

MIDLANDS STATE UNIVERSITY



FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF LOCAL GOVERNANCE STUDIES

**ADDRESSING URBAN POVERTY IN CONTEXT WITH URBAN
COMMUNITY GARDENS: THE CASE OF KAROI TOWN COUNCIL.**

SUBMITTED BY

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This dissertation is submitted in partial fulfilment of the requirements of the Bachelor of Science Honours Degree in Local Governance Studies.

JUNE: 2015

MIDLANDS STATE UNIVERSITY



APPROVAL FORM

This is a confirmation that the undersigned had read and recommended the Department of Local Governance Studies at Midlands State University to accept the project entitled: ADDRESSING URBAN POVERTY IN CONTEXT WITH URBAN COMMUNITY GARDENS: THE CASE OF KAROI TOWN COUNCIL.

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Declaration

I Birsal Chihanga, I hereby sign and declare that I am the writer of this dissertation and that this dissertation has never been put in any academic institution before by me or any person for a degree or any other related academic achievements.

Signature.....

Date signed.....

Dedication

To my Mother, Uncle and Sister Nyaradzo, I would like to give my heartfelt thanks for their support during my entire educational life, for this may the Almighty God bless you abundantly.

To widows, orphans, elderly age and other vulnerable groups in Karoi town, who depend on urban farming for sustenance.

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Abstract

The study aimed on addressing urban poverty in context with urban community gardens in the case of Karoi Town Council. The problem statement states that, due to the prevailing situation in Zimbabwe of poor economy and limited employment opportunities, urban residents are now living under poverty conditions, earning below the poverty datum line and enduring with one meal a day. So it is the core of the study to show how urban community gardens can solve such challenges and reduces urban poverty. The research objectives are; to evaluate the effectiveness of urban community gardens in reducing urban poverty, to assess the extent to which urban community gardens meet the demands of household food security, to find out challenges faced by urban community gardens beneficiaries and to identify strategies that can be used to improve the conditions of urban community gardens in Karoi town. The literature review covered several aspects upon community gardens and urban poverty. It highlighted the role of literature review to the study, which is to summarises, evaluates and clarifying the works of the study being carried out. It has also defined urban poverty, urban community gardens and urban agriculture. More so, the literature review explained the nature of poverty in the world and in the Zimbabwean context. The role of Millennium Development Goals and Sustainable Development Goals to poverty and Agriculture were also explained. Theoretical framework was explained basing on two theories which are Johanne Henry Von Thunen's Spatial Land Theory and Cultural and Structural Poverty Theory, which explained urban farming and poverty respectively. For empirical evidence, two case studies were used which are; the case of Masizame community garden in South Africa and Gamakalle garden in Niger. Quantitative and qualitative research design was used. The target population for the study are the beneficiaries of urban community gardens of Karoi and Karoi Town Council employees. The actual population of Karoi is 28 606. The sampling technique were grouped into two, probability and non-probability sampling. For this study, purposive or judgemental sampling was used as non-probability sampling and simple random sampling as probability sampling. The sample size, are 40 community garden beneficiaries and 10 Karoi Town Council employees, which makes the total of 50 sample size. Focus group discussions, interviews and questionnaires are the research instruments used to gather data for the study. The research has found that urban community gardens are playing a pivotal role in addressing urban poverty through, income generation, increasing meals per day after harvesting, nutritional diversity, socio-economic empowerment and employment creation. The research concludes that, urban community gardens are effective in addressing urban poverty, because residents are benefiting from the gardens and their standards of life are being rising. However, although community gardens are effective, the study recommend, the legalising of urban community gardens, inclusion of urban community gardens in planning, improve urban community garden technology, increase extension services coverage and improve market linkages for urban community gardens produce.

Acronyms

C.S.O.....	Community Service Officer.
E.S.A.P.....	Economic Structural Adjustment Programme.
F.T.L.R.P.....	Fast Track Land Reform Programme.
F.A.O.....	Food and Agriculture Organisation.
F.G.D.....	Focus Group Discussion.
H.D.I.....	Human Development Index.
K.T.C.....	Karoi Town Council.
M.D.G.....	Millennium Development Goals.
NGO.....	Non-Governmental Organisations.
S.D.G.....	Sustainable Development Goals.
U.N.D.P.....	United Nations Development Programme.
ZIM-ASSET.....	Zimbabwe Agenda for Sustainable Socio-Economic Transformation.

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Chapter I

Introduction

1.0 Introduction

The economy of Zimbabwe has recorded a significant increase in poverty as well as unemployment levels. According to United Nations International Children Education Fund (UNICEF) 2010, 78 % Zimbabweans are absolutely poor and 55% live under food poverty line. Generally, even urban dwellers they are living under poverty datum line and most of them are earning a living either by being self-employed or indulging in community gardening.

The practice of community gardening in urban communities has become a panacea to improvements of standards of living of urban poor dwellers all over Zimbabwe. This chapter will look on the background of study. The background of the study will be focusing on the origins of the community gardens, tracing the occurrence of poverty in the world. It also looks on the statement of the problem, research objectives and research questions which assist the researcher to have guideline on what to research. Also the chapter will contain significance of the study, which focuses on who will be benefited by the study. Lastly but not the least, the chapter will also contain delimitations and limitations.

1.1 Background of the Study

Community gardens were initiated back from the 18th and 19th centuries where tropical vegetation survived in remote areas and mixed gardens in South East Asia. Community gardens can be traced back its origins in the mid-1800, in Europe as well as in America. This is supported by Lawson (2004), who mentioned that community gardens has got a long history in developed countries, mainly they were meant to supply cities with fresh and

nutrient rich foods around the world, with their origins in allotment gardens of Europe in mid 1800s.

Furthermore, in Europe community gardens mainly began to be seen and recognised as the vital means of addressing urban poverty during and after the world wars. This is due to the fact that, war led to poverty in many countries of the world especially those in Europe and community citizens began to focus on community gardens, where they farm collectively as a group in order to boost food for their consumption. This is evidenced by Armstrong (2000), who states that in times of crisis, like war, recession, growing food in cities has been always been a fundamental to urban people. During both world wars, victory gardens provided a reliable source of fresh food in United Kingdom, United States of America and Australia.

Taylor and Francis (2009), states that community gardens in all African countries, involved irrigation in home gardens since prehistoric time with the provision of vegetables for household consumptions. Community gardens are whereby residents in any particular community jointly participate in growing several types of crops on a given piece of land. Sithole (2012), is of the idea that the land is demarcated and each farmer is allocated a small plot on which to grow crops, mainly vegetables for household consumption. He further suggested that community resources shared in community garden include water, fences and possibly security services, assistance from non-governmental organisations and benefits from the local authority linked to community gardens.

In Zimbabwe urban community gardens were initiated back from 1960s during the colonial era, when Zimbabwe began to develop into towns and cities, Grigg (2005). Furthermore urban gardening during 1960s were not yet owned collectively but were once regarded as home gardens , where urban residents utilise the backyard land , farming vegetable for household consumption. More so, urban gardening further moves a step ahead towards

independence, when urban dwellers began to utilise open spaces and free land in towns for farming. After independence the Government of Zimbabwe and other institutions that supported urban agriculture, began to legalise urban farming through construction on urban community gardens. Each beneficiary of the garden has his/her own allocation within a large garden area. The total number of beneficiaries, availability of water, size of land, etc determines the size of land that each beneficiary can own. Infrastructure is owned collectively and the management of activities is under the committee, FAO (2005).

Zimbabwe's economic recession, is actually increasing urban poverty as well as unemployment. Zimbabweans experienced harsh situation in early 2009, when the Zimbabwean currency collapsed after it had accumulated 12 zeros, job creation and growth was no more, high unemployment rate of about 80%, Zimstat PICES (2011/12). During that period urban poverty was 98.5%, and the poverty datum line was \$US 435.00 which was unattainable by Zimbabweans because of hyper-inflation. However things began to be partially better in April 2009 when the government of national unity introduced multi-currency system, from April 2009, the poverty line in a family of 5 was \$US 141.00 and 65% were earning below poverty datum line of \$US 435.00. However the situation changed in 2014, Zimstat (2014), it states that, the poverty datum line in Zimbabwe is US\$ 534.00. The study estimated that 61% of Zimbabweans are poor and 45% very poor. In 2014, 63.3% of Zimbabwean's households had per capita consumption expenditure below the upper poverty line, and the household per capita which is US\$1.07.00, Zimstat (2014). This means that in a family of five which generates monthly income below US\$ 534.00, is regarded as living in poverty. Basing on the Zimbabwean situation where monthly salaries of civil servants are below US\$ 500.00, high unemployment rate, it makes sense to conclude that the whole of Zimbabwe's citizens are living in poverty. Thus, eyeing the above statistics through a lance of a local governance practitioner, it can be deduced that from 2009 up to date poverty

situation in Zimbabwe had remained a problem and employees are still earning below current poverty datum line of \$US 534.00.

Evans (2009), suggest that in five of the eight countries, the absolute number of urban poor and the share of poor people living in urban areas is increasing over time, especially in Bangladesh, China, Ghana, India and Nigeria. For Kenya, Sahn and Stifle (2009), suggest that only 1.2% of Kenya's urban population could be considered as poor in 2005, yet the Kenyan Bureau of Statistics suggested that 49% of Kenya's urban population were in absolute poverty in 2005.

In Zimbabwe, Alwag, Mills and Taruvinga (2008), argued that, the Food Poverty Line (FPL) represents minimum consumption expenditure which adequate to make sure that each household member can consume, while the minimum food basket in Zimbabwe is 2 100 kilo calories. In 2014, the number of households eating only one or two meals a day was actually 29%. This shows that urban poverty is continuing to increase in different countries as well as in Zimbabwe.

