in the Sahel. *Agricultural and Food Economics* 5(1): 2.

Bingen, J. 2000. Institutions and sustainable livelihoods. Michigan State University.

Bingen, J., Serrano, A. & Howard, J. 2003. Linking farmers to markets: different approaches to human capital development. *Food policy* 28(4): 405-419.

Black, P.A. 1993. Affirmative Action: Rational response to a changing environment. *South African Journal of Economics* 61(4): 330-334.

Black, P.A. 2002. On the case for Black Economic Empowerment in South Africa. *South African Journal of Economics* (70): 8:

Bohle, H.G., Downing, T.E. & Watts, M.J. 1994. Climate change and social vulnerability: toward a sociology and geography of food insecurity. *Global Environmental Change* 4(1): 37-48.

Bola, G., Mabiza, C., Goldin, J., Kujinga, K., Nhapi, I., Makurira, H. & Mashauri, D. 2014. Coping with droughts and floods: a case study of Kanyemba, Mbire District, Zimbabwe. *Physics and Chemistry of the Earth*, Parts A/B/C. 67: 180-186.

Botes, L. & van Rensburg, R. 2000. Community participation in development: nine plagues and twelve commandments. *Oxford University Press and Community Development Journal* 35(1): 41-58.

Bonti-Ankomah, S. 2001. *Addressing food insecurity in South Africa*. Paper presented at the SARPN conference on Land Reform and Poverty Alleviation in Southern Africa. Pretoria: June 4–5.

Breslin, E.D., Delius, P. & Madrid, C. 1997. Strengthening institutional safety nets in South Africa: sharing Operation Hunger's insights and experiences. *Development Southern Africa* 14(1): 21-41. DOI: 10.1080/03768359708439948.

Brignall, S. & Modell, S. 2000. An institutional perspective on performance measurement and management in the new public sector. *Management Accounting Research* 11: 281-306.

Brocklesby, M.A. and Fisher, E. 2003. Community development in sustainable livelihoods approaches: an introduction. *Oxford University Press and Community Development Journal* 38 (3): 185-198.

Bromley, D. 1989. Property relations and economic development: the other land reform. *World Development* 17: 867-877.

Bruhn, M. & Love, I. 2014. The real impact of improved access to finance: evidence from Mexico. *The Journal of Finance* 69(3): 1347-1376.

Brunsson, N. & Olsen, J.P. 1997. The Reforming Organisation. Fagbokforlaget, Bergen.

Burns, N. & Grove, S.K. 1993. The practical^? of nursing research: conduct, critique and utilisation. (3rd ed.) W.B. Saunders, Philadelphia.

Butt, T.M., Hassan, Z.Y., Mehmood, K. & Muhammad, S. 2010. Role of rural women in agricultural development and their constraints. *Journal of Agric. Soc. Sci.* 6: 53-56.

Carr, E.R. 2006. Postmodern conceptualisations, modernist applications: rethinking the role of society in food security. *Food Policy* 31(2206): 14-29.

Carter, M.R. & May, J. 1999. Poverty, livelihood and class in rural South Africa. *World Development* 27(1): 1-20.

Carter, M.R. & May, J. 2001. One kind of freedom: poverty dynamics in post-apartheid South Africa. *World Development* 29(12): 1988-2005.

Carter, N., Brush, C., Greene, P., Gatewood, E. & Hart, M. 2003. Women entrepreneurs who break through to equity financing: the influence of human, social and financial capital. *Venture Capital: An International Journal of Entrepreneurial Finance* 5(1): 1-28.

Casile, M. & Davis-Blake, A. 2002. When accreditation standards change: factors affecting differential responsiveness of public and private organisation. *Academy of Management Journal* 45: 180-195.

Chakraborty, S. & Newton, A.C. 2011. Climate change, plant diseases and food security: an overview. *Plant Pathology* 60: 2-14.

Chambo, S. Mwangi, M. & Oloo, O. 2007. An analysis of the socio-economic impact of cooperatives in Africa and their institutional context. ICA Regional Office for Africa, Nairobi.

Chambo, S. 2009. Agricultural co-operatives: role in food security and rural development. Paper presented to expert group meeting on co-operatives. New York: 28-30 April, 2009.

Chambers, R. 1989. Editorial introduction: Vulnerability, coping and policy. *IDS Bulletin* 20 (2): 1-7.

Chambers, R. & Conway, G. 1992. Sustainable rural livelihoods: practical concepts for the 21st century. *Institute of Development Studies (UK)*.

Chambers, R. 1988. Sustainable rural livelihoods: a strategy for people, environment and development. Earthscan Committee. June, 1997 (mimeo).

Chan, G. 2014. China and small states in food security governance. *African and Asian Studies* 13: 59-79.

Cheater, A. 1999. Anthropology of power: empowerment and disempowerment in changing structures. New York: Routledge.

Chiloane-Tsoka, E. 2013. An investigation into barriers facing women entrepreneurs operating in SMMEs in Tshwane, South Africa. *Journal of Economic and Financial Sciences* 6(2): 347-358.

Choo, C.W. 2007. The knowing organisation: how organisations use information to construct meaning, create knowledge and make decisions. Oxford scholarship online, September 2007, viewed 20 June 2015. http://www.da.org.za/docs/633/5%/20municipalities_document.pdf

Civil Society Agriculture Network, 2011. "The people's voice!" A community consultation on food and nutrition security in Malawi. Viewed 12 March 2015. www.odi.org.uk/food-security-forum.

Clapp, J. & Helleiner, E. 2012. Troubled futures? The global food crisis and the politics of agricultural derivatives regulation. *Review of International Political Economy* 19(2): 181-207.

Clemens, E.S. & Cook, J.M. 1999. Politics and institutionalism: explaining durability and change. *Annual Review of Sociology* 25: 441-446.

Collinson, S. 2003. *Power, livelihoods and conflict: Case studies in political economy analysis for humanitarian action.* Humanitarian Policy Group Report, No. 13. London: Overseas Development Institute.

Conway, G.R. & Barbier, E.B. 1990. After the green revolution: sustainable agriculture for development. London: Earthscan.

Corley, K.G. & Gioia, D.A. 2011. Building theory about theory building: what constitutes a theoretical contribution? *Academy of Management Review* 36(1): 12-32.

Crossan, J., Cumbers, A., McMaster, R. & Shaw, D. 2016. Contesting neoliberal urbanism in Glasgow's community gardens: the practice of DIY citizenship. *Antipode* 00(0): 1-19.

Crow, K., Conger, M.M. & Knoki-Wilson, U. 2011. Mentorship for nursing in a rural area: a program for success for working with diverse populations. *Online Journal of Rural Nursing and Health Care* 11(2): 43-50.

Davis, O. & Geiger, B.B. 2017. Did food insecurity rise across Europe after the 2008 crisis? an analysis across welfare regimes. *Social Policy and Society* 16(3): 343-360.

De Cock, N., D'Haese, M., Vink, N., Van Rooyen, C.J., Staelens, L., Schonfeldt, H.C. & D'Haese, L. 2013. Food security in rural areas of Limpopo Province, South Africa. *Food Security* 5: 269-282.

Debrah, E. 2013. Alleviating poverty in Ghana: the case of livelihood empowerment against poverty (LEAP). *Africa Today* 59(4): 40-67.

De Haan, L.J. 2012. The livelihood approach: a critical exploration. *Erdkunde*: 345-357.

Del Ninno, C., Dorosh, P.A. & Subbarao, K. 2007. Food aid, domestic policy and food security: contrasting experiences from South Asia and sub-Saharan Africa. *Food Policy* 32: 413-435.

De Marco, M. & Thorburn, S. 2008. The association between sociodemographic factors, participation in assistance programs, and food insecurity among Oregon Residents. *Journal of Hunger and Environmental Nutrition* 3(1): 36-50.

Department of Agriculture and Rural Development and Land Affairs. 1997. Food security policy for South Africa: a discussion document. Pretoria: Department of Agriculture and Rural Development and Land Affairs.

Department of Agriculture, 2002. *International training strategy for the agricultural sector*. Pretoria: Department of Agriculture.

Department of Agriculture, 2006. *International* training *strategy for the agricultural sector*. Pretoria: Department of Agriculture.

Department of Social Development and Department of Agriculture. Forestry and Fisheries, 2012. *National policy on food and nutrition security*. Pretoria: Department of Social Development and Department of Agriculture, Forestry and Fisheries.

Department of Agriculture, Forestry and Fisheries. 2012. *The framework of the Zero Hunger Programme*. Pretoria: Department of Agriculture, Forestry and Fisheries.

Department of Social Development and Department of Agriculture, Forestry and Fisheries, 2013. *National policy on food and nutrition security*. Pretoria: Department of Social Development and Department of Agriculture, Forestry and Fisheries.

Deininger, K. & Feder, G. 1999. *Land policy in developing countries*. (Rural development Note No. 3). Washington DC: World Bank.

Dercon, S. & Krishnan, P. 2005. 14 Food aid and informal insurance. *Insurance against Poverty*, 305.

Dercon, S., Hoddinott, J. & Woldehanna, T. 2005. Shocks and consumption in 15 Ethiopian villages, 1999-2004. *Journal of African Economies* 14(4): 559.

Devereux, S. 1996. Fuzzy entitlements and common property resources: struggles over rights to communal land in Namibia (Working Paper 44). Brighton: Institute of Development Studies and University of Sussex.

Devereux, S. 2000. Famine in the twentieth century. (IDS working paper 105). Brighton: Institute for Development Studies.

Devereux, S. 2001. Sen's entitlement approach: critiques and counter-critiques. *Oxford Development Studies* 29(3): 245-263.

Devereux, S. 2009. Why does famine persist in Africa? Food Security 1(1): 25-35.

Devereux, S. 2016. Social protection for enhanced food security in sub-Saharan Africa. *Food Policy* 60: 52-62.

DFID. 1999. Sustainable livelihoods guidance sheets. London: DFID.

Dodd, N.M. & Nyabvudzi, T.G. 2014. Unemployment, living wages and food security in Alice, Eastern Cape, South Africa. *Journal of Human Ecology* 47(2): 117-123.

Doig, M., Jackson, D. & Rai, K. 2005. *Energy for rural livelihoods: a framework for sustainable decision-making*. Bourton Hall: ITDG Publishing.

Dowlah, C. 2006. The politics and economics of food and famine in Bangladesh in the early 1970s with special reference to Amartya Sen's interpretation of the 1974 Famine. *International Journal of Social Welfare* 15: 344-356.

Dovie, D.B.K., Shackleton, C.M. & Witkowski, E.T.F. 2006. Valuation of communal area livestock benefits, rural livelihoods and related policy issues. *Land Use Policy* 23: 260-271.

Dreze, J. & Sen, A. 1989. Hunger and public action. Oxford: Clarendon Press.

Drimie, S & Rugsemok, S., 2010. The integrated food security strategy of South Africa: an institutional analysis. *Agrekon* 49(3): 316-337.

Drinkwater, M. & Rusinow, T. 1999. Application of CARE's livelihoods approach. In *Presentation for Natural Resource Advisor's Conference*.

Drori, G.S., Meyer, J.W., & Hwang, H. (eds.) 2006. *Globalisation and organisation: world society and organizational change*. Oxford: Oxford University Press.

Duffy, C., Murray, U., Nowak, A., Girvetz, E., Corner-Dolloff, C., Twyman, J., Huyer, S., Jarvis, A. & Spillane, C. 2017. National level indicators for gender, poverty, food security, nutrition and health in climate-smart agriculture (CSA) activities.

Duncan, A. 1999. The food security challenge for Southern Africa. *Food Policy* 23(6): 459-475.

Duncan, J. & Barling, D. 2012. Renewal through participation in global food security governance: implementing the international food security and nutrition civil society mechanism to the committee on world food security. *International Journal of Agriculture and Food* 19(2): 143-161.

Du Toit, G.S., Erasmus, B.J. & Strydom, J.W. 2009. *Introduction to business management*. (7th edition.) Southern Africa, Oxford University.

Ebohon, O.J., Field, B.G. & Ford, R. 1997. Institutional deficiencies and capacity building constraints: the dilemma for environmentally sustainable development in Africa. *The International Journal of Sustainable Development & World Ecology* 4(3): 204-213.

Ebrahim, A. 2003. Making sense of accountability: conceptual perspectives for northern and southern. *Non-profit Management and Leadership* 14: 191-212.

Elahi, K.Q. 2006. Entitlement failure and deprivation: a critique of Sen's famine philosophy. *Journal of Development Studies* 42(4): 541-558.

Ellis, F. & Allison, E. 2004. Livelihood diversification and natural resource access. Overseas Development Group, University of East Anglia.

Ellis, F. & Manda, E. 2012. Seasonal food crises and policy responses: a narrative account of three food security crises in Malawi. *World Development* 40(7): 1407-1417.

Elliott, K. & Dunning, C. 2016. Assessing the US feed the future initiative: a new approach to food security? *CGD Policy Paper:* 75.

Faber, M., Witten, C. & Drimie, C. 2011. Community-based agricultural interventions in the context of food and nutrition security in South Africa. *South African Journal of Clinical Nutrition* 24(1): 21-30.

Fakudze, C.D. & Machethe, C.L. 2015. Improving smallholder livestock farmers' income through value chain financing in South Africa. *Development in Practice* 25(5): 728-736. DOI: 10.1080/9614524.2015.1047326.

Farkas, L.B. 2013. The human right to water and sanitation: context, contours, and enforcement prospects. *Wisconsin International Law Journal* 30(4): 118-245.

Farrington, J., Ramasut, T. & Walker, J. 2002. Sustainable livelihoods approaches in urban areas: general lessons, with illustrations from Indian cases.

Fatoki, O.O. & Smit, A.V.A. 2011. Constraints to credit access by new SMEs in South Africa: a supply-side analysis. *African Journal of Business Management* 5(4): 1413.

Fatoki, O. 2013. The determinants of longevity of micro-enterprises in South Africa. *Journal of Economics* 4(2): 133-143.

Fawcett, S.B., Paine-Andrews, A., Francisco, T.V., Schultz, J.A., Richter, K.P., Lewis, R.L., Harris, K.J., Williams, E., Berkley, J. & Lopez, C. 1995. Using empowerment in collaborative partnerships for community health and development. *American Journal of Community Psychology* 23: 677-697.

Fedderke, J., Perkins, P. & Luiz, J. 2006. Infrastructural investment in long – run economic growth: South Africa 1875 – 2001. *World Development* 34(6): 1037 – 1059.

Fernandez-Alless, M.L. & Llamas-Sanchez, R. 2008. The neo-institutional analysis of change in public services. *Journal of Change Management* 8(1): 3-20.

Fine, B. 1997. Entitlement failure? *Development and Change* 28: 617-647.

Firmstone, J. & Coleman, S., 2015. Public engagement in local government: the voice and influence of citizens in online communicative spaces. *Information, Communication and Society* 18(6): 680-695.

Fischer, E. & Qaim, M. 2012. Linking smallholders to markets: determinants and impacts of farmer collective action in Kenya. *World Development* 40(6): 1255-1268.

Food and Agriculture Organization. 1994. *Policies for sustainable development: four essays.* Rome: *Economic and Social Development Paper 121*.

Food and Agriculture Organization, 1996. *The state of food insecurity in the world 2011*. Rome: Food and Agriculture Organization.

Food and Agriculture Organization, 2001. World markets for organic fruit and vegetables. Rome: Food and Agriculture Organization/ ITC/ CTA.

Food and Agriculture Organization, 2002. Livelihood support programme: improving support for enhancing livelihoods of the rural poor (GCP/INT/UK/803). Rome: Food and Agriculture Organization.

Food and Agriculture Organization, 2003. Agricultural extension, rural development and the food security challenge. Rome: Food and Agriculture Organization.

Food and Agriculture Organization, 2010. *Promoting the growth and development of smallholder seed enterprises for food security crops: case studies from Brazil, Cote d' Ivoire and India. AGP. Series* 201. Rome: Food and Agriculture Organization. www.fao.org/docrep/013/i1839e00.pdf. 29 - 03 - 2013

Food and Agriculture Organization, 2012. The state of food insecurity in the world: economic growth is necessary but not sufficient to accelerate reduction of hunger and malnutrition. Rome: Food and Agricultural Organization.

Food and Agriculture Organization, 2015. WFP, 2014. *The state of food insecurity in the world.* Rome: Food and Agriculture Organization.

Food and Organization. 2012. DFID sustainable fisheries livelihoods programme in West Africa and FAO fisheries department technical programme. Rome: Food and Agriculture Organization.

Food and Agriculture Organization, 2013. *The state of food insecurity in the world*. Accessed 21 February 2015, http://www.fao.org/docrep/018/i3434e/i3434e.pdf/

Food and Agriculture Organization, 2014. *The state of food insecurity in the world.* Accessed 21 February 2015, http://www.fao.org/docrep/018/i3434e/i3434e.pdf/

Food and Agriculture Organization, 2014. *Food insecurity in the horn of Africa*. Accessed 24 May 2015 http://www.fao.org/docrep/003/x8530e02.htm

Francis, E. 2002. Rural livelihoods, institutions and vulnerability in North West Province, South Africa. *Journal of Southern African Studies* 28(3): 531-550. DOI: 10. 1080/030570702200006503

Francis, P. & James. R. 2003. Balancing rural poverty reduction and citizen participation: the contradictions of Uganda's decentralisation program. *World Development* 31(2): 325-337.

Frediani, A.A. 2007. Amartya Sen, the World Bank, and the redress of urban poverty: a Brazilian case study. *Journal of Human Development* 8(1): 134-152.

Friedmann, J. 1992. *Empowerment: politics of alternative development*. Blackwell Publishers, Malden, MA.

Fukuda-Parr, S & Taylor, V. 2015. Food security in South Africa: human rights and entitlement perspectives. Cape Town: University of Cape Town Press.

Fukuyama, F. 2004. *State-building: governance and world order in the twenty-first century.* Ithaca, NY: Cornell University Press.

Gadgil, M. & Guha, R. 1992. This fissured land: an ecological history of India. Berkeley: University of California Press.

Gagliardi, F. 2008. Institutions and economic change: a critical survey of the new institutional approaches and empirical evidence. *Journal of Socio-Economics* 37: 416-443.

Gebrehiwot, T. 2008. Rural food security in Tigray, Ethiopia: policy impact evaluation. International Institute for Geo-Information Science and Earth Observation, Enschede, The Netherlands.

Gibbs, G.R., 2007. Analysing qualitative data: The SAGE Qualitative Research Kit. Sage, Thousand Oaks, CA.

Gollin, D., Parente, S.L. & Rogerson, R. 2007. The food problem and the evolution of international income levels. *Journal of Monetary Economics* 54: 1230-1255.

Gollin, D. 2008. Nobody's business but my own: self-employment and small enterprise in economic development. *Journal of Monetary Economics* 55: 219-233.

Gough, S. 2006. Empowerment. Viewed 25 September 2015, from www.fride.org.

Govender, I.G. & Reddy, P.S. 2014. Monitoring and evaluation in municipalities: a case study of KwaZulu-Natal Province. *Administration Publica* 22(4): 160-177.

Graftstein, R. 1992. Institutional realism: social and political constraints on rational actors. New Haven, CT: Yale University Press.

Grindle, M.S. 2007. Good enough governance revisited. *Development Policy Review* 25(5): 533-574.

Grote, U. 2014. Can we improve global food security? A socio-economic and political perspective. *Food Security* 6(2): 187-200.

Gutierrez-Montes, I., Emery, M. & Fernandez-Baca, E. 2009. The sustainable livelihoods approach and the community capitals framework: the importance of system-level approaches to community change efforts. *Community Development* 40(2): 106-113.

Guthman, J., Morris, A.M. & Allen, P. 2006. Squaring farm security and food security in two types of alternative food institutions: University of California at Santa Cruz and the USDA. *Rural Sociology* 71(4): 662.

Halakatti, S.V., Sajjan, C.M., Gowda, D.S.M. & Kamaraddi, V. 2010. Empowerment of women through dairy training. *Karnataka Journal of Agricultural Sciences* 20(1), 89.

Hamann, R., Giamporcaro, S., Johnston, D. & Yachkaschi, S. 2011. The role of business and cross-sector collaboration in addressing the "wicked" problem of food insecurity. *Development Southern Africa* 28(4): 579-594.

Hanazaki, N., Berkes, F., Seixas, C.S. & Peroni, N. 2013. Livelihood diversity, food security and resilience among the Caiçara of coastal Brazil. *Human Ecology* 41(1): 153-164.

Hannah, L, Ikegami, M, Hole, D.G, Seo, C., Butchart, SHM, Peterson, A.T. and Roehrdanz, P.R. 2013. Global climate change adaption priorities for biodiversity and food security. *PLoS ONE*, 8(8): e72590.doi:10.1371/journal. Pone 0072590.