Millennium Development Goals are also centred at eradicating poverty and improve the life conditions of people in 189 countries which are members. Urban community gardening is another strategy which is meant to achieve the MDGs especially on poverty reduction. This is when the urban poor are participating in urban agriculture by farming in groups on allocated pieces of land by the local authorities of their jurisdiction.

Through the support of the Sustainable Development Goals which were adopted in June 2012. Through urban community gardens, Sustainable Development Goals such as goal number one, of ending poverty in all its forms everywhere and achieve food security and improved nutrition and promote sustainable agriculture, will be achieved through participation of urban poor in community gardens.

Since the study is going to be carried out in Karoi, it is vital to describe the background of Karoi. The town of Karoi, is situated in Hurungwe district in the north-eastern Zimbabwe. The town straddles the main Harare to Chirundu road and is about 204 km from the city of Harare. The establishment of Karoi Town Council, pre-independence was to be a service centre and to be fixed local for distribution of farm inputs and as a collection centre for agricultural produce. Responding to the demands for increasing agricultural activities in the surrounding areas of Karoi, it grew steadily and was upgraded into a town council status in 1991. Basing on the background of Karoi, it is essential to study the viability of urban community gardens in addressing urban poverty.

In Zimbabwe, the government has adopted the economic blue print, Zimbabwe Agenda for Sustainable Socio-Economic Transformation, (ZIM-ASSET) which is to be achieved by December 2018. The idea of community gardens has a positive impact to the achievement of some of the agenda of ZIM-ASSET, such as food security and nutrition, social services and poverty eradication.

To end this, the Constitution of Zimbabwe amendment 20, chapter 2 section 15 supports the activities and existence of urban community gardens through, encouraging people to grow and store adequate food, secure the establishment of adequate food reserves and encourages and promote adequate and proper nutrition through mass education and other appropriate means.

1.2 Statement of the Problem

Urban community gardens have become an increasingly popular practice and are widely perceived to be a panacea to urban livelihood challenges. This is because they contribute significantly to the production of grains, vegetables and market. Several factors such as persistent rural-urban migration, poor economy and unemployment has compromised urban

residents' sources of livelihoods living them with no option , but to adopt survival strategies like urban agriculture through urban community gardens.

In an ideal situation, when the Zimbabwe economy is stable, low inflation rate, 100% employment levels and people earning above poverty datum line of US\$ 534, 00, Zimstat (2014). Thus urban poverty will be a foreign thing in an ideal perfect economy situation.

However the prevailing situation in Zimbabwe of poor economy and limited employment opportunities led urban dwellers to survive under poverty conditions. For instance, some of the urban residents in Karoi, are eating only one meal a day, also a family of six surviving with dollar a day. Zimbabwe Poverty Survey (2009). More so, the situation is now worsened by the retrenchment of workers by major companies in Karoi such as, Delta Beverages and Cargill Cotton Company. Thus it is the essence of the study to show how urban community gardens can be a panacea to urban poverty.

1.3 Research objectives

- To evaluate the effectiveness of urban community gardens in reducing urban poverty.

- To assess the extent to which urban community gardens meet the demands of household food security.

- To find out challenges faced by urban residents in urban agriculture.

- To identify strategies that can be used to improve the conditions of urban community gardens in Karoi town.

1.4 Research Questions

- How effective are urban community gardens in reducing urban poverty?

- To what extent do urban community gardens meet the demands of household food security?

- What are the challenges being faced by urban residents in urban agriculture?

- What are the strategies that can be used to enhance the viability of urban community gardens in Karoi?

1.5 Significance of the Study

1.5.1 Stakeholders in Poverty Reduction

The hope of this research is to benefit every stakeholder who is in the category of poverty reduction as well as alleviation through implementation of urban community gardens. This is due to the fact that the study will bring ideas that can be used by various stakeholders who are in the field of urban poverty reduction in context with urban community gardens.

1.5.2 The Zimbabwean Government

The research will contribute to the Zimbabwean government, in attaining the national agenda reducing poverty as the major aim of Zimbabwe on Millennium Development Goals. Also the research will contribute to the attaining of the Sustainable Development Goals by the Zimbabwean Government especially, goal number one of ending poverty in all its forms everywhere and to achieve food security and improved nutrition and promote sustainable agriculture. Lastly but not least the study also contributes to achievement of ZIM-ASSET in food security and nutrition as well as social services and poverty eradication.

1.5.3 Local Authority

The research will be significant to the local authority of Karoi in the sense that it will suggest solutions that can be put in place to make sure that there is continuity in community gardens and upgrading of the standards of the urban community gardens. The study will also note the challenges that are being faced by the urban residents who are in community gardens and recommendations will be suggested which can be used by the council to advance the standards of the community gardens.

1.5.4 The Urban Community

The findings of this research will benefit the urban residents in whether to intensify their community gardens or diversify. The urban community will also promote other towns which have-not engaged in community gardens to begin the projects so as to improve their livelihoods strategies. The results of this research will also determine the viability of community gardens and it can be replicated in other communities so that it will serve the same purpose of addressing urban poverty.

1.5.5 Midlands State University

It is vital to note that, the research will be significant to Midlands State University in the sense that the project will be placed in library and will be a source of reference to students who are carrying out study in urban poverty eradication through community gardens.

1.5.6 The Student

Lastly but not least, the study is of great importance to student because it helps the student in to acquire a lot of knowledge and having a fuller understanding on urban poverty reduction measures. Basing on the outcome of the study, it will assist the student in future to have best strategies which will be viable to urban poverty reduction in urban areas through community gardens.

1.6 Delimitations

The research is focusing on addressing urban poverty in context with community gardens in Karoi town. The research will also have a significant to various institutions that are in reduction of urban poverty. The whole study will be conducted in Karoi town which straddles along the Harare-Chirundu high way. It is about 204 km from Harare. Karoi is the first town from Chirundu border which connects Zambia and Zimbabwe. Karoi is surrounded by Chinhoyi Municipality which is 88km away, Makonde RDC, Magunje growth point which is 25 km away, Kariba Municipality and Chirundu Local Board. The town of Karoi consist of ten wards.

The study will be centred mainly in Karoi locations such as Chikangwe where there are housing offices of Karoi Town Council and the Community Service Department which works hand in hand with NGOs in poverty alleviation through community gardens. In 2012 the total population of Karoi was 28 606, consisting of 13 189 males and 15 417 females ZIM-STAT (2012).

Furthermore the study comes after the several problems that are being faced by the residents of Karoi, which include food shortages, unemployment, housing etc, which are leading them to urban poverty. Thus the main concern of the study is to show how urban poverty can be reduced through indulging into urban community gardening. The study will focus on the benefits of urban community gardens which include; income generation, employment, food supplement and security, nutritional diversity and socio- economic empowerment, which addresses urban poverty. Also the study will focus on the problems encountered in community gardens and solutions.

Lastly but not the least, the study will not focus to not concern issues such as political divergence in urban community gardens members, internal conflicts between members of community gardens, power struggle of community gardens chairpersons and hunger issues.

To this end, it can be seen that the main concern of the study is to focus on the role played by urban community gardens in reducing urban poverty, focusing on the benefits of urban community gardens such as income generation, boost food supply, creates employment etc. However the study will not focus to areas which are not the concern of the study such as the political divergence and affiliation of community gardens members, internal conflicts of community garden members and hunger.

1.7. Limitations

1.7.1 Financial Problems

Funds will be a challenge here and there to the researcher to move around carrying out the study. However to overcome the problem the researcher managed to arrange with the department of community service of Karoi town council and the researcher will make use of time when the community service officer is moving around in community gardens, that is a challenge to funds for transport will be sorted. Also the researcher has begun a typing and printing project to cater for funds needed to complete the research.

1.7.2 False Information

Some people have a tendency of giving false information whenever they are being interviewed or completing a questionnaire, this is because some they do not want to publicise their work or the fear of the unknown.

To overcome the challenge, the researcher will indicate to the respondents that the study is all about academic reason and there is nothing more needed. More so the researcher will be in the field with respondents in order for them to understand what the research is all about.

1.7.3 Resistance from Respondents and Delays

Delays are likely to be encountered especially when respondents are completing questionnaires, some may demand more days to complete the questionnaires which will cause

delays in gathering data. Also in seeking permission to carry out a study in community gardens of Karoi they might be delays in responding by the management. Some respondent may resist to what you will be saying.

To overcome the challenge the researcher will try by all means to speak with the management to avoid delays in whatever form during a process of gathering data from members of community gardens. Effective communication will be used by the researcher to deal with resistance.

1.8. Definitions of Terms

1.8.1 Urban Poverty

According to Taru, (2013), urban poverty is a situation where an urban population or a portion of the urban population is able to meet only its bare subsistence, the essentials of food, clothing and shelter, in order to maintain a minimum standard of living.

1.8.2 Poverty Alleviation

It is a situation which targets to reduce negative impacts of poverty to the people which are poor, in a sustainable and permanent way, Evans (2007)

1.8.3 Community gardens

According to Middleton (2009), are a place to grow food crops, flowers and herbs in company of friends and neighbours.

1.8.4 Livelihoods

Chambers (2005), state that livelihoods comprise of the capabilities, assets (both material and social resources) and activities required for means of living

1.8.5 Council

It is a group of people who come together to consult, deliberate or make decisions. A council may function as a legislative especially at a town, city or country level. Webster (2005).

1.9 Summary

The chapter reviews that to address urban poverty, urban dwellers who are not employed and those who are facing difficulties in life must indulge into urban agriculture through urban community gardens. The background of the study managed to highlight the challenges being faced by local authorities to meet the demands of people under their jurisdiction, such as urbanisation and employment leading to urban poor and poverty. Statement of the problem is the major focus of the study which include an overview of what the researcher is focusing, for instance due to urbanisation and unemployment, urban dwellers are now in the pool of poverty, so to overcome those challenges, indulging into urban agriculture through urban community gardens will be a panacea to urban poverty. More so it can be seen in this chapter that the study will be significance to the government of Zimbabwe, stakeholders in poverty eradication, the urban community, the local authority and many more. The next chapter will be literature review, which will be focusing on the various studies done by several authors in conjunction with the research topic.

Chapter II

Literature Review and Theoretical Background

2.0. Introduction

This chapter focuses on the literature review of urban poverty and how urban community gardens can be a panacea to urban poverty. Literature review is important in the sense that it helps to establish a theoretical foundation as well as consolidating one's idea. Therefore, the researcher reviewed the literature under the following categories; urban poverty, urban community gardens, urban agriculture in Zimbabwe, overview of urban poverty in the world, urban poverty in Zimbabwe, causes of urban poverty, millennium development goals on poverty and agriculture, sustainable development goals on poverty and development, theoretical conceptualisation, role of urban community gardens in reducing poverty and the challenges being faced in urban community gardens.

2.1. Literature Review and its Role to Study

Literature review is actually an evaluative report of the studies that is found in the literature, related to your selected area of study, Boote and Beile (2005). This means that literature review describes, evaluates, summarizes and clarifies the works of the study being carried out. It also gives the researcher a theoretical basis and helps to determine the nature of the research. Boote and Beile (2005), mentioned that literature review drives further than the search for information, but helps to identify and articulates the relationships which is between the literature and your field of research.

Gay *et al* (2006), is of the idea that, literature review includes an organised, identification, location and analysis of documents which contains similar information related to your research problem. Furthermore, literature review plays an important role in reviewing

research strategies as well as specific data collection that was or was not been productive in investigations of the topics similar to yours. Thus this information will assist the researcher in avoiding the scholar's mistakes and capitalise from those mistakes.

As the research topic, demands the researcher to look on how urban community gardens can be used to address urban poverty, the researcher will be looking and recommend various works which have been under in relation to the research topic.

2.2 Urban Poverty

Poverty remains a problem which needs much attention in all developing countries. The concept of poverty is viewed differently from one point to another. What is perceived as poverty in Africa is different from that of Europe. A myriad of definitions has been said by different schools of thought. Poverty has both financial and non-financial dimensions. In other dimensions, poverty can be explained as lack of income or resources, a lack of knowledge, a lack of basic human needs or a lack of institutional defences, World Bank (2006).

If all the measured levels of poverty mentioned above are found in one they are viewed to be in extreme poverty. According to Evans (2007), urban poverty is a situation where an urban population or a portion of the urban population is able to meet only its bare subsistence, the essentials of food, clothing and shelter, in order to maintain a minimum standard of living.

In conjunction with it with the wider broader perceptive of urban poverty, urban poverty is a combination of economic, social and political deprivations. World Bank (2006), defines it as the lack of what is necessary for material well-being. Urban poverty has a multiple and complex causes, Side (2011). Urban poverty is not only the deprivation of resources to the poor but also in ability to access information. Above all they lack collateral to access loans to start their own project.

2.3 Urban Community Gardens

Pudup (2008), defines urban community gardens as open spaces in an urban settlement which are managed and operated by local members of the community in which they cultivate food or flowers. He further mentions that urban community gardens may include schools, youth groups, prisons, hospitals, elderly groups as well as residents of the neighbourhoods.

The United States Department of Agriculture (2007), also views urban community gardens as a shared space where urban local people come collectively to grow various crops such as vegetables, flowers and other plants to meet their demands of food and income, a good example of urban community gardens are those gardens in Senga where urban residents of Gweru City collectively indulge into farming activities. This means that urban dwellers will unite and allocate the unutilised land equally to each beneficiary under the directives of the council under that jurisdiction, so that they will grow various crops which will sustain them from urban poverty.

According to Taylor and Francis (2009), states that urban community gardens in Africa involved irrigation in home gardens long time back in a way of providing vegetables for household consumption. Thus, Community gardens in urban settlements plays a pivotal role in reducing urban poverty since they provide marketing opportunities to urban poor people and also built a strong base of food production.

Middleton (2009), states that most of the urban people are facing problem of shortage of adequate space at their home yards to have a garden and as a result they use open spaces which are allocated by local authorities as community gardens to build a sense of community among neighbours. Urban community gardens as propounded by Middleton (2009), they are located on land that is divided into different plots for every individual or household. In support of the above, these gardens have leaders and the management committee which is

elected by the beneficiaries of the garden, the elected leaders works hand in hand with the local authority department under social service.

In support of the above, Bowora *et al* (2012), mentioned that urban community gardens are located at the centre of the urban community, organised and headed by a group of urban community, making it easy to share work and rewards. This means that urban community gardens act as a survival strategy for the urban poor in many urban settlements since they share resources together in order to meet their daily basic needs and mutual obligations.

Sithole *et al* (2012), mentioned that community gardens are forms of urban agriculture whereby residents of a particular urban community participate jointly in growing different types of crops on a given piece of land. More so, community resources which are shared in community gardens include water, fences and possibly security service assistance from Non-Governmental Organisation and benefits from the local authority which is linked to that community garden.

2.4 Urban Agriculture

Urban agriculture is defined by Mougeot (2006) and Sithole *et al* (2012), as growing of plants, rearing of livestock and growing of trees on or within the fringes of cities (intra-urban and peri-urban agriculture respectively) including related input provision, processing and marketing activities and services. It is also a dynamic concept which includes a variety of livelihood systems which ranges from subsistence farming and processing at household level to a fully commercialized farming. Kekana (2006), is of the idea that urban agriculture is undertaken on a greatest portion as a survival means by individual urban households generally in backyards.

Mougeot (2006), views urban agriculture as an industry which is located within an urban or on the outskirts (peri-urban) of a town, metropolis or city, which raises or grows, processes,

distributes a wide variety of non-food and food products, using mainly material and human resources, products and services which are found within and around the urban area, and in turn it also supply material resources and human, services and products largely to that urban area. For example in Mutare, Sakubva and Chisamba gardens supplies 60% of vegetables to the local market in Mutare, Chadyiwa (2011). This shows that urban agriculture plays a major role in supplying the local area with resources.

The most population which is involved in urban agriculture are the urban poor, the activities may be taken at their homestead, private land, open spaces and public land. Food crops are grown mostly and animals are also kept only for self –consumption and the surpluses will be traded. Kekana (2006), further mentioned that urban agriculture can be regarded as a rational economic and socially activity which is useful within development.

2.5 Urban Agriculture in Zimbabwe

According to Sedze (2006), urban agriculture is growing at a greater pace due to the suffering urban population which is unable to feed their families. For instance in Zimbabwe in the year 1990, gardens covered 8% of the land in the city: by1994, 16% of land and by 2001 urban agriculture pervaded 25% of urban area, Sedze (2006).

The Urban Councils Association of Zimbabwe's 61st annual conference, which was comprising the minister of Local Government, Public Works and National Housing, representatives of urban councils, councillors , regional, international and local development partners strongly urged urban local authorities to promote urban agriculture in their cities, develop appropriate incentives and other policies necessary for its growth, Mushavanhu (2005).

In Zimbabwe, there is no legislation that targets urban agriculture, several instruments which include the Environmental Management Act Chapter 20.27, the Regional Town and Country

Planning Act Chapter 29.12, views urban agriculture as the cause for urban environmental degradation and also responsible for other negative biodiversity challenges. Also most of the urban farmers in Zimbabwe do not have title deeds, which means they do not have recourse through the courts when their pieces of agricultural land is acquired and put into other competing uses.

In Bulawayo, according to the 200-2015 city of Bulawayo master plan, the city own 11 000 hectares of vacant land. The vacant land either publicly or privately owned is designated for the expansion of residential, industrial and commercial stands, but the vacant land is temporarily converted into small individual plots either illegally or legally by urban farmers. However the municipal planning process in Zimbabwe, regards urban agriculture as incompatible with urban development hence as an impediment to urban growth, Chaipa (2011). This means that in Zimbabwe, construction of residential, commercial and industrial areas is the first priority and urban agriculture is largely viewed as a second option of land use as compared to other land use activities.

In Zimbabwe, urban agriculture is driven by a combination of factors linked to severe food crisis including the failure of the Structural Adjustment Programmes (SAPS) and Land Reform Programmes, worsening poverty, market failures and political and economic decline since year 2000, Kutiwa *et al* (2010). The 2000 Government Fast Track Land Reform Programme (FTLRP), which was accompanied with misaligned food security and economic policies lead to a near decline commercial agriculture sector. Sithole (2012), asses that subsequent ad-hoc food policy strategies failed to address the country's food security challenges leading to dietary and economic deficiencies especially among low income urban minorities. However, on the other side, food shortages led to exorbitant food prices and the intensification of urban agriculture as a strategy towards self –sufficiency and self-reliance.

Urban agriculture in Zimbabwe is mainly practiced in open spaces of the city, urban fringes and along rivers where land is not favourable for construction, CARE (2009). Women were the major suppliers of labour and management of inputs for urban agriculture and children cheeping in as assistants. However from 2000, men began to be involved in urban agriculture as a result of unemployment which is increasing in Zimbabwe at a greater pace.

In Zimbabwe urban agriculture include both controlled gardens which takes place on an allocated land by council and farming that occurs at any open space that is easily accessible by the urban people. The uncontrolled urban agriculture resulted in various conflicts between the authorities and urban poor due to the authorities' adherence to implementation of policies controlling the farming of the public land, citing reasons for environmental degradation. These reasons include preventing of siltation of nearby water bodies soil erosion, hydrology effects and increasing of breeding sites of malarial mosquitos.