Hansen-Kuhn, K. 2011. Making US trade policy serve global food security goals. *Sustainable Development: Law and Policy* 11(3): 9-13; 36-38.

Hardoon, D. 2012. Corruption index. 27-30. http://www.transparency.org/cpi2012/results.

Hart, T. 2009. Food security definitions, measurements and recent initiatives in South Africa and Southern Africa. Pretoria: Human Sciences Research Council.

Headey, D.D. 2013. The impact of the global food crisis on self-assessed food security. *The World Bank Economic Review* 27(1): 1-27.

Helal, G.D.P. 2016. Corruption and food security status: an exploratory study on perceived corruption and access to adequate food on a global scale. (Doctoral dissertation, McGill University Libraries).

Hellin, J., Lundy, M. & Meijer, M. 2009. Farmer organization, collective action and market access in Meso-America. *Journal of Food Policy* 34: 16-22.

Hendricks, S. 2013. South Africa's National Development Plan and new growth path: reflections on policy contradictions and implications for food security. *Agrekon* 52(3): 1-17.

Hendricks, S.L. & Olivier, N.J. 2015. Review of the South African agricultural legislative framework: food security implications. *Development Southern Africa* 32(5): 555-576.

Hendriks, S.L., van der Merwe, C., Ngidi, M.S., Manyamba, C., Mbele, M., McIntyre, A.M., Mkandawire, E., Molefe, Q.N., Mphephu, M.Q. & Ngwane, L. 2016. What are we measuring? Comparison of household food security indicators in the Eastern Cape Province, South Africa. *Ecology of food and nutrition* 55(2): 141-162.

Hesselberg, J. & Yaro, J.A. 2006. An assessment of the extent and causes of food insecurity in northern Ghana using a livelihood vulnerability framework. *GeoJournal* 67(1): 41-55.

Hitt, M. A. & Smith, K.G. 2005. Introduction: the process of developing management theory. In K.G. Smith & M.A. Hitt (eds). *Great minds in management: the process of theory development*. 1-6, Oxford: Oxford University Press.

Holt-Gimenez, E. & Patel, R. 2009. *Food rebellions! Crisis and hunger for justice*. Cape Town: Pambazuka Press.

Hossain, M.S., Uddin, M.J., & Fakhruddin, A.N.M. 2013. Impact of shrimp farming on the coastal environment of Bangladesh and approach for management. *Reviews in Environmental Science and Bio/Technology* 12: 313-332.

Howlett, M. 2003. Administrative styles and the limits of administrative reform: a neo-institutional analysis of administrative culture. *Canadian Public Administration* 46(4): 471-494.

Hristov, A.N., Degaetano, A.T., Rotz, C.A., Hoberg, E., Skinner, R.H., Felix, T., Li, H., Patterson, P.H., Roth, G., Hall, M. & Ott, T.L. 2017. Climate change effects on livestock in the Northeast US and strategies for adaptation. *Climatic Change*: 1-13.

Huchzermeyer, M. 2004. *Unlawful occupation: informal settlements and urban policy in South Africa and Brazil*. Africa World Press.

Human Sciences Research Council, 2004. Food security in South Africa: key policy issues for the medium term. Pretoria: Human Sciences Research Council.

Hur, M.H. 2006. Empowerment in terms of theoretical perspectives: exploring a typology of the process and components across disciplines. *Journal of Community Psychology* 34(5): 523 540.

Hutchison, W.R. 1993. Errand to the world: American Protestant thought and foreign missions. University of Chicago Press.

Hussain, J. 2006. *Business start-up and access to finance for SMEs and new technology-based firms*. Paper presented at Conference for the International Network for SME Association.

Hussein, K. & Nelson, J. 2016. Sustainable livelihoods and livelihood diversification. IFPRI (International Food Policy Research Institute). 2002. Assessing the impact of agricultural research on poverty using the sustainable livelihoods framework. Washington, D.C. 20006 U.S.A., March 2002.

Ile, I.U. 2010. Strengthening intergovernmental relations for improved service delivery in South Africa: issues for consideration. *Journal of US-China Public Administration* 7(1): 51-57.

International Labour Organisation, 2007. Fact sheet co-operatives and rural employment. Accessed 3 May 2015. http://www.copacgva.org/publications/2007-ilo-ruralemployment-coops.pdf.

Ingle, M.K. 2014. An analysis of factors impeding SMME performance in South Africa. *Africa Insight* 44(2): 37-50.

International Food Policy Research Institute (IFPRI). 2011. Policies, institutions and markets to strengthen food security and incomes for the rural poor: a revised proposal submitted to the CGIAR Consortium Board. International Food Policy Research Institute.

Iruonagbe, T.C. 2010. Land ownership patterns and the economic life of women: a study of Ozalla Community, Edo State, Nigeria. VDM Verlag. Dr. Muller Aktiengesellschaft and Co. KG., Saarbrucken, Germany.

Iruonagbe, T.C. 2011. Gender equity and food security: lessons from Ozalla community, Edo State, Nigeria. *Gender and Behaviour* 9(1): 89-110.

Islam, M.S. & Wong, A.T. 2017. Climate change and food in/security: a critical nexus. *Environments* 4(2): 38.

Jayne, T.S., Mather, D & Mghenyi, E. 2010. Principal challenges confronting smallholder agriculture in sub-Saharan Africa. *World Development* 38(10): 1384-1398.

Jayne, T.S., Yamano, T., Weber, M.T., Tschirley, D., Benfica, R., Chapoto, A. & Zulu. B. 2003. Smallholder income and land distribution in Africa: implications for poverty reduction strategies. Working paper, Zambia Food Security Research Project, Lusaka.

Julio, C.F.F. & Brauch, H.G. 2009. The human security network: a global north-south coalition. In *Facing global environmental change*. 991-1001.

Just Food Ottawa. 2012. Just Food Ottawa: Alimentation juste d'Ottawa: constitution and by-laws. Just Food Ottawa, Ottawa, ON.

Kaganzi, E., Ferris, S., Barham, J., Abenakyo, A., Sanginga, P. & Njuki, J. 2009. Sustaining linkages to high value markets through collective action in Uganda. *Journal of Food Policy* 34: 23-30.

Kataneksza, J., Riddhima, A.M. & Gary, A.W. 2012. *Confronting food insecurity: addressing food access and availability in KwaZulu-Natal*. Graduate program in International Affairs at the Milano School of International Affairs, Management and Urban Policy.

Kawamura, Y. 2015. Structural adjustment and social protection in the Middle East and North Africa: food subsidies in Jordan. *Contemporary Arab Affairs* 8(1): 81-95.

Kepe, T. & Tessaro, D. 2012. *Integrating food security with land reform: a more effective policy for South Africa*. Centre for International Governance Innovation.

Kepe, T., & Tessaro, D. 2012. Trading off: rural food security and land rights in South Africa. *Land Use Policy* 36: 267-274.

Kirkpatrick, S.I. & Tarasuk, V. 2009. Food insecurity and participation in community food programs among low-income Toronto families. *Canadian Journal of Public Health/Revue Canadienne de Sante'e Publique*. 135-139.

Koc, Y., de Mello, A.J., McHale, G., Newton, M.I., Roach, P. & Shirtcliffe, N.J. 2008. Nanoscale super hydrophobicity: suppression of protein adsorption and promotion of flow induced detachment. *Lab on a Chip* 8: 582-586.

Koch, J. 2011. *The food security policy context in South Africa*. International Policy Centre for Inclusive Growth: United Nations Development Programme.

Koch-Weser, I. 2012. China in international food markets: revisiting the responsible stakeholder debate. *Harvard Asia Quarterly* 14(4).

Koelble, T.A. & LiPuma, E. 2010. Institutional obstacles to service delivery in South Africa. *Social Dynamics* 36(3): 565-589.

Koma, S.B. 2010. The state of local government in South Africa: issues, trends and options. *Journal of Public Administration* 45(1.1): 111-120.

Koma, S.B. 2014. The implementation of local economic development policy: the case of the Emakhazeni local municipality in South Africa. *Administratio Publica* 22(1.1): 40-60.

Koppmair, S., Kassie, M. and Qaim, M. 2017. Farm production, market access and dietary diversity in Malawi. *Public Health Nutrition* 20(2): 325-335.

Kruger, L.P. 2011. The impact of Black Economic Empowerment (BEE) on South African businesses: Focusing on ten dimensions of business performance. *Southern African Business Review* 15: 207-233.

Kruijssen, F., Keizer, M. & Giuliani, A. 2009. Collective action for small-scale producers of agricultural biodiversity products. *Journal of Food Policy* 34: 46-52.

Kydd, J. & Dorward, A. 2001. The Washington consensus on poor country agriculture: analysis, prescription and institutional gaps. *Development Policy Review* 19(4): 467-478.

Labadarios, D., Mchiza, Z.J.R., Steyn, N.P., Gericke, G., Maunder, E.M.W., Davids, Y.D. & Parker, W. 2011. Food security in South Africa: a review of national surveys. *Bulletin of the World Health Organization* 89: 891-899.

Lang, T. & Barling, D. 2012. Food security and food sustainability: reformulating the debate. *The Geographical Journal* 178(4): 313-326. doi: 10.1111/j.14754959.2012.00480. x.

Lenselink, N. & Cacaud, P. 2002. Roles in artisanal fisheries management and interaction between fisheries management and fishers' livelihoods. (69).

Luan, H., Jia, X. & Huang, J. 2014. Household access to nongovernmental microfinance, formal credit and informal credit in rural China. *Review of Economics and Finance* 4: 61-76.

Ligthelm, A. 2011. *Soweto businesses struggling*. Accessed 23 April 2015. www.news24.com/SouthAfrica/News/Sowetobusinesses-struggling-20111030.

Lin, J.Y. & Yang, D.T. 2000. Food availability, entitlements and the Chinese famine of 1959-61. *The Economics Journal* 110(460): 136-158.

Lingane, A. 2015. Bay area blueprint: worker co-operatives as a community economic development strategy. *Carolina Planning* 40: 19-28.

Liu, Y.Y. & Li, H.Y, 2010. Environment, governance, controls, and radical innovation during institutional transitions. *Asia Pacific Journal of Management* 29: 689-708.

Loopstra, R. & Tarasuk, V. 2013. Severity of household food insecurity is sensitive to change in household income and employment status among low-income families. *The Journal of Nutrition Community and International Nutrition* 143: 1316-1323.