2.6 Overview of Urban Poverty in the World.

World Bank (2008), states that there are various dimensions of poverty which makes it suitable for multiple ways of indicators which include levels of income and consumption, social indicators and indicators of vulnerability to risks and of social-political access. The most common method which is used to measure poverty either rural or urban is based on income or consumption levels. UNDP (2009), states that a person is regarded as poor if his/her income or consumption levels fall below the minimum level which is necessary to meet the basic needs. Poverty line refers to the minimum level which is necessary to meet the basic needs.

UNDP (2007/2008), is of the idea that poverty in the world increased considerably between the period of 1995 and 2003. They further mentioned that the proportion of households which are below food poverty line (those who are very poor) increased from 20% in 1995 to 48% in

2003, representing an increase of 148%. More so it states that the proportion of households which are below the total consumption poverty line rises from 42% in 1995 to 63% in 2003, which represents 51% increase. It further states that urban poverty in Zimbabwe has an increase compared to rural poverty mainly due to factors linked to poor country's economy and burdens of urban dwellers on paying water, electricity, transport and rent as compared to rural dwellers that pay less.

The UNDP (2008), states that in terms that in terms of food, rural dwellers rely mostly on agricultural products which are cheaper as compared to those in urban. More so, goods which are processed such as bread, cooking oil and sugar are actually more likely to be expensive in rural areas. This makes the total consumption poverty line and food poverty line of the urban dwellers to be higher than the rural dwellers.

In southern Africa, UNDP (2007), pronounced that in urban areas of southern African countries such as Zambia, Botswana, Lesotho etc, those urban households being headed by females have a higher poverty incidence as compared to those male headed households. In developed countries' urban female headed households they have few chances of poverty because of developed economy which is able to meet the demands of every household. They further mentioned that from 2006 poverty began to increase more often in male-headed households than female-headed households because males in urban they rely on wages from employment and currently the wages are negatively affected by the poor economy of Zimbabwe.

Crush *et al* (2006), state that cities in the Sub-Saharan Africa, (SSA) are growing at exceptional rate of about 5% annually. In support of the above, the UN-Habitat (2006), further reports that the percentage of urban residents in SSA is expected to rise from 30% to 47% of the total population during the period lasting from 2005 to 2030. This means in poor

African countries it will cause problems in urban development and ensuring proper household food security. Beall and Fox (2007), is of the idea that as the world's urban population continues to grow, so does the numbers of the urban poor. Thus to boost food security in urban areas urban agriculture has to be practised.

2.7 An Overview of Urban Poverty on Zimbabwean Context

According to Tibaijuka (2005), states that in, Zimbabwe, urban poverty can be traced back from the 1930s in the period of great depression. The Commissioner of Labour during that period of 1930s, put the blame on the blacks who were getting skilled and competing with whites in searching for jobs. Furthermore Tibaijuka (2005), mentioned that the labour commissioner blamed the employers who had developed the tendency of being economic by employing more blacks on a cheap labour or forced labour, leaving whites in the cities under poverty conditions because they were not willing to work for low wages. In that period whites' life became tough to a situation where they had to rely on state for assistance.

Furthermore, urban poverty in 1960s, was worsened by overcrowding of blacks in the cities and unemployment conditions. The black's unemployment challenge actually increased with the challenge of low wages, also that is the time when black's economic and political need was against the need of the Europeans who were the employers. For instance in 1962, an average black's yearly wage was 68.8 pounds as compared to that of an European which was 1,034 pounds. Furthermore it was estimated that half of the total number of blacks which were employed of about 612,593 was earning 5 pound a month, Tibaijuka (2005).

After independence, Economic Structural Adjustment Programmes (ESAP) was introduced, which effectively increased urban poverty in Zimbabwe, this is because it left rich richer and poor poorer, due to decline of urban per capita income, retrenchments in the public sector and

urban infrastructure deterioration. ESAP made the town life unenjoyably in the sense that it reduces anything that smacked state subsidisation, Mpofu (2010).

Urban poverty in Zimbabwe continued to be a problem, which led to the intervention of the Reserve Bank of Zimbabwe (RBZ) in 2007, when the country was under hyperinflation and the life in town was not good and tough. Through the RBZ Midterm Monetary Policy (2007), they formulate the Basic Commodities Supply-Side Intervention (BACOSI) which was aimed to boost production targeting fiscal assistance to manufacturers of basic commodities as well as retailers and selected wholesalers. RBZ was to make sure that there are basic commodities in supermarkets; however the policy collapsed in the late 2008 when most of the supermarkets had empty shelves. The basic commodities were only found in black market at an exorbitant price, which led to urban dwellers to be hunter and gatherers of basic commodities.

The Statistics of World Bank (2014), actually indicated that urban poverty in cities of Zimbabwe in 2014 was 65%, this is because 75% of urban population in Zimbabwe is not employed and those employed are earning below the poverty datum line which is US\$ 534.00. SAVE the Children (2014), in January states that 10 out of 13 million urban residents of Zimbabwe, which is 75% of the total population, were serving under desperate poverty. Furthermore , 2015 January UNICEF indicated that 78% Zimbabweans are absolutely poor and 55% of the total population(which is 6.6 million) lived under food poverty line. Zvivenge *et al* (2015) mentioned that all the estimated statics actually shows that Zimbabweans are poor and they only identifies the percentage and number of those who are poor either urban or rural but they do not show us the period of those poor Zimbabweans have survived in such poverty conditions, the historical as well as social dimensions of urban people in understanding poverty and what it means to be poor.

Tibaijuka (2004), emphasize that urban poverty in Zimbabwe was worsened by the deterioration of the economy. He further states that in the 2004 era unemployment rate was 80% and $\frac{3}{4}$ of the industries; private company was forced to close due to poor economy. Almost 800 manufacturing industries and companies shut down all over Zimbabwe in the period of 2002, those which left operating were struggling and some are in closure state. In urban areas, from 2005, Tibaijuka (2004), states that over four million of Zimbabweans are earning their living through informal sector. This led to tight situation in urban areas were over 70% of the population are serving below the poverty datum line.

Evans (2007), is of the idea that Zimbabweans are moving deeply into poverty, this is evidenced by the Human Development Index (HDI) which measures literacy, life expectancy, standard of living and education, Zimbabwe's human development index levels actually fell from 0,654 in 1990 to 0,513. Evans (2007), mentioned that 85% of economically active group is not employed and over 75% of Zimbabweans are regarded as poor.

Taru (2013), supports the above idea, by mentioning that poverty levels in Zimbabwe were so high to an extent that it was ranked bottom in the human development report of 2010. He states that this is due to blatant deterioration of economy over the past decade in Zimbabwe which has pushed several people in Zimbabwe into informal sector and prospects from the mainstream economy dwindled.

Taru (2013), further mentioned that for the last decade and half the economy of Zimbabwe was so pathetic and the gross domestic product falling by a half in a decade, in 1998 it was US\$574 while in 2009 decreased by almost half to US\$294, PRP (2012). Urban poverty was accelerated in Zimbabwe by hyperinflation which was 49% in 2000 and in 2008 was 231,000,000 %, Mutami and Chazovachii (2012). Thus under such scenario, the survival of most urban household livelihood activities was stifled.

2.8 Causes of Urban Poverty

2.8.1 Rural- Urban Migration

Urban poverty can be a result of rural- urban migration. This when a country has failed to bring ideal economic situation in rural areas. Rural dwellers began to migrate to urban for search of better economy. More so, cities have better chances for individuals to upgrade their welfare status. Generally , as well known by everyone being in the city brings high self-esteem to the people, thus became some of the push factors which cause rural people to migrate from their area of birth to urban areas, leading to congestion in cities. United Nations (2012), support this idea by mentioning that, it put burden to city local authorities because they will not be able to cater for such a large number in either, employment or shelter and food, which lead to urban poor.

2.8.2 Poor Urban Governance

Poor policy implementation by the local authorities also plays a role to urban poverty. If the authorities are corrupt, implement policies pathetically and improper management in cities will lead to deprivations like, unsuitable infrastructure, poor environment, limited access to health care, schools as well as social exclusion, for instance in Zimbabwe, poor governance characterises the running of day to day activities of local authorities. Local authorities are failing to provide better service to local people such as affordable houses and they are failing to accommodate the number of urban dwellers which is increasing daily due to rural –urban migration, hence lead to urban poverty, Chaipa (2011).

2.9 Millennium Development Goals (MDGs) to Poverty and Agriculture.

Millennium Development Goals born out of the Millennium Declaration of 2000 also gives the basis to urban agriculture, Zimbabwe MDGs report (2005), the main aim of the MDGs which is to be achieved by 2015, is to promote development by improving economic and social conditions in the world's poorest countries in a way to realise the right to freedom, dignity, tolerance and solidarity and basic standards of living. Eradication of extreme poverty is also the main core of MDGs, it targets halve the proportion of people who live with less than one united states dollar per day, to achieve decent employment for men, woman and young people. The accommodation of urban agriculture in different towns of Zimbabwe can be a way which contributes towards the achievement of the MDG number three.

Zimbabwe as a signatory of the United Nations has mandated to implement Millennium Development Goals. As a member of UN and being affected by the MDGs, Zimbabwe has chosen to eradicate extreme poverty by 2015. Thus, Indulging into urban community gardens which the urban local authorities were urged to implement by the delegations of the Urban Councils Association of Zimbabwe's 61st annual conference, actually have an impact towards the achievement of eradication of poverty in Zimbabwe.

Eradicating extreme poverty by 2015 is the main aims of Zimbabwe to achieve in the MDGs. The Literature shows that for the past 60 years, United Nations has created a partnership with governments of the developing countries continental wide, in eradicating poverty and assisting the governments with financial support and technical help. Starting from 2000, the developing countries have adopted the MDG one and have mandated to cut by half extreme poverty, so that they will achieve the MDG one five years ahead of schedule.

However, MDG one, up to now has not yet met in Africa and South Asia (UNICEF; 2010), states that over one billion people in the world are in extreme poverty and also being vulnerable to price shocks. Due to these conditions in developing conditions, the World Bank has chip in with financial aid to developing countries for them to boost projects and programmes that will help in achieving goal number one. Since food security is important to this effort, World Bank is assisting with capital of about \$8-10 billion each year as well as working in different ways to boost agricultural products and resilience to climate change.

As cited by (UNICEF; 2010), the statistics have however reviewed progress that has been met and they showed that 54% of developing countries have met or are on track to meet the goal of cutting extreme poverty in half, 700 million fewer people lived in extreme poverty in 2010 than in 1990, 26% of countries have halved child malnutrition or are on track and 1.2 billion people around the world still live in extreme poverty.

2.10 Sustainable Development Goals on Poverty and Development

Sustainable Development's origins can be dated back in the 70s, under the Brundtland commission, which was also known as the world commission on environment and development. Sustainable development is defined by Le Blanc *et al* (2012), as the development that meets the needs of the present generation without compromising the need of the future generation. In 1992 the Earth Summit was held in Rio de Janeiro and the delegates at the summit agreed to develop a set of Sustainable Development Goals that could be effective in pursuing and harnessing the coherent action on sustainable development, United Nations (2012).

SDGs became vital for urban development, because urban poverty remains dominating urban areas. Urban poverty strongly governs the quality and quantity of the food that people can purchase. Sheaffer and Moncada (2009), states that in developing countries, workers are

serving with only \$1-2 per day or less and the some of the economic situations of developing countries reduces the demand for food, which led to lower levels of either distribution or food production. Thus urban poor began to look for environmental assistance through urban farming, utilising resources like water and soil.

The 27 principles were set as Sustainable Development Goals under the Rio De Janerio declaration, which is to empower either urban or rural people to be the cornerstone of their local environment for current and future generation development. The Brundtland Commission actually came up with the ideal perspective of sustainable development. The commission viewed Sustainable Development as people oriented and development which meets the needs of the current generation and without compromising the need of the future generations to meet their own needs.

According to Moncada (2009), he states that Sustainable Development is not a goal which is tangible, but rather it is a principle which is organised to govern the activities at all levels of the system and to provide a quality condition of social alternatives that will yield vitality. Urban poverty and rural poverty both became vital components of sustainable development because they are fundamental of human welfare. He further states that poverty can be only addressed effectively if the natural resources are being used correctly and in an equitable manner which meets the human needs.

Participation and sustainability are the two fundamental objectives of Sustainable Development paradigm. Several goals and principles were set at the Rio De Janeiro summit, in addressing resource utilisation which can be used to prevailing attempts of addressing poverty in either rural or urban. The principles and goals of the SDGs summit, actually fits to the prevailing attempts of addressing poverty in either rural or urban. Mougeot (2006), is of the idea that principles and goals of the SD summit actually fits to the prevailing situation,

because the local authorities in developing countries have several vacant land in either rural or urban which is underutilised or unused, thus this vacant land can be used or rezoned and be useful to urban poor in practising urban agriculture.

According to United Nations (2012), sustainable development goals can only be achieved through partnerships between private and public as well as including the voluntary urban dwellers in the community. Fox (2006), is of the idea that empowering local people who are poor through community participation is the major drive to poverty alleviation. Also it is now recognised widely that development needs to be focused on strategies which empowers the poor.

2.11 Theoretical Framework

2.11.1 Johanne Henry Von Thuneun's Spatial Location Theory.

Von Thuneun's spatial location actually shows a particular viable frame work and analysis of urban agriculture. The model of Von Thuneun illustrates the economic rationale for land use around the central marketing place. The model propounded that the value of land determines its use and its distance from the central market determines its value, Nobuhle et al (2014).

This can be evidenced in Zimbabwe, on the current use of land through urban community gardening, which are following Von Thuneun's model. Those products which are perishable such as vegetables and tomatoes are being produced nearer to the market centre as mentioned by Von Thuneun. The model also emphasize on the intensive use of land which is closest to the market.

The theory also states that the second zone will be used for production of heavy products such as cereal crops and legumes. These crops are produced at least nearer to the market in the second zone because they are bulk and to minimise transport cost. Furthermore, the theory states that the third zone is being used for livestock grazing, because the land will not

be suitable for farming and it will be too far from the central market. This can be evidenced in Zimbabwean situation where the land which is far from the town centre is being used for farming heavy products, for instance Lions Dens farms which are specialising on potatoes, soya beans and beans since they are far away from Chinhoyi Market Centre,

However, it is not all where the ideas of Von Thunen model implies. According to Kekana (2006), it is not only the value of the land and its distance from the central market place that determines its use and value, respectively, political and social motives as well as the physical nature of land and transaction cost considerations also influence land use patterns.

More so, urban agriculture cannot be only based on the theory of optimal land allocation because the current economic growth is failing to support the rapid growth of urban population with employment and public investment to provide economic rationale for social and physical infrastructure.

To this end, Kekana (2006), states that the theory regards urban agriculture as a rationale economic and socially useful activities within urban development and it gives a scope which should be provided for urban agriculture to grow in the modern urban environment. Thus urban agriculture will be a rational resource allocation for urban dwellers who are not in a position suitable to earn sufficient income from non-farming to provide a suitable urban family livelihood.

2.11.2 Structural and Cultural Theories of Poverty

Structural theory describes poverty in terms of conditions under which people live, this include unemployment, underemployment, poor health and poor education. Also the theory put attention to resources, it states that people in various areas are in poverty because they lack objective resources which are needed to boost income and well-being and also they lack power to control the distribution. Weber (2005), state that, the theory is based on allocation of resources and the role of the central government in creating favourable conditions to people. He further explains that developing countries has resources but the problem is who will get those resources and as a result, people are deprived from getting those resources which led them into poverty.

Cultural theory, found the explanation for poverty in traits of the poor themselves. The theory asserts that poverty is caused by attitudinal, valuation and behavioural patterns of the poor which prevents them from being socially mobile. The theory also blames individuals who are in poverty as a cause of their own problems. It also argued that through hardworking and selecting better choices, poor conditions can be avoided. It also state that being poor it is because of lack of genetic qualities for example intelligence and cannot be reserved easily.

Weber (2005), mentioned that cultural theory view poverty as a result of inheritance from the past generation, basing on values, beliefs and skills that are culturally transmitted but individually held. Thus they blame the past generation for failure to create favourable conditions for future generations.

The theories to some extent, it manage to explain why urban people in Zimbabwe are poor, for instance the allocation of resources applies to Zimbabwean situation. This is evidenced by poor sharing of resources and ownership of industries under the Indigenisation Programme, not all Zimbabweans residents manage to benefit from indigenisation but few individuals

who have political muscle took all the ownership of industries and companies, Madhuku (2010).

Furthermore the theories manage to explain why people are poor due to failure of the government to create favourable conditions to people, such as employment and quality food. This is evidenced in Zimbabwe, the government has failed to create employment for Zimbabweans and as for now the unemployment rate is 65% , which cause many Zimbabweans to move out of Zimbabwe in search of employment and escaping from poverty, Madhuku (2010).

However, the theories omitted some to the reasons why Zimbabweans people are poor. They only manage to focus on resource competing, poor allocation of resources, individual failure and employment They have omitted the idea that people can be poor due to Political violence for example in 200, during Fast Track Land Reform Programme several people lose their property due to violence and as result they were left in poverty. Also the theory failed to look on the effects of natural disasters to poverty, because being poor can be a result of natural disasters, for instance the Tokwe-Mukosi incident. More so the theory failed to look on the options such as location, race and age, which are very important factors that contribute to poverty in Zimbabwe.

2.12 Empirical Evidence

2.12.1 Case Study of Gamakalle Community Garden in Niger

Gamakalle is found along the left riverside of Niger River, at the fringes of Niamey town. Zarma people are the main producers and as well as the residents of Gamakalle residential area. Gamakalle community garden covers an area of about 230 hectares and it has got 600 producers, Ali (2013). Male population dominates Gamakalle community garden and the average age is 22 years minimum and 67 years maximum. Male producers in Gamakalle is about 98% and 76% of them are heads of household. In Gamakalle households, on average they consist of 12 members, 27 is the uppermost number of members per household and 5 members is the minimum, Ali (2013).

The Community garden of Gamakalle is being irrigated using power-driven pumps and other activities such as stumping, digging, ploughing and weeding are practised using traditional hoes and other modern techniques. Each beneficiary of Gamakalle community garden owns 0.21 hectare of land. community leaders of Gamakalle has the power to manage land, although the government of Niger has put in place the Land Act of 1998, which controls the land activities in Niger. According to Diogo *et al* (2014), he state that, in Gamakalle, the land under cultivation is divided into planks. The planks have a dimension of 5, 3 square metres, each provider has an average of 334 planks and is mandated to grow one product per plank. Each producer in Gamakalle has at least 3 products and the production period is 4 months.

The effectiveness of Gamakalle community garden in reducing urban poverty is being shown by the crops grown and benefits they are getting from those crops. These crops include, tomatoes, sweet pepper, melon, cabbages, bean, hot pepper, carrot and many more. The beneficiaries of Gamakalle garden rely on the produce from the harvest as their source of income. According to Diogo *et al* (2014), he mentioned that, the beneficiaries of Gamakalle

community garden, regard the project or urban community garden as their employment and they see it as a form of socio-economic empowerment, because the local community have access to own their local resources, involved in decision making and raise income from those local resources.