Lord, J. & Hutchison, P. 1993. The process of empowerment: implications for theory and practice. *Canadian Journal of Community Mental Health* 12(1): 5-22.

Lundstrom, A. & Stevenson, L. 2001. *Entrepreneurship in the future: Series 1.* Swedish Foundation for Small Business Research.

Lyne, M. & Collins, R. 2008. South Africa's new co-operatives act: a missed opportunity for small farmers and land reform beneficiaries. *Agrekon* 47(2): 180-197.

MacMillan, T. & Dowler, E. 2012. Just and sustainable? Examining the rhetoric and potential realities of UK food security. *Journal of Agricultural and Environmental Ethics* 25(2): 181-204.

Mago, S. & Toro, B. 2013. South African government's support to small, medium and microenterprises (SMMEs): the case of the King William's Town area. *Journal of Economics* 4(1): 19-28.

Mailo, G.M., Halepoto, A.H. & Shah, A.S. 2014. Time series analysis of micro credit and its impact on SMEs, business growth and alleviating poverty in rural Sindh. *Revista Romana de Statistica* 11: 65-72.

Maiorano, D. & Manor, J. 2017. Poverty reduction, inequalities and human development in the BRICS: policies and outcomes. *Commonwealth & Comparative Politics* 55(3): 278-302.

Margulis, M. 2013. The regime complex for food security: implications for the global hunger challenge. *Global Governance* 19: 53-67.

Markelova, H., Meinzen-Dick, R., Hellin, J. & Dohrn, S. 2009. Collective action for smallholder market access. *Journal of Food Policy* 34: 1-7.

March, J.G. & Olsen, J.P. 1984. The new institutionalism: organizational factors in political life. *The American Political Science Review* 78(3): 734-749.

Martin, A., Oudwater, N. & Meadows, K. 2000. *Urban agriculture and the livelihoods of the poor in Southern Africa: case studies from Cape Town and Pretoria, South Africa, and Harare, Zimbabwe*. Natural Resource Institute, Chatham, 45.

Mase, T. 2015. Survival strategies of the informal sector food and drink vendors in Yogyakarta, Indonesia: the case of a campus area. *The Journal of Sophia Studies* (33): 19-43.

Masuku, M., Selepe, M. & Sabela, T. 2014. The effect of infrastructural challenges on food security in Ntambanana, KwaZulu-Natal, South Africa. *African Journal of Hospitality, Tourism and Leisure* 3(1): 1-12.

Mathekga, R. & Buccus, I. 2006. The challenge of local government structures in South Africa: securing community participation. *Critical Dialogue in Public Participation Review* 2(1): 11-17.

Maxwell, S. & Smith, M. 1992. Household food security: a conceptual review. In: Maxwell, S & T. Frankenberger (eds). *Household food security: concepts, indicators, measurements*. Rome and New York: IFAD and UNICEF.

Maxwell, S. 1996. Food security: a post-modern perspective. *Food Policy* 21(2): 155-170.

Mbedu, N. 2014. Social cohesion for the unfinished business of land reform in South Africa. *International Journal of African Renaissance Studies: Multi-, inter- and transdisciplinarity* 9(1):100-114. doi: 10.1080/18186874.2014.916881.

McDermott, M.J. 2012. Constitutionalizing an enforceable right to food: a new tool for combating hunger. *Boston College International and Comparative Law Review* 35: 543.

Mckeon, N. 2013. One does not sell the land upon which the people walk: land grabbing, transnational rural social movements, and global governance. *Globalisations* 10(1): 105-122. http://dx.doi.org/10.1080/14747731.2013.760911.

Menon, P. & Dixit, D. 2013. Starving India: food security vis-à-vis right to food in the Indian context. *OIDA International Journal of Sustainable Development* 6(9): 47-58.

Messer, E. & Cohen, M.J. 2007. Conflict, food insecurity and globalization. *Food, Culture & Society* 10(2): 297-315.

Metu, A.G., Okeyika, K.O. & Maduka, O.D. 2016. Achieving sustainable food security in Nigeria: challenges and way forward.

Meyer, J.W. & Rowan, B. 1977. Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology* 340-363.

Misselhorn, A. 2005. What drives food insecurity in southern Africa? A meta-analysis of household economy studies. *Global Environmental Change* 15: 33-43.

Misselhorn, A. 2009. Is a focus on social capital useful in considering food security interventions? Insights from KwaZulu-Natal. *Development Southern Africa* 26(2): 189-208.

Misselhorn, A., Aggarwal, P., Ericksen, P., Gregory, P., Horn-Phathanothai, L., Ingram, J. & Wiebe, K. 2012. A vision for attaining food security. *Current Opinion in Environmental Sustainability* 4(1): 7-17.

Mkandawire, T. & Soludo, C. 2003. African voices on structural adjustment. *International Development Research Centre* 10: 123-156.

Mmbengwa, V.M., Ramukumba, T., Groenewald, J.A., van Schalkwyk, H.D., Gundidza, M.B. & Maiwashe, A.N. 2012. Analysis of the socio-economic factors that contribute to land and agrarian reform which initiated and supported small, micro and medium farming enterprises (SMMEs) in South Africa. *African Journal of Business Management* 6 (24): 7158-7169.

Modirwa, S. & Oladele. O.I., 2012. Food security among male- and female-headed households in Eden District Municipality of the Western Cape, South Africa. *Journal of Human Ecology* 37(1): 29-35.

Modi, A.T. 2015. A simple model to evaluate integrated vegetable production for food security in KwaZulu-Natal, South Africa, *Food Research International* 76: 946-952.

Mohammed, A. 2003. Food insecurity: vulnerability and information mapping system. Paper presented at the Annual Meeting of Inter-Agency Working Groups, Abuja, Nigeria, 13 October, 2003.

Mohapatra, S., Rozelle, S. & Goodhue, R. 2007. The rise of self-employment in rural China: development or distress? *World Development* 35(1): 163-181.

Moll, H.A.J & Tilburg, A. 2006. Rural microfinance between clients and financial markets. Wageningen University.

Moussa, G. 2008. Gender aspects of human security. Blackwell Publishing, Malden, MA.

Moreland, S. & Smith, E. 2013. Climate change, food security and population in sub-Saharan Africa: modelling the linkages. *The International Journal of Climate Change: Impacts and Responses.* 4 (2).

Moyo, S. 2007. Land policy, poverty reduction and public action in Zimbabwe. Land, poverty and livelihoods in an era of globalization: perspectives from developing and transition countries. 344.

Mujawamariya, G., D'Haese, M. & Speelman, S. 2013. Exploring double side-selling in cooperatives: a case study of four coffee co-operatives in Rwanda. *Food Policy* 39: 72-81.

Munyambonera, E., Mayanja, M. L., Nampeewo, D. & Adong, A. 2014. Access and use of credit in Uganda: unlocking the dilemma of financing smallholder farmers.

Mutyenyoka, E.M. & Madzivhandila, T. 2014. Employment creation through small, medium and micro enterprises (SMMEs) in South Africa: challenges, progress and sustainability. *Mediterranean Journal of Social Science*, 5(25): 65.

Najeeb, A. 2013. Institutional perspectives in HRM and MNC research: a review of key concepts. *IJES* 2(2): 79-99.

Najeeb, A. 2014. Institutional theory and human resource management. In: H. Hasan (eds). *Being practical with theory: A window into business research.* 25-30.

National Department of Agriculture and Rural Development, 2002. *Integrated food security strategy*. Pretoria: National Department of Agriculture and Rural Development.

Nayak, P. 2000. Understanding the entitlement approach to famine. *Journal of Assam University* (1): 60-65.

National Development Agency. 2012. Food security programmes: working together to promote households and community food security. Johannesburg: National Development Agency.

National Development Agency. 2013. *Civil society organisations' participation in food security activities in South Africa*. Johannesburg: National Development Agency.

National Development Agency. 2014. *Beyond 10 years of unlocking potential*. Viewed 12 June 2015 from http://www.nda.org.za/index.php

Ncube, N. & Kang'ethe, S.M. 2015. Pitting the state of food security against some millennium development goals in a few countries of the developing world. *Journal of Human Ecology* 49(3): 293-300.

Nehring, R., Miranda, A. & Howe, A. 2017. Making the case for institutional demand: supporting smallholders through procurement and food assistance programmes. *Global Food Security* 12: 96-102.

Nelson, G.C., Rosegrant, M.W., Koo, J., Robertson, R., Sulser, T., Zhu, T., Ringler, C., Msangi, S., Palazzo, A., Batka, M. & Magalhaes, M. 2009. *Climate change: impact on agriculture and costs of adaptation.* (Vol. 21). Intl Food Policy Res Inst.

Newig, J., 2013. Governance for Sustainable Development: Coping with ambivalence, uncertainty and distributed power. Routledge.

Njuki, J. and Sanginga, P.C. 2013. Women, livestock, ownership and markets: bridging the gender gap in eastern and southern Africa. Routledge.

Nkonya, E., Gerber, N. & Baumgartner, P. 2012. The economics of land degradation toward an integrated global assessment. *Development Economics and Policy* 66: 443-516.

Nnadozie, R.C. 2013. Access to basic services in post-apartheid South Africa: what has changed? Measuring on a relative basis. *The African Statistical Journal* 16: 81-103.

North, D.C. 1990. *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.

North, D.C. 1991. Institutions. *The Journal of Economic Perspectives* 5(1): 97-112.

Nunnenkamp, P. 2005. Why economic growth has been weak in Arab countries: the role of exogenous shocks. In *Economic policy failure and institutional deficiencies*. In? *Conference: Middle East and North African economies: past perspectives and future challenges. Free University of Brussels*.

Nussbaum, M. 2003. Capabilities as fundamental entitlements: Sen and social justice. *Feminist Economics* 9(2-3): 33-59.

Nussbaum, M. 2011. Capabilities, entitlements, rights: supplementation and critique. *Journal of Human Development and Capabilities* 12(1): 23-37.

Office of the Premier, KwaZulu-Natal 2014. 2030 Provincial growth and development plan. KwaZulu-Natal Provincial Planning.

Oluoko-Odingo, A.A. 2011. Vulnerability and adaptation to food insecurity and poverty in Kenya. *Annals of the Association of American Geographers* 101(1): 1-20.

Olowu, D. 2013. Gendered aspects of food security in Lesotho: implications for an integrative rights-based approach. *Gender and Behaviour* 11(2): 5378-5392.