The Gamakalle community garden has managed to diversify diet and supplement nutritive quality of food consumed by Gamakalle residents and Niamey residents and also after harvest the meals had increased to the members of Gamakalle residents and Niamey residents. Through community gardening, the poverty rate of Niamey had decreased from 59% in 2008 to 27.8 in 2014, Bachman (2014). This shows the significance of urban community gardens in reducing urban poverty.

However, according to Diogo *et al* (2014), he state that, although the activities of Gamakalle community garden is a success story, few challenges are being encountered by beneficiaries of the garden; these include shortage of capital and market challenges. However, Diogo *et al* (2014), further mentioned that beneficiaries of Gamakalle they are trying to solve these challenges through seeking of donors and creating a wide marketing base from supermarkets, vendors etc.

2.12.2 Case Study of Masizame Community Garden in Durban: South Africa.

The origin of Masizame community garden was initiated by four local women pre 1994, as a way to generate income and supply local households with low cost food. They began by cultivating land belonging to Methodist church which is nearer to Nathaniel Palma School, Cousins (2013). The Pedi clan consist of 70% Durban inhabitants. Women are responsible for household food supplement in the Pedi culture. This explains why Masizame community garden amount to 80% female producers.

The Masizame community garden was turned into project after a decade that is in 2004. The Durban City Council found it possible to establish a project which will benefit the poor local people. Thorton (2014), mentioned that in 2010 the garden had manage to accommodate 66 household members, on 100 hectares of land. Masizame community garden covers about 100 hectares of land on the periphery zones of Durban city.

The main goals of Masizame community garden is to provide income, creates employment and empowering the local residents economically and socially, which makes it effective in reducing urban poverty. In 2013, the number of producers began to increase the garden was extended to 200 hectares and accommodates 190 producers.

With such a big number, problems began to increase in Masizame community garden, these include inadequate water supplies, shortage of capital, shortage of inputs and low demand on market due to increased supply, Thorton (2014). The committee of Masizame community garden began to seek funding in order to further their farming activities and solve the challenges they were facing. The funds were meant to boost activities such as, ploughing, boost water supplies, fencing, tools, seeds and fertilisers, Thorton (2014). They manage to secure funding from government in 2011.

Several crops are grown in Masizame community garden. These crops include tomatoes, cabbage, vegetables, carrots, beans etc. Thornton (2014), mentioned that these crops have managed to boost income for the poor Durban population involved in urban agriculture, food supplement at their home, increased their meals per day and nutritional diversity to beneficiaries. This shows that urban community gardens have a positive impact in addressing urban poverty.

2.13 The Role of Urban Community Gardens to Poverty Eradication

2.13.1 Household Food Sufficiency

Sebeta *et al* (2014), is of the idea that, the period of time when the produce of the urban community gardens is sufficient for the beneficiaries, is an indication of its food or consumption gap. The major reason why urban poor indulge into urban Agriculture is to boost food supplement at home. Urban residents are now venturing into community gardens as a way to ensure food security at home as well as eradicating urban poverty. For instance in Cowdray Park high density suburb in Bulawayo, women who are participating in community gardens have stated that the major reason why they are in urban agriculture is to supplement food at home, Sebeta (2014).

2.13.2 Employment and Income Generation

Urban farming is one of the activities that create employment for unemployed urban dwellers, youths, women, men or the elderly age. Peri- urban farming actually expands the economy base of the city that is through marketing, production, processing and packaging. This has a positive result in the entrepreneurial increase and job creation activities, reduction in food costs and better quality of life. Thus the city will create employment opportunities on a productive space and results in a better local economy which do not depend on importing food.

2.13.3 Socio-Economic Empowerment

According to Chadyiwa (2011), socio-economic empowerment refers to the extent which vulnerable groups in society such as widows, orphans and elderly age which are in risk of urban poverty can have access to local resources, control of local resources, included in decision making and their contribution to family welfare. Since urban agriculture is mainly done by the unemployed urbanites, who are in danger of poverty conditions. It empowers the unemployed urbanites so that they will have access to control their family's welfare and participation in decision making.

2.13.4 Educational Opportunities

According to Kekana (2006), Community gardens also can be a teaching tool, for primary and secondary children, for them to understand better food sources and their process of growth. Furthermore they can be a tool to demonstrate the concept of sustainability on natural resources and how communities and individuals can be more self-sustainable in their actions and practices, like those gardens which are nearer to either primary or secondary school.

2.14 Challenges Faced in Urban Community Gardens

Several challenges are being encountered by the urban dwellers that are in urban community gardening, which draws back the ideal food security in urban areas. Chaipa (2011), is of the idea that challenges which are being encountered in urban community gardens are either emanating physically such as capital to start up the project, poor skills and knowledge within the members of the garden, vandalism and crime, land tenure and marketing limitations, and natural problems such as seasonal and climate change. This challenge draws back urban residents to escape from urban poverty.

2.14.1 Vandalism and Theft

Crime and vandalism is the major blow to urban community gardens beneficiaries. In the night community gardens are being invaded by thieves and several crops such as vegetables and tomatoes are being stolen. Due to high levels of unemployment in developing countries, unemployed youths are the most accused group of being perpetrators of crime and vandalism. Vandalism is being reported on fences which surround the gardens and boreholes which are being used as sources of water. For instance Sithole *et al* (2009), states that in Nkulumane and Magwegwe community gardens the beneficiaries of the gardens have put several reports to the police on crime and vandalism. However the community have solved the problem by creating a good relationship with the nearby community to the garden because human eye offers the best security.

2.14.2 Shortage of Capital

Urban people, who are under urban poverty, have limited resources to start up the farming projects. This is because farming requires several inputs to be bought, such as tools and equipment, seeds, fertilisers and water rents. This implies that any sort of start-up cost is an obstacle. This can be evidenced in urban community gardens in Senga, which are not properly function due to financial problems. To solve the challenge, Sithole (2012), states that, grants, donor funding and local authorities intervention will be a panacea.

2.14.3 Low levels of Skills and Knowledge

Pudup (2008), is of the idea that, urban citizens who are in community gardens, actually some of them do not have knowledge and skills which makes their work to be implemented pathetically. They lack knowledge such as to plant the right plant at the right time, proper spacing and application of fertilisers which affects their yields. In Senga community gardens, skills and knowledge is another factor that had contributed to poor performance of gardens. Thus fail to recognise that urban farming is done on a small plot and the type of agriculture

which they supposed to implement is intensive farming, where they farm on a small plot and yield more so that they will fight for food insecurity which is dipping them into urban poverty.

2.14.4 Weak Land Tenure Systems

Land tenure remains the major problem to urban farmers; this is because no one owns or has the title deeds to own the land they farm. This makes their plots to be exposed to any changes by the council in terms of development and the beneficiaries of those gardens they are not able to claim back or to defend their land due to absence of title deeds, Kekana (2006).

2.14.5 Water Shortages

There is a chronic water shortage for domestic and industrial use resulting in frequent rationing of water. Most of the cash crops which are grown in the gardens demand more water and some of the gardens depend on the use of waste water during dry spells. Kekana (2006), mentioned that, during dry spells or in those areas which receive low rainfall water table is very low to an extent that, boreholes and wells which are being used as water sources will end up failing to provide adequate water. For instance in the community gardens of Senga in Gweru City Council, water problem is still a challenge and this is another challenge which led to poor implementation of the activities at these gardens.

2.14.6 Marketing Challenges

Several challenges are being faced in marketing of harvested produce of the gardens, these include long distance being travelled from the garden to the market, which makes it not easily accessible by the buyers. More so, high prices of the transport cost also affect the beneficiaries of the gardens, because the transport cost is not equal in all directions but depends with the distance, while price at the market remains low no matter what distance you have travelled, Mubvami (2006).

2.15 Gaps in Literature

On the issue of urban community gardens and their role in addressing urban poverty, several literature have managed to explain different issues pertaining to urban community gardens and poverty. The literature has managed to explain the benefits of urban community gardens, causes of poverty, challenges in urban community gardens and many more. However the literature has left few gaps on issues pertaining to urban community gardens and poverty. The issues which have not been addressed by literature include modernisations of urban community gardens through use of modern technology in farming and training of urban community gardens farmers.

Modernisation of urban community gardens has a positive impact in enhancing production in farming. For instance the use of modern irrigation system such as irrigation pivot and sprinklers will enhance the production in the sense that irrigating crops will be easier and plants will be able to have the actual amount of moisture. Also through use of internet, urban community gardens farmers will be able to advertise their produce globally which will improve their marketing strategy. Thus the literature has failed to discuss the issue of modernisation of urban community gardens.

More so the literature has failed to address the importance of educating urban farmers through farmers training programmes. Training of famers is important in farming because it will help farmers to acquire knowledge and skills in how to use chemicals, spacing in planting, seasons of crops, climatic conditions of their area and the crops recommended.

Thus it will be the basis of this study to recommend the issues which have been left by the literature that will enhance urban farming, so that urban poverty will be solved through effective urban community gardening.

2.16 Summary

This chapter has managed to show the theoretical conceptualisation of the study. It also managed to reflect the importance of urban agriculture in form of urban community gardens as a livelihood strategy in eradicating urban poverty. The next chapter will concentrate on the methods that were used to obtain data as well as the presentation and analysis procedure. It will also look on the research design, which is the overall plan on how the research is to be conducted, target population which is the selection of individuals or objects which are the focus of the study, sampling techniques which include simple random sampling and purposive or judgemental sampling, population sample which are individuals who participated in carrying out the study and information will be collected on them. As well as the research instruments, validity and reliability and data presentation.

Chapter III

Research Methodology

3.0 Introduction

This chapter outlines the research design and methods used to gather data in this research. In this chapter, questions are going to be self-administered so that maximum response will be gained from respondents. More so, this chapter will focus on research instruments, target population, population sample, data presentation and analysis and the conclusion which is the summary of the chapter.