Oni, S.A., Maliwichi, L.L. & Obadire, O.S. 2010. Socio-economic factors affecting smallholder farming and household food security: a case of Thulamela local municipality in Vhembe District of Limpopo Province, South Africa. *African Journal of Agricultural Research* 5(17): 2289-2296.

Osmani, S., 1995. The entitlement approach to famine: An assessment in: Basu, K, Pattanaik, P and Suzumura, K (eds) Choice, Welfare, and Development: Essays in Honor of Amartya Sen.

Ortmann, G.F. & King, R.P. 2007. Agricultural co-operatives I: history, theory and problems. *Agrekon* 46(1): 18-46.

Paddison, A. & Calderwood, E. 2007. Rural retailing: a sector in decline? *International Journal of Retail and Distribution Management*. 35(2): 136-155.

Page, H. 2013. *Global governance and food security as global public good*. Centre for International Cooperation. New York University.

Pandolfelli, L.E., Shandra, J. & Tyagi, J. 2014. The International Monetary Fund, structural adjustment, and women's health: a cross-national analysis of maternal mortality in sub-Saharan Africa. *The Quarterly* 55: 119-142.

Parpart, J.L., Rai, S.M. & Staudt, K. 2003. *Rethinking empowerment: gender and development in a global / local world.* New York: Routledge.

Paul, S.K., Hossain, M.N. & Ray, S.K. 2015. 'Monga' in northern region of Bangladesh: a study on people's survival strategies and coping capacities. *Rajshahi University Journal of Life & Earth and Agricultural Sciences*. 41: 41-56.

Peacock, M.S. 2010. Starvation and social class: Amartya Sen on markets and famines. *Review of Political Economy* 22(1): 57-73.

Pennartz, P. & Niehof, A. 1999. *The domestic domain: chances, choices and strategies of family households*. Aldershot: Ashgate.

Pereira, L.M., Cunco, C.N. & Twine, W.C. 2014. Food and cash: understanding the role of the retail sector in rural food security in South Africa. *Food Security* 6: 339-357.

Perez, E.C., Olle, A.S. & Navarro, P.S. 2012. Corruption scandals, voter information, and accountability. *European Journal of Political Economy* 28: 469-484.

Perkins, D.D. & Zimmerman, M.A. 1995. Empowerment, research and application. *American Journal of Community Psychology* 23(5): 569-579.

Peters, R.M. 2009. SMME development initiatives and constraints to growth in South Africa. Unpublished doctoral thesis, University of Johannesburg.

Peters, D. 2012. Sustainable support for SMMEs. Report for Ntsika Enterprise Promotion Agency, Pretoria.

Phillips, R. 2009. Food security and women's health: a feminist perspective for international social work. *International Social Work* 52(4): 485-498.

Pine, A.M. & de Souza, R. 2013. Including the voices of communities in food insecurity research: an empowering-based agenda for food scholarship. *Journal of Agriculture, Food Systems and Community Development* 3(4): 71-79.

Poulsen, M.N., McNab, P.R., Clayton, M.L. & Neff, R.A. 2015. A systematic review of urban agriculture and food security impacts in low-income countries. *Food Policy* 55, 131-146.

Ponte, S., Roberts, S. & Van Sittert, L. 2007. Black Economic Empowerment, business and the state in South Africa. *South African Journal of Economics* 38(5): 934-935.

Program in Urban Food Security, 2009. *Data Analysis Workshop*. Johannesburg: University of Witwatersrand, 4-5 February 2009.

Qureshi, M.E., Dixon, J. & Wood, M. 2015. Public policies for improving food and nutrition security at different scales. *Food Security* 7(2): 393-403.

Rakodi, C. 1999. A capital assets framework for analysing household livelihood strategies: implications for policy. *Development Policy Review* 17(3): 315-342.

Ramphele. M. 2005. 10 years of democracy: 1994-2004. Sixth Steve Biko Memorial Lecture, 12 September 2005, Steve Biko Foundation. Cape Town: University of Cape Town.

Rao, N., Pradhan, M. & Roy, D. 2017. Gender justice and food security in India: a review.

Republic of South Africa, 1995. White Paper on Agriculture. Pretoria: Department of Agriculture.

Republic of South Africa. 1996. Constitution. 1996. Pretoria: Government Printers.

Republic of South Africa. 1998. White Paper on local government. Pretoria: Government Printers.

Republic of South Africa. 2002. *The Integrated Food Security Strategy for South Africa*. Pretoria: RSA Department of Agriculture.

Reutlinger, S. 1984. Amartya Sen, poverty and famines: an essay on entitlement and deprivation. *Economic Development and Cultural Change* 32(4): 881-886.

Right to Food, 2010. *The right to adequate food*. Rome: United Nations Human Rights Fact Sheet No. 34: 39-45.

Rockstrom, J.S., Steffen, W. & Noone, K. 2009. A safe operating space for humanity. *Nature* 461: 472-475.

Rodriguez-Pose, A. & Hardly, D. 2015. Addressing poverty and inequality in the rural economy from a global perspective. *Applied Geography* 61: 11-23.

Rodrigues, L.P.F., Carvalho, R.C., Maciel, A., Otanasio, P.N., Garavello, M.E.D.P.E. & Nardoto, G.B. 2016. Food insecurity in urban and rural areas in central Brazil: transition from locally produced foods to processed items. *Ecology of Food and Nutrition* 55(4): 365-377.

Roncarolo, F., Bisset, S. & Potvin, L. 2016. Short-term effects of traditional and alternative community interventions to address food insecurity. *PloS one*, 11(3): e0150250.

Rose, A.K. & Spiegel, M.M. 2012. Cross-country causes and consequences of the 2008 crisis: early warning. *Japan and the World Economy* 24(1): 1-16.

Rosner, H.J. 2012. Co-operatives: the magic bullet of poverty reduction? Focus Rural.

Rubin, O. 2009. The entitlement approach: a case for framework development rather than demolition: a comment on 'Entitlement failure and deprivation – A critique of Sen's famine philosophy'. *Journal of Development Studies* 45(4): 621-640.

Salehin, M. 2015. Implementation of the Structural Adjustment Program in Bangladesh: experience of shrimp culture. *Social Development Issues* 37(2): 37-54.

Sasson, A. 2012. Food security for Africa: an urgent global challenge. *Agriculture and Food Security* 1: 2.

Satterthwaite, D. 2000. *Seeking an understanding of poverty that recognises rural-urban differences and rural-urban linkages.* Paper presented at the World Bank's urban forum on urban poverty reduction in the 21st century. International Institute for Environment and Development (IIED). April 2000.

Scaramozzino, P. 2006. *Measuring vulnerability to food insecurity*. Agricultural and Development Economics Division of the Food and Agriculture Organization of the United Nations (FAO-ESA).

Scheffran, J., Brzoska, M., Brauch, H.G., Link, P.M. & Schilling, J. (eds.) 2012. *Climate change, human security and violent conflict: challenges for societal stability* (Vol. 8). Springer Science & Business Media.

Schonfeldt, H.C., Hall, N. & Bester, M. 2013. Relevance of food-based dietary guidelines to food and nutrition security: A South African perspective. *British Nutrition Foundation Nutrition Bulletin* 38: 226-235.

Scoones, I. 1998. Sustainable rural livelihoods: a framework for analysis.

Scrimshaw, S. 1990. Combining quantitative and qualitative methods in the study of intrahousehold resource allocation. Tokyo: United Nations University Press.

Selim, L. 2014. Gender inequality and food security. In: *Encyclopaedia of Food and Agricultural Ethics*: 1087-1093.

Sekhampu, T.J. 2013. Determination of the factors affecting the food security status of households in Bophelong, South Africa. *International Business and Economics Research Journal* 12(5): 543.

Sen, A. 1973. Poverty, inequality and unemployment: some conceptual issues in measurement. *Economic and Political Weekly* 8(31/33): 1457-1464.

Sen. A. 1977. Starvation and exchange entitlements: a general approach and its application to the great Bengal famine. *Cambridge Journal of Economics* 1(1): 33-59.

Sen, A. 1981. Ingredients of famine analysis: availability and entitlements. *The Quarterly Journal of Economics* 96 (3): 433-464.

Shackleton, C.M., Shackleton, S.E., Buiten, E. & Bird, N. 2007. The importance of dry woodlands and forests in rural livelihoods and poverty alleviation in South Africa. *Forest Policy and Economics* 9(5): 558-577.

Shaoul, J., Stafford, A. & Stapleton, P. 2012. Accountability and corporate governance of public private partnerships. *Critical Perspectives on Accounting* 23: 213-229.

Shadnam, M. & Lawrence, T. 2011. Understanding widespread misconduct in organisations: an institutional theory of moral collapse. *Business Ethics Quarterly* 21(3): 379-407.

Shimelis, A. & Bogale, A. 2007. Dimensions of food insecurity and livelihood strategies among rural households in Dire Dawa, eastern Ethiopia. *Tropical Science* 47(2): 73-80.

Shisana, O. & Hendriks, S.L. 2011. The contribution of community gardens to food security in the Maphephetheni uplands. *Developments Southern Africa* 28(4): 509-526.

Sidh, S.N. & Basu, S. 2011. Women's contribution to household food and economic security: a study in the Garhwal Himalayas, India. *Mountain Research and Development* 31(2): 102-111.

Sinclair, K., Ahmadigheidari, D., Dallmann, D. & Melgar-Quiñonez, H. 2017. Rural women: the most vulnerable to food insecurity and poor health in the global south. *The FASEB Journal* 31(1 Supplement): 791-28.

Smith, P., Haberl, H., Popp, A., Erb, K.H., Lauk, C., Harper, R., Tubiello, F.N., Siqueira Pinto, A., Jafari, M., Sohi, S. & Masera, O. 2013. How much land-based greenhouse gas mitigation can be achieved without compromising food security and environment goals? *Global Change Biology* 19: 2285-2302.

Sokile, C.S., Kashaigili, J.J. and Kadigi, R.M., 2003. Towards an integrated water resource management in Tanzania: the role of appropriate institutional framework in Rufiji Basin. Physics and Chemistry of the Earth, Parts A/B/C, 28(20), pp.1015-1023.

Sonnino, R., Marsden, T. and Moragues-Faus, A. 2016. Relationalities and convergences in food security narratives: towards a place-based approach. *Transactions of the Institute of British Geographers* 41(4): 477-489.

Soussana, J.F., Fereres, E., Long, S.T., Mohrens, F.G., Lorch, R.P., Saino, P.P., Porter, J.R., Rosswall, T. & Von Braun, J. 2012. A European science plan to sustainably increase food security under climate change. *Global Change Biology* 8: 3269-3271. doi:10.1111/j. 1365-2486.2012.02746. x.

South African Human Rights Commission, 2000. Second economic and social rights report (1998/1999): executive summary. Johannesburg: South African Human Rights Commission.

Sridhar, G, Rao, B.S., Rao, S.S.N.M. & Patil, D.V. 2013. Empowering rural community with improvement in knowledge level and livelihood through KVKs: impact and cases. *International Journal of Scientific Engineering and Research*: 13-20.

Stacey, J. and Rittberger, B., 2003. Dynamics of formal and informal institutional change in the EU. *Journal of European Public Policy*, 10(6), pp.858-883.

Statistics South Africa. 2000. Measuring poverty in South Africa. Pretoria: Statistics South Africa.

Statistics South Africa. 2011. General household survey. Pretoria: Statistics South Africa.

Statistics South Africa. 2012. Quarterly labour force survey. Pretoria: Statistics South Africa.

Statistics South Africa. 2013. General household survey. Pretoria: Statistics South Africa.

Statistics South Africa. 2014. Quarterly labour force survey. Pretoria: Statistics South Africa.

Stein, S.A. 2016. The 2015 World Expo exposed: the depiction of global food security.

St-Germain, A.A.F. & Tarasuk, V. 2017. High vulnerability to household food insecurity in a sample of Canadian renter households in government-subsidized housing. Can J? *Public Health* 108(2): 129-134.

Stevenson, L & Lundstrom, A. (2001). *Patterns and trends in entrepreneurship: SME policy and practice in ten economies 3*. Elanders Gotab.

Sumaila, U.R., Jacquet, J. & Witter, A. 2017. When bad gets worse: corruption and fisheries. *Corruption, Natural Resources and Development: From Resource Curse to Political Ecology.* :93.

Tacoli, C., Bukhari, B. & Fisher, S. 2013. *Urban poverty, food security and climate change*. Human settlements working paper 37. London: IIED.

Tanner, A., Kim, S.H., Friedman, D.B., Foster, C. & Bergeron, C.D. 2015. Barriers to medical research participation as perceived by clinical trial investigators: communicating with rural and African-American communities. *Journal of Health Communication* 20(1): 88-96.

Tarasuk, V. 2005. Household food insecurity in Canada. *Topics in Clinical Nutrition* 20: 229-312.

Tauger, M.B. 2003. Entitlement, shortage and the 1943 Bengal famine: another look. *Journal of Peasant Studies* 31(1): 45-72.

Taylor. V. 2007. Recasting power and transforming governance: a feminist perspective from the south. *Development* 50(1): 28-35.

Tefera, D.A., Bijman, J. & Slingerland, M.A. 2016. Agricultural co-operatives in Ethiopia: evolution, functions and impact. *Journal of International Development*.

Thamo, T., Addai, D., Pannell, D.J., Robertson, M.J., Thomas, D.T. & Young, J.M. 2017. Climate change impacts and farm-level adaptation: economic analysis of a mixed cropping—livestock system. *Agricultural Systems* 150: 99-108.

Thoenig, J.C. 2011. Institutional theories and public institutions. In: B.G. Peters and J. Pierre, *The Handbook of Public Administration*. Sage, 185-101.

Thurmond, V.A. 2001. The point of triangulation. *Journal of Nursing Scholarship* 33(3): 253-258.

Tiwari, M. 2007. Chronic poverty and entitlement theory. *Third World Quarterly* 28(1): 171-191.

Toulmin, C. & Quan, J. 2000. Evolving land rights, policy and tenure in sub-Saharan Africa. In: C. Toulmin and J. Quan (eds). *Evolving land rights, policy and tenure in Africa*. DFID/IIED/NRI, London.

Toulmin, C. 2008. Securing land and property rights in sub-Saharan Africa: the role of local Institutions. *Land Use Policy* 26: 10-19.

Townsley, P. 1998. Aquatic resources and sustainable rural livelihoods. Sustainable rural livelihoods: what contribution can we make?: 139-153.

Ubisi, N.R., Mafongoya, P.L., Kolanisi, U. & Jiri, O. 2017. Smallholder farmer's perceived effects of climate change on crop production and household livelihoods in rural Limpopo province, South Africa. *Change and Adaptation in Socio-Ecological Systems* 3(1): 27-38.

UNDP. 1997. Promoting sustainable livelihoods: a briefing note submitted to the Executive Committee. June 1997 (mimeo).

United States Department of Agriculture 2002. *Agricultural co-operatives in the 21st century*. Viewed 15 May 2015, from http://www.rurdev.usda.gov/rbs/pub/cir-60.pdf.

Uwizeyimana, D.E. 2011. The politics-administration dichotomy: was Woodrow Wilson misunderstood or misquoted? *Journal of US-China Public Administration* 10(2): 165-173.

Van Averbeke, W. 2007. Urban farming in the informal settlements of Atteridgeville, Pretoria, South Africa. *Water SA* 33(3).

Van der Veen, R.J. & Van Parijs, PF. 1985. Entitlement theories of justice: from Nozick to Roemer and beyond. *Economics & Philosophy* 1(1): 69-81.

Vandenberg, P. 2006. Poverty reduction through small enterprises: emerging consensus, unresolved issues and ILO activities (Seed Working Paper No. 75). International Labour Organisation.

Van Zyl, J. & Kirsten, J. 1992. Food security in South Africa. Agrekon 31(4): 170-184.

Veeranjaneyulu, K., Krishnaveni, G., Lakpathi, G. & Rajanikanth, P. 2014. Skill development and enhanced livelihood opportunities through apparel making and embroidery trainings in KVK, Kampasagar, Nalgonda District. *International Journal of Scientific and Technology Research* 3(1): 6-10.

Vistro, T. 2014. Poverty, food insecurity, and sexual and reproductive health and rights in the post-2015 agenda: considerations from the Philippines. *Arrow for Change* 20(1): 167-192.

Wade, R.H. 2004. Is globalization reducing poverty and inequality? *World Development* 32(4): 567-589.

Watson, D.D. 2017. The political economy of food price policy during the global food price crisis of 2006-2008. *Food Security:* 1-13.

Warshawsky, D.N. 2011. Food bank Johannesburg, state, and civil society organisations in post-apartheid Johannesburg. *Journal of Southern African Studies* 37(4): 809-829.

Warshawsky, D.N. 2015. Civil society and public–private partnerships: case study of the Agri-Food bank in South Africa. *Social and Cultural Geography:* 1-21.

Wellens, L. & Jegers, M. 2014. Beneficiary participation as an instrument of downward accountability: a multiple case study. *European Management Journal* 32: 938-949.

Weissman, S.R.1990. Structural adjustment in Africa: insights from the experiences of Ghana and Senegal. *World Development* 18(12): 1621-1634.

Welter, F. & Smallbone, D. 2011. Institutional perspectives on entrepreneurial behaviour in challenging environments. *Journal of Small Business Management* 49(1): 107-125.

Wilcox, C.S., Grutzmacher, S., Ramsing, R., Rockler, A., Balch, C., Safi, M. & Hanson, J. 2015. From the field: empowering women to improve family food security in Afghanistan. *Renewable Agriculture and Food Systems* 30(01): 15-21.

Wills, J., Chinemana, F. & Rudolph, M. 2009. Growing or connecting? An urban food garden in Johannesburg. *Health Promotion International*, dap042.

Winters, M., Karim, A.G. & Martawardaya, B. 2014. Public service provision under conditions of insufficient citizen demand: insights from the urban sanitation sector in Indonesia. *World Development* 60: 31-42.

Wolfe, W.S., Olson, C.M., Kendall, A. & Frongillo, E.A. Jr. 1996. Understanding food insecurity in the elderly: a conceptual framework. *Journal of Nutritional Education* 28: 92-100.

World Bank, 2003. World development report 2004: making services work for poor people. Washington, DC: World Bank and Oxford University Press.

World Bank, 2013. *Improving nutrition through multisectoral approaches - agriculture*, World Bank, Rapid Social Response, Department for International Development (DFID) and the Government of Japan.

Yadav, R.K. 2014. Significance of microfinance institutions in rural development of India. *International Letters of Social and Humanistic Sciences* 10: 84-90. Viewed 26 November 2015, from www.ceeol.com.

Yaro, J.A. 2004. Theorizing food insecurity: building a livelihood vulnerability framework for researching food insecurity. *Norsk Geografisk Tidsskrift – Norwegian Journal of Geography* 58: 23-37.

Yigzaw, D.A. 2014. Hunger and the law: freedom from hunger as a freestanding right. *Houston Journal of International Law* 36: 3.

Young, H. & Maxwell, D. 2013. *Participation, political economy and protection: food aid governance in Darfur, Sudan.* John Wiley and Sons Ltd.

Yuan, Y. & Xu, L. 2015. Are poor able to access the informal credit market? Evidence from rural households in China. *Journal of China Economic Review* 33: 232-246.

Zeuli, K. & Radel, J. 2005. Co-operatives as a community development strategy: linking theory and practice. *Journal of Regional Analysis and Policy* 35(1): 43-54.

APPENDIX 1 : PROJECT INFORMATION AND INFORMED CONSENT

Receive my Greetings

My name is Mfundo Masuku and I am a post graduate student at the University of Zululand. I am conducting a research project based on analysing institutional gaps on food insecurity and I need your assistance in getting the information for this research project. The project will be explained to you with the aim of making you to understand clearly what will be done and what will be expected from you so that you can decide if you want to participate in this project. Participation is voluntary and should you decide not to participate, you may withdraw at any stage during this project.

WHAT IS THIS PROJECT ABOUT?

The information on the project is:

- The purpose of the research project is to collect information on institutional gaps that contribute to the situation of food insecurity in uThungulu, northern KwaZulu-Natal
- The information collected will be used to expand knowledge on how these institutional gaps eliminated and suggest programmes which will promote food security in rural areas.

WHY IS THIS PROJECT IMPORTANT?

This project is relevant because it will assist uThungulu and institutions to improve their services to a community and develop the strategies for sustainable community projects. Institutional services have been regarded as important factors, but it seems that the policies and implementation guidelines are not evolved completely to support rural development.

PROCEDURE

The project will take place over a period of ten weeks. The participants will be requested to

complete questionnaires. For the focus groups, officials will be requested to undergo the process

of answering the interview questions.

WHAT DO WE EXPECT FROM YOU?

You will be asked to sign a consent form to participate in the project.