3.1 Research Methodology

Saunders (2005), explains research methodology as a theory that explains how the research is going to be undertaken. Also it is a way of showing the evidence of research. Research methodology according to Burns (2008), it is an analysis of logical concepts and procedures of research by which knowledge is developed by the researcher. Furthermore, it ascertains the representatives and effectiveness of the research, how the researcher collects data and extracts meaning from the collected data as a way to show how research objectives can be achieved. Also it is fact and evidence is shown so that the meaning of the research can be seen clearly. Basing on this study, beneficiaries of urban community gardens and Karoi Town Council officials are the representatives from which the researcher will collect data on the role played by urban community gardens in addressing urban poverty.

3.2 Research Design

According to Barbie and Monton (2011), research design is actually an overall plan on how the research is to be conducted. Leedy (2010), supports the idea by the notion that research design is a functional framework within which ideas and evidence of the study are placed in order for their meaning to be seen clearly. Furthermore, research design guides the research which is under the study towards attainment of its objectives, this means that the quality of results rely upon the methods used. Research design is actually a logical plan that provides correct guideline for data collection, structures the research and provides methods that are interlinked to achievement of research questions, Kumar et al (2010). It also provides an approach towards gathering data and analysing data through use of various research instruments. This researcher used interviews; focused group discussions for qualitative research and questionnaires for quantitate research.

Research design is a way of attaining objectives and answering questions. It also assist to identify the target population as well as the population sample. It also helps in selecting proper research methods which are appropriate for collection of data for the study. The research design's focus in this study is to show clearly the role played by urban community gardens in reducing urban poverty. This is because urban residents are surviving under poverty conditions, so it is fundamental for this study to show the useful of urban community gardens in uplifting the standards of living of urban residents.

In this study, qualitative research was used and the researcher was the primary instrument for collecting data. In support of the qualitative research tool, interviews and focused group discussions was used in collecting data. This is an optimal method for collecting data on individual's personal history, perspectives and experiences. For quantitative research, the researcher used questionnaires.

3.2.1 Qualitative and Quantitative Approach

Burns (2008), state that, qualitative approach is a way of collecting, interpreting and analysing data by observing the activities of people and what they say. Quantitative approach as defined by Burns (2008), as a systematic empirical investigation of social phenomena through statistical, mathematical or computational techniques. It therefore aims to develop and employ mathematical models, theories and hypothesis pertaining to phenomena under research. Hussey (2005), supports the idea, by mentioning that qualitative and quantitative research provides in-depth world's understanding of the study since the findings are explained and presented graphically.

Qualitative and quantitative approach made it possible for the researcher to develop more intimate and formal relationships with respondents. The use of both quantitative and qualitative paradigms aims to obtain reliable, valid and sound conclusions to the research findings. A descriptive survey design was adopted which incorporated questionnaires, interviews, secondary data sources and focused group discussions. This was used to collect data about the selection of beneficiaries, benefits, challenges and coping strategies in community garden projects from beneficiaries and local authority employees.

3.3 Target Population

It is the selection of individuals or objects which are the focus of the study, Callisto (2009). It also refers to the entire group of people or items from which a sample may be selected for study or statistical measurement. In this study, the target population are beneficiaries of urban community gardens of Karoi with an actual population of 116 members, according to CSO garden Register and Karoi Town has a population of 28 606 citizens, according to Zim-stat (2012). Furthermore, Karoi Town Council Department of Housing, Education, Health and Community Service which deals with social welfare of Karoi, consisting of 55 members.

The target population in tells the specific number of people which the researcher is working with. For this research, the target population are members of Karoi community gardens and Karoi Town Council representatives, which accumulates to a total of 50.

3.4 Sampling Technique

These were grouped into probability and non-probability sampling methods. Non- probability sampling was defined by Callisto (2009), as a method of selecting samples in which the choice of selection of sampling units depends on the discretion or judgement of the sampler. This means that the chance of certain of a certain element of population being selected is not known. For non-probability sampling, the researcher used personal judgement based on the following parameters, employee experience, employee age and level and other elements. Probability sampling was defined by Callisto (2009), as a technique that involves equal chances for every member to be selected into the sample. Probability sampling involves partitioning the entire population into subpopulation called strata and then selecting elements separately from each sub population by random procedure. For this study, purposive or judgemental sampling was used as non-probability sampling and simple random sampling as the probability sampling.

3.5 Population Sample.

Callisto (2009), defines population sample as individuals who participate in carrying out the study and information will be collected from them. Adding on, Borg (2005), views population sample as a selected number of people from a certain population and the selected people are the representatives of the other population. For this study, stratified random sampling and purposive or judgemental sampling was used to select participants for this research. After putting the population into strata, focused group discussions and interviews were conducted. The table below shows the selected sample.

Table 1. A Sample Chosen for the Research

Section	Population	Sample Size	Sampling Technique
Beneficiary of urban community gardens	360	40	Simple random sampling
KTC officials	340	10	Purposive sampling
URBAN GARDENS		3	Purposive sampling
TOTAL	700	53	

The table shows the sampling frame of the target population of 50 people which worked with the researcher in gathering data in the area under the study. 40 people were selected through simple random sampling, where every member of community garden was numbered and the numbers were put into hat and picked randomly. The other 10 people which are the KTC officials were selected through purposive or judgemental sampling. The sampling population are the residents of Karoi, who are referred as the beneficiaries of urban community gardens and council officials. Another reason is that of time which is limited, so the researcher decided to work with 50 people to avoid big sample. Furthermore the researcher also looks to the resources he has and the sample of 50 is attainable for him.

The researcher decided to work with department of Housing, Education, Health and Community Service because they are the ones who deal with urban agriculture and they are also involved in the management of urban community gardens. The researcher selected all 3 gardens in Karoi through purposive or judgemental sampling and the respondents were randomly selected through picking their names numbers in the hat, it was easier for

researcher since he had names of these individuals involved in community gardens from Community Service Department of Karoi Town Council.

3.5.1 Purposive or Judgemental Sampling

The researcher had used purposive or judgemental sampling, which involves selection of a certain group from the total population and the group selected was the provider of the available information in the research and the group is regarded as the representative of the other population not selected. Neuman (2012), is of the view that purposive or judgemental sampling is often used in the case study being carried and it requires to deal with small samples.

Purposive or judgemental sampling do not consume much time, since the population has been selected already, candidates which are not suitable were eliminated to participate. This increases the results quality of the study and financial costs are also reduced. Basing on this study, the researcher seeks to find data from Karoi residents who participate in urban community gardening and Karoi Town Council officials, so purposive or judgemental sampling was found the most perfect one to use. This is because the researcher's main aim was to find rich information from people with great idea and experience, relevant knowledge on urban agriculture and how urban community gardens reduces urban poverty.

3.5.2 Simple Random Sampling

Simple random sampling is the second sampling type which was used in this research. Simple random sampling is when each and every member has equal chances of being selected for this study. Respondents from 3 urban community gardens of Karoi were selected through simple random sampling using the hat system, where number of names were picked randomly in the hat. The method has several merits which attracted the researcher to go for it. These

include, attainable costs, the results have greater accuracy and answers are highly representative. The method also promotes fairness in selecting respondents.

3.6 Data

3.6.1 Primary Data

Primary and secondary data was used by the researcher. Perreault (2006), state that primary data is mainly gathered for the project and also that it is the information which is meant to address a certain problem. Adding on, Katsande (2005), further states that primary data is related to research topic and the data may be gathered in form of formal surveys, ad hoc basis and business discussion. Primary data have all important field data collected principally to the effectiveness of urban community gardens in addressing urban poverty. Primary data is important for this study because it assist in formulating unstructured and structured questions for the study topic. The researcher found it possible to use primary data because the questions being asked are linked to elicit the information that will assist in coming up with the study. Basing on this research, the researcher used interviews and questionnaires to gather information from Karoi residents who are involved in community gardens and the employees of Karoi Town Council.

Primary data for this study was collected through 20 interviews, 5 from each garden in Karoi. Also 5 more interviews were done in the Department of Housing, Education, and Health and Community Service of Karoi Town Council. The reasecher has selected the councillor of ward 9, 3 chairpersons of community gardens and the Community Service Officer of Karoi Town Council to be the key informants. Respondents were purposively sampled by chairpersons of community gardens and members which were selected have 3 years' experience in urban agriculture.

3.6.1.1 Advantages of Primary Data

- In collecting primary data, the researcher had managed to have a chance to grasp the views of respondents on issues pertaining to the research topic.
- Since the researcher was the one involved in collecting primary data, the data collected was reliable and up to date.

3.6.1.2 Disadvantages of Primary Data

- As mentioned by Katsande (2005), that gathering primary data consumes much time, the researcher has encountered the problem of time and delays. Some respondents were not able to meet the agreed time. However to solve the challenge the researcher used activity schedule to avoid spending much time on one activity.
- The researcher encountered shortage of cash for transport, since he was visiting different places gathering data. To solve the challenge the researcher manages to seek funding from the local business tycoon of Karoi.

3.6.2 Secondary Data

The researcher has also used secondary data in order to have a perfect research. Perreault *et al* (2006), states that secondary data consist of information which has already published. It is the information which has been gathered already by someone else prior for other purpose. Secondary data actually is the data which has been collected by someone but have a link to the research topic. Secondary data is cheaper to collect as compared to primary data. The secondary data for this study is being collected from different journals, textbooks, full council meetings reports and newspapers. All this information is being collected by searching on various internet sources and library books.

3.6.2.1 Advantages of Secondary Data

- Perreault *et al* (2006), mentioned that the main advantage of secondary data is that it is cheap and easier to collect, since in the modern day several information is found on internet. Thus you can research while you are at home and there is no need to be on ground.
- Secondary data provides guidelines and direction to the researcher on how to conduct a study and the procedures needed to have a perfect study.