We will ask you a number of questions and respond with honesty.

If you have any questions about the project, please do not hesitate to ask me at any time.

Thank you.

Mfundo Masuku

Project Leader

Mobile number: 078 114 5551

Tel: 035 902 6272

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INFORMED CONSENT

I, the undersigned, (ID is optional
) of
(Physical address).
I have read the details of the project, or have listened to the oral explanation thereof, and declare
that I understand it. I have had the opportunity to discuss relevant aspects with the researcher and
declare that I voluntarily participate in the project. I hereby give consent to participate in the
project.
Signature of the participant
Signed at on
Witness
Name
SignatureSignature
Signed at Signed at
Contact telephone number

APPENDIX 2 : COMMUNITY MEMBERS OR HOUSEHOLDS (FOOD SECURITY SURVEY QUESTIONNAIRE)

The following questions were asked to community members or households included in the sample. Guidance was given to researcher before the survey on the content of the questionnaires and how they should approach and be respectful to corparticipants. Respect also includes developing an understanding of the cultural norms of the participating group and treating people as equal participants in the data collection process.

Date :

Interviewer :

Name of the ward

Name of the participant (optional):

ULWAZI OLUMAYELANA NEPHROJEKTHI KANYE NOKUZIBOPHEZELA OKUNOLWAZI OLUPHELELE

Ngiyabingelela

Igama lami nginguMfundo Masuku owenza iziqu zeqhuzu eliphezulu eNyuvesi YakwaZulu. Ngenza uphenyo oluphathelene nokuhlaziya kwamagebe adaleka phakathi kweminyango eyahlukene aholela ekudalekeni kokudla okuanganele. Ngidinga usizo lwakho ukuthola ulwazi olufanele oluzophumelelisa lolu cwaningo. Indlela yokuqhuba lolu cwaningo uzochazelwa yona ngokucacile kanye nokuthi yini okuzolindeleka ngakuwe ukuze uzimbandakanye ngokuthanda kwakho kulolu cwaningo. Ukuzimbandakanya kusekuthandeni komuntu akukho ophoqiwe kanti unelungelo lokuhoxa noma kuyinini.

IPHATHELENE NANI IPHROJEKTHI?

Inhloso yalolu phenyo:

- Injongo yalolu cwaningo ukuqoqa ulwazi olumayelana namageba kanye nokufekela kweminyango ethize okubhekana nomphakathi waseThungulu mayelana nokokudla okunganele.
- Ulwazi oluzotholakala luzosetshenziselwa ekwethasiseleni ulwazi kanye nokuthi
 izinkinga zalolu hlobo zingagwenywa kanjani kanye nokuqhamuka nezinhlelo
 ezikhuthaza ukukhuselwa noma zokwandisa izinhlelo zokudla okwanele ezindaweni
 zasemakhaya.

UKUBALULEKA KWEPHROJEKTHI

Lolu cwaningo lushaya khona ngoba luzosiza umphakathi wasemakhaya kanye neminyango eyahlukene ukuze bakwazi ukumelana nokusilela ekuthuthukeseni ukuba khona kokudla kanye neminyango ephethwe ngendlela exegayo uma kuza ngasekwenzeni ukuba kube nokokudla okwanele.

INDLELA EZOLANDELWA

Ucwaningo luzothatha isikhathi esibalelwa emasontweni alishumi. Labo abazimbandakanyayo

bazocelwa ukuba bagcwalise amapheshana anemibuzo. Leso sigejane esikhethiweyo kanye

nezikhulu bazocelwa ukuba baphendule imibuzo ethile.

ESICELA UKUBA UKWENZE

Uzocelwa ukuba usayine iphepha elishoyo ukuthi uyazimbandakanya.

• Uzobuzwa imibuzo ethile okuzocelwa ukuba uyiphendule ngokuthembeka.

• Uma kukhona imibuzo onayo emayelana nalolu cwaningo unganqeni ukubuza.

Siyabonga kakhulu.	
UMfundo Masuku	•••••

Umholi wocwaningo

Ucingo oluphathwayo: 0781145551

Ucingo lwasehhovisi: 0359026272

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IMVUME OYIQONDAYO

Mina, lo osayinde ngezansi,
Inombolo kamazisi (ayiphoqelekile) Ohlala
(Ikheli lendlu).
Ngiyifundile imininingwane cwaningo noma ngiyizwile incazelo yalo futhi ngiyavuma ukuthi
ngiyayiqonda. Ngibenalo ithuba lokubamba izingxoxo ezimayelana nemibandela ethile kanye
nocwaningo ngakho-ke ngiyazibophezela ngokungaphoqiwe ukusiza kulolu cwaningo.
Ngiyavuma ukuthi ngizoba yingxenye yocwaningo.
Isandla sokusayina salowo ozimbandakanyayo
Ofakazi
Igama Igama
Ukusayina
Indawo yase
Ucingo engitholakala kulo

Amalunga omphakathi noma abomkhaya (imibuzo emayelana nokokudla okwanele)

Imibuzo elandelayo yabuzwa amalunga omphakathi noma abomkhaya abambandakanyekayo kwabakhethiwe. Umphenyi wanikezwa amazwi okwelulekwa ngaphambi kokuba kwenziwe uhlolomvo ngalokho okuqukethwe yimibuzo nanokuthi kufanele kulandelwe ziphi izindlela ezinenhlonipho. Inhlonipho isho nokuqonda imigomo ethile ethinta amasiko alabo bantu abaphendula imibuzo kanye nokwemukela labo abaphendulayo njengabalingani. Imininingwane yakho.

Fill in the relevant information and where possible mark with an X Gcwalisa ngezimpendulo okuyizonazona ngophawu olungu- X

A.1. Gende r Ubulil i	A.2. Age(Yo Isilinga		eminyak	a			A.3. Marital Phathel		nshado	
M F	10-19	19- 29	30-39	40-49	50-59	60 abo ve (ng aph ezul u)	Single ongas hadile	Marri ed Osha dile	Divorce d ohlukan isile	Widowe d Umfelo kazi

A.4. what is your highest educational level (mark with an X) (Izinga lemfundo yakho)

•	O	*	, · · · · · ·	• /
No formal	Primary school	Secondary / High	Tertiary	Other specify
education	only	school	education	Okunye cacisa
Angifundile	Imfundo	Imfundo	Imfundo	
	yamabanga	yamabanga	ephakeme	
	aphansi	aphakeme		

A.5. what is your employment status and under which income class do you fall in? (Mark as appropriate) (yisho umsebenzi owenzayo futhi uhola malini)

Employment	Tick	Incor	ne class (R	Rand per Mo	onth)		
status(izinga		Iziga	ba zemali	oyiholayo n	genyanga		
lomsebenzi							
Full time farmer		700	700 –	1500-	3000-	5000-	10000 above
Umlimi			1500	3000	5000	10000	ngaphezulu
ngokugcwele							
Part time farmer							
Umlimi							
wesikhashana							
Formal employed							
Umqashwa							
Pensioner							
Ohola impesheni							
Unemployed							
Ongasebenzi							
Other (specify)							
Okunye cacisa							

B. Food Security (non-agricultural) ukudla okwanele okutholakala ngaphandle kwezolimi

В.	Questions (Imibuzo)	Answers(Izimpendulo)
B.1.	Where do you purchase food for your family	Local Business
	Ukuthenga kuphi ukudla komuzi wonke /	Ibhizinisi lendawo
	umndeni?	
		Town Idolobha
		Other (Okunye)
B.2.	Has your household ever benefited from food	Yes/Yebo
	Aid. Please name the organisation that assist you with food	No/ Cha
	Engabe umndeni wakho wake wazuza	
	ekumukelisweni kokudla. Ngicela usho igama	
	lenhlangano ekusiza ngokudla	

C. Food security (agricultural activities) (Ukudla okwanele okutholakala ngezolimi)

C.	Questions(Imibuzo)	Answers(Izimpendulo)	
C.1.	Do you have access to land for	Yes/Yebo	
	cultivation purposes?	No / Cha	

	Unawo yini umhlaba wokulima?		
C.2.	Do you grow any Vegetables? Uzitshalile yini izithelo?	Yes, for home consumption Yebo, ukuthi kudle umndeni Yes, for sale only Yebo, ukudayisa Yes , for consumption and sale	
		Yebo , nokudayisa ukuthi kudle umndeni No / Cha	
C.3.	Do you have cattle?	Yes, for home consumption Yebo, ukuthi kudle umndeni	
		Yes, for sale only Yebo, ukudayisa	
		Yes, for consumption and sale Yebo, nokudayisa ukuthi kudle umndeni	
		No / Cha	

D. During the past years did any household member earn income through any of the enterprises listed below? If yes, report the income from each activity by ticking (**X**) the appropriate boxes. *Kuleminyaka edlule ukhona yini omunye wamalungu omndeni okade ethola iholo lakhe ngokuzibandakanya ngalezizimboni zebhizinisi ezibalwe lapha ngezansi. Uma kunjalo,tshengisa ngaloluphawu (X) maqondana nalolohlobo lemboni.*

CODE	ENTERPRISES	IZIMBONI YEZEBHIZINISI
D1.	Shop-keeping	Ukuba Nesitolo
D2	Hawking	Ukudayisa ngezimpahla
D3	Building or repairing houses	Ukwakha noma ukulungisa izindlu
D4	Baking, brewing or selling food	Ukubhaka, ukuvubela utshwala noma
		ukudayisa ukudla
D5	Hiring out contractor services or	Ukwenza imisebenzi yezinkotilaka noma
	equipments	okuqashisa ngezinto zokusebenza
		ezinkotilakeni.
D6	Selling firewood	Ukudayisa izinkuni zokubasa umlilo
D7	Making furniture or handicrafts	Ukwenza ifanisha noma imisebenzi
		yezandla ebaziwe

D8	Home garden	Ukusebenza engadini yasekhaya	
D9	Community garden	Ukusebenza engadini yomphakathi	
DIO	Selling of traditional medicine	Ukudayisa imithi yendabuko	
D11	Other, specify:	Okunye, Kusho ukuthi yini:	
D11			

E. CREDIT AND CASH LOANS / IMALI EKWELETAYO

CODE	QUESTION UMBUZO	REASON FOR TRANSACTION ISIZATHU SOKUSEBENZA
		KWEMALI
E1	Amount of cash borrowed or credit used	
	(Rands): Inani lemali oyibolekile noma	
	oyisebenzisile.	
E2	Main purpose of loan or credit:	
	Inhlosongqangi sokuboleka noma	
	ukusebenzisa imali.	
E3	Source of loan or credit. <i>Indawo lapho</i>	
	uboleke khona imali.	

F. INSTITUTIONAL SERVICES / IZIKHUNGO OKUNGATHOLAKALA KUZO UKUSIZAKALA

FI	Are there any institutional services that are available within your community. Zikhona izikungo zokusizakala komphakathi ezitholakala kumphakathi ohleli kuwona.	01	Yes/ Yebo		02	No/ Cha		
----	--	----	--------------	--	----	------------	--	--

F2 If yes, what are those institutional services and if not what are the reason behind their absence. *Uma uthi yebo*, *yiziphi lezozikhung kodwa uma uthi cha yiziphi izizathu zokuthi zingabibikho*.

I	
II	
III	
IV	
V	

Food Security: Availability of food and one's access to it. A household is considered food secure when its occupants do not live in hunger or fear of starvation.

Ukudla Okwanele: Ukutholakala kokudla nanokufinyelela ngokuziphilisa kalula ekudleni. Umndeni uthathwa ngokuthi ulondekile noma ugcinekile ngasekudleni lapho amalungu awo ephila ngokungasabi ukuthi azohlaselwa indlala.

F3	In your opinion, how do institutional services enhance food security within your
	community? Ngokubona kwakho, yini eyenziwa izikhungo zomphakathi ekukhuphuleni
	ukubakhona kokudla okwanele emphakathini wakini.
I	
II	
III	
IV	
V	
F4	Do you think these services are effective in promoting food security within your area? <i>Ucabanga ukuthi imisebenzi yezikhungo zomphakathi iphumelela ngempela ngokugqugquzela kokudla okwanele nokubakhona kokudla endaweni yakini</i> ? Yes/ Yebo O1 No/ Cha
F4.1	If yes , why? <i>Uma uthe yebo, ukushiswo yini?</i>
I	
II	
III	
IV	
V	
F4.2	2 If no , why not? <i>Uma uthe</i> cha , kungabe yini imbangela?
I	
II	
III	
IV	
V	
F5	What hinders an access to food security within your area? Yini evimbezela kokudla nokubakhona kokudla endaweni ohlala kuyo?
I	
II	
III	
IV	
V	
F5.1	What do you think are the possible solutions to the problems mentioned in F5 above? Kungabayini izisombululo kulezizivimbezelo ozobale ku-F5 ngenhla?
I	
II	
TTT	

IV			<u></u>			
V						
F6	Are there any programmes / projects that are provided by the government to promote food security in your area? Lukhona yini uhlelo noma umklamo kahulumeni lokugqugquzela ukuba khona kokudla okwanele nokukabakhona kokudla endaweni yakini?	01	Yes/ Yebo	02	No/ Cha	
F6.1	I If yes in F6 why? <i>Uma uthe yebo ku F6, yiziphi lezozii</i>	nhlel	o?			
I						
II						
III						
IV						
V						
F7	Is the government doing enough to assist with the programmes / project that promote food security. Kungabe uhulumeni ukwenza ngokwanele yini ukugqugquzela ukulondeka nokukabakhona kokudla?	01	Yes/ Yebo	02	No/ Cha	
F7.1	I If yes , why? <i>Uma uthe yebo, ukushiswo yini?</i>					
I						
II						
III						
IV						
V						

	F7.2	If no , why not?	Uma uthe cha .	kungabe	vini imbange	ela?
--	------	-------------------------	-----------------------	---------	--------------	------

I	
II	
III	
IV	
V	

THANK FOR YOUR PARTICIPATION IN THIS RESEARCH/ SIYABONGA NGOKUZIMBANDAKANYA KWAKHO KULOLUCWANINGO.

The following questions will be asked to municipal officials and other government departments.

- 1. What services does your organization provide to the community to enhance food security?
- 2. How does your organization communicate with a community?
- 3. What are the challenges faced by your organization to promote programmes/projects on food security?
- 4. How does your organization assist people towards accessing food security?
- 5. What can be done to overcome the challenges that are faced by your organization towards food security?

Thank you for your participation.

The following questions will be asked to focus groups, small scale famers and commercial famers.

- 1. What kind of projects do you have/activities do you perform?
- 2. What problems do you have as an organization?
- 3. Where do you get assistants to sustain your projects?
- 4. What kind of assistant do you normally receive?
- 5. How the community benefit from your organization/projects?

Thank you for your participation.

Group interviews with the Extension Officers in uThungulu Districts of KwaZulu-Natal

- 1 What are processes involved in the establishment of a community garden?
- 2 What are the objectives of community gardens?
- 3 What is the role of Extension Officers in community gardens?
- 4 Are there any constraints that are affecting the performance of Extension Officers as well as the progress of community garden projects

Thank you for your participation.

APPENDIX 3 PERMISSION LETTER TO CONDUCT RESEARCH



Our Reference:

Your Reference:

24 NOVEMBER 2014

Email: MasukuM@unizulu.ac.za

Mr MM Masuku Private Bag X1001 Kwa Dlangezwa 3886

Dear Sir

RE: PERMISSION TO CONDUCT RESEARCH IN UTHUNGULU DISTRICT MUNICIPALITY

I refer to your letter dated 13 November 2014, regarding your request to be permitted to conduct research in the Municipality.

I wish to advise you that the permission is granted for only three months, from February 2015 till April 2015. You will also be required to follow all the necessary processes to get the documents/ information that you will need.

For further information do not hesitate to contact the Deputy Municipal manager Corporate Services: Advocate MNT Xulu on 035 799 2506/083 254 1284

Yours Faithfully

MH NKOSI

MUNICIPAL MANAGER

Postal Address Private Bag X 1025 Richards Bay 3900 Address uThungulu House, Cnr Krugerrand & Barbabos Street, Richards Bay CBD Tel (035) 799 2500 Fax (035) 789 1409

Web Address www.uthungulu.org.za

APPENDIX 4 ETHICAL CLEARANCE CERTIFICATE

UNIVERSITY OF ZULULAND RESEARCH ETHICS COMMITTEE (Reg No: UZREC 171110-30- RA Level 02)



RESEARCH & INNOVATION

RESEARCH & INNOVATION
Website: http://www.unizulu.ac.za
Private Bag X1001
KwaDlangezwa 3886
Tel: 035 902 6887
Fax: 035 902 6222
Email: ManqeleS@unizulu.ac.za

ETHICAL CLEARANCE CERTIFICATE

Certificate Number	UZREC 171110-030	RA Level 02 PGI	0.2014/83			
Project Title	Analysis of Institutional gaps that contribute to the situation of food insecurity in uThungulu, Northern KwaZulu Natal					
Principal Researcher/ Investigator	MM Masuku		Transfer Trace			
Supervisor and Co- supervisor	Dr BM Selepe		Dr NR Ngco	bo		
Department	Consumer Science		L			
Nature of Project	Honours/4 th Year	Master's	Doctoral	×	Departmental	

The University of Zululand's Research Ethics Committee (UZREC) hereby gives ethical approval in respect of the undertakings contained in the above-mentioned project proposal and the documents listed on page 2 of this Certificate.

Special conditions:

- (1) The Principal Researcher must report to the UZREC in the prescribed format, where applicable, annually and at the end of the project, in respect of ethical compliance.
- (2) Documents marked "To be submitted" (see page 2) must be presented for ethical clearance before any data collection can commence.

The Researcher may therefore commence with the research as from the date of this Certificate, using the reference number indicated above, but may not conduct any data collection using research instruments that are yet to be approved.

Please note that the UZREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the documents that were presented to the UZREC
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

MM Masuku PGD 2014/83

Page 1 of 1

Classification:

Data collection Animals	Human Health	Children	Vulnerable pp.	Other
X				
Low Risk	Medium Risk		High Risk	
	X			

The table below indicates which documents the UZREC considered in granting this Certificate and which documents, if any, still require ethical clearance. (Please note that this is not a closed list and should new instruments be developed, these would require approval.)

Documents	Considered	To be submitted	T
Faculty Research Ethics Committee recommendation	X	To be submitted	Not required
Animal Research Ethics Committee recommendation	 ^ -		
Health Research Ethics Committee recommendation	-		Х
Ethical clearance application form	- x		X
Project registration proposal	X		
Informed consent from participants	X		
Informed consent from parent/guardian			
Permission for access to sites/information/participants	×		X
Permission to use documents/copyright clearance	_ ×		
Data collection/survey instrument/questionnaire	l,		X
Data collection instrument in appropriate language	Х		
Other data collection instruments		Only if necessary	
		Only if used	

The UZREC retains the right to

- Withdraw or amend this Certificate if
 - o Any unethical principles or practices are revealed or suspected
 - o Relevant information has been withheld or misrepresented
 - Regulatory changes of whatsoever nature so require
 - o The conditions contained in this Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project

The UZREC wishes the researcher well in conducting the research.

Professor Rob Milley

Deputy Vice-Chancellor, Research and Innovation Chairperson: University Research Ethics Committee

11 December 2014

CHAIRPERSON /ERSITY OF ZULULAND RESEARCH ETHICS COMMITTEE (UZREC) REG NO: UZREC 171110-80

1 1 -12- 2014

RESEARCH & INNOVATION OFFICE

MM Masuku PGD 2014/83

Page 2 of 2

APPENDIX 5 **ENGLISH EDITOR'S CERTIFICATE**

L. Gething, M.Phil. (Science & Technology Journalism) (cum laude)

WHIZZ@WORDS PO Box 1155, Milnerton 7435 Cape Town, South Africa; cell 072 212 5417 leverne@eject.co.za

24 May 2016

DECLARATION OF EDITING of PhD thesis in Development Studies submitted to the Department of Anthropology and Development Studies, Faculty of Humanities and Social Sciences, University of Zululand

Title: ANALYSIS OF INSTITUTIONAL GAPS THAT CONTRIBUTE TO THE SITUATION OF FOOD INSECURITY IN UTHUNGULU, NORTHERN KWAZULU-NATAL

By: MASUKU MANDLA MFUNDO

I hereby declare that I carried out language editing of the above paper on behalf of the author, including checking formatting and citation of references.

I am a professional writer and editor with many years of experience (e.g. 5 years on SA Medical Journal, 10 years heading the corporate communication division at the SA Medical Research Council), who speciatises in Science and Technology editing - but am adept at editing in many different subject areas. I am a full member of the South African Freelancers' Association as well as of the Professional Editors' Group.

Yours sincerely

LEVERNE GETHING

leverne@eject.co.za