3.6.2.2 Disadvantages of Secondary Data

- Perreault *et al* (2006), state that the main disadvantage of secondary data is that it consists of out-dated information and information which do not suit the area of the study topic. To overcome this, the researcher has to look for the year of publications and the sources which the researcher used are below ten years.
- Since now days several information is found on internet than books, the researcher has encountered network challenges in using internet. The challenge was solved through use private networks of internet such as Econet Broadband.

3.7 Research Instruments

These are different ways in which data is collected. Katsande (2005), is of view that research instruments are those tools used to gather data and information that is being needed to address the problem under the study. He further states that for research to be a success, the correctness of the information gathered determines it. For this research, the researcher had used interviews, focused group discussions and questionnaires.

3.7.1 Questionnaires

Questionnaires defined by Brink *et al* (2010), as the self-report instrument, that respondent put her or his views in response to asked questions on the document. The researcher used both open and closed questions and respondents selected the answer from the given alternatives. The document also consists of blank space, where the respondents will fill. More so the questionnaire which was used was divided into sections, starting with respondents' information, community garden's information and household information. 50 questionnaires will be distributed to 50 randomly selected beneficiaries of community gardens and KTC officials.

3.7.1.1 Advantages of Questionnaires

- They provide a description which is detailed on both events and situations and provide a better input to users, Brink *et al* (2010).
- Questionnaires are easier and faster to administer as the researcher will make the questions as brief as possible which saves time, Brink *et al* (2010).
- A questionnaire also allows the respondent to express his or her feeling and perception freely without the influence of the researcher.

3.7.1.2 Disadvantages of Questionnaires

- Brink *et al* (2010), state that, since questionnaires consist of closed questions, there is no room for further clarification by respondents. Thus also been encountered by the researcher but solve it the researcher get use of focus group discussion for further clarification.
- Brink *et al* (2010), also mentioned that questionnaires are expensive to prepare. The researcher also encountered this challenge in printing questionnaires. However the challenge was solved since the researcher had funding from the local business tycoon.

3.7.2 Structured Interview

Interview is defined by Flick (2006), as a very close discussion of hidden sources of feelings. A skilled interviewer who is the KTC Administrator, administer the questions. In the case of this study, the researcher uses an interview guide and interviews were administered to key informants who included Karoi Town Council officials and chairperson of garden committees. In support of the ward 9 councillor, the researcher interviewed 3 chairpersons of garden committee and 2 officials of KTC who works hand in hand with the gardens beneficiaries.

3.7.2.1 Advantages of Interviews

- Flick (2006), mentioned that interviews have instant feedback
- There is room to further explain the question
- There is room to seek clarification
- It is easy to capture verbal and non-verbal ques.
- Easy to capture emotions and behaviour of participants.

3.7.2.2 Disadvantages of Interviews

- Flick (2006), is of the view that interviews consumes much time and to avoid this the researcher had activity schedule to avoid dwelling much time one activity.
- Interviews gave the researcher an extra job to screen information which is relevant to study, Flick (2006). This is because some respondents end up digressing from the major issue and giving unnecessary data. To avoid such a scenario the researcher had to guide and direct respondents to be focused to main issue of the study.

3.8 Focus Group Discussions

Kumar *et al* (2006), state that focused group discussions are used to establish conceptual views relating area under study. He further states that it is a group of six to ten people led through an open discussion by a skilled moderator. In this research focus group discussions were used to find out the role of urban community gardens in addressing urban poverty. A total of 3 group discussions were done, each comprising of 10 beneficiaries.

3.8.1 Advantages of Focus Group Discussions

- Focused group discussion gave the researcher room to collect a detailed descriptive data from participants, Kumar *et al* (2006).
- Kumar *et al* (2006) also state that there is free talk in focused group discussion which allows respondents to freely give information without intimidation.

3.8.2 Disadvantages of Focus Group Discussions

- Kumar *et al* (2006) state that the disadvantage of focus group discussion is that there is unnecessary arguments during discussions. For this challenge the researcher will make sure that he keeps members of the group focus to the main issue being discussed through reminding or informing the group members wherever they go out of discussion.
- Focus group discussion consumes time. However to avoid spending more time on one thing, the researcher will use Time Management Grid which sets priorities to be considered first and activity schedule.

3.9 Ethical Considerations

An ethical consideration to research refers to the norms of conduct that distinguishes between acceptable and unacceptable behaviour, Kumar *et al* (2006). The researcher will not use names of respondents in any of primary data collection instrument and that will be written on those instruments. Before conducting any interview, focused group discussions and during distribution of questionnaires, respondents will be informed that the purpose of this study is for academic purpose and there nothing more needed and for evidence the research clearance letter will be shown to them. The researcher will also respect the societal behaviour and cultural beliefs of Karoi residents. In terms of politics of Karoi the researcher will not go into that, he will be only focused to study. To end this, Elders, Councillors of wards, Heads of Departments and any other authorities will be considered first and informed before the researcher carry out the study.

3.10 Data Presentation and Analysis

To bring out meaningful conclusions, the researcher used quantitative and qualitative data analysis. Qualitative data analysis is when the data is being analysed through explanatory data analysis. Quantitative data analysis, is when the data is presented through graphical display, it involves the use of pie charts, bar graphs and tables to summarize data. The researcher choses this way of presenting data because it makes the data easy to analyse and interpret.

3.11 Reliability and Validity

Reliability and validity issues are of paramount importance if the study is to be accepted as credible, Sithole (2008). Reliability in research, according to Silverman (2005), he states that it refers to the consistency of the research findings. It begins from the inception of the research and maintained up to data presentation. Silverman (2005), is of the view that reliable

work must show a degree of independence of findings. Validity according to Sithole (2008), it is the soundness, legitimacy and the relevance of the study and its investigations.

Basing on this study, analysis of research instruments was carried out to ensure that they are valid and they will provide accurate results. More so, the research instruments were also reliable in the sense that they were free from bias and errors. Questions for interview were clarified so that they will have high response rate. Questionnaires were delivered to respondents a week before, so that they will have enough time to respond to the questions. Furthermore, interviews and FGD were done in time after the researcher and respondents had prior arrangements. This was made to allow respondents to spare 25 minutes for the researcher's interview and FGD without disturbances. The results of interview and FGD were noted down by the researcher. Findings were grouped and qualified by the researcher. Responses were sorted out according to sub-challenges. The data from research instruments was analysed, scrutinised and summarized.

3.12 Pre-test

A pre-test was carried out to pre-test the data collection instrument and see how long it takes the respondents to complete them. According to Bell (2005), all data gathering instruments should be tested to see how long it takes respondents to complete them and to check if all questions and instructions are clear to them.

Questionnaires and interviews were administered to check for reliability and validity of the instruments and tested before actual data collection. Pre-test on research instruments was done to measure the extent to which it will produce similar results under constant conditions on all occasions. The questionnaire was pilot tested and corrected.

A total of 10 beneficiaries were involved in the pre-test. They composed of 4 males and 6 females. 6 members were the beneficiaries of urban community gardens and 4 from KTC

employees. It took about 10 minutes for the respondents to complete the questionnaires. After assessing how they had completed, the researcher was able to rephrase some of the questions that were not fully understood by the respondents. Questions were revised to ensure that they were valid for the actual data collection. The pilot study helped the researcher come up with appropriate assessment elements basing on the services provided in the area of study. The pilot study was done to find out whether there were inadequacies in the instrument used.

3.13 Summary

The chapter had followed the protocol needed in carrying out the study. The research design was discussed which is the overall plan of the study and it clearly indicated how the researcher went through in gathering data through use of different research design. The target population was also discussed which is entire population were research information will be gathered from, for this study target population is the beneficiaries of urban community gardens and KTC officials. Sampling techniques which is the selection criteria of individuals from the whole target population and data presentation were also outlined. The next chapter will focus on the results of the data gathered and its presentation.

Chapter IV

Data Presentation and Analysis

4.0 Introduction

This chapter analyses, presents, discusses and interprets data gathered from Karoi residents who are participating in urban community gardens and KTC officials on the role of urban community gardens in addressing urban poverty. The findings of this study were presented as it was given by the respondents, basing on interviews, focus group discussion and research questionnaires which were used by the researcher to gather data. Pictures, tables and graphs present the data collected by the researcher.

4.1. Questionnaire Response Rate

Questionnaires were drafted into two segments, one for KTC employees and the other for beneficiaries of urban community gardens. Respondents were given questionnaires to respond to the questions, which were used to gather data on how urban gardens reduce urban poverty. Since KTC has authority upon the birth and death of urban gardens, its employees were given questionnaires to respond on the relationship of KTC and garden beneficiaries. For KTC employees 10 employees were handed over questionnaires to respond to the questions and all 10 respondents managed to respond, which gave 100% response rate. For beneficiaries of urban community gardens, the response rate was 100% since all 40 questionnaires were completed. Thus the response was very much encouraging and the result of the research can be easily justified due to excellent response from KTC employees and garden beneficiaries. This is also agreed by Mbia (2006), who asserts that 100% response rate is suitable to uphold the validity and representation of the data and ascertain the rationale behind the research. Table 2 below, illustrates the response rate on questionnaires.

Table 2: Questionnaires Response Rate

Category	Targeted respondents	Respondents number	Response rate in %
KTC employees	10	10	100
Beneficiaries	40	40	100

4.1.1 Focus Group Discussion Response Rate

Focus group discussions were done on all three community gardens of Karoi between the beneficiaries of urban community gardens. Beneficiaries of the gardens were subjected to focus group discussion in order to discuss several issues pertaining to the research topic, focusing on the effectiveness of urban community gardens in addressing urban poverty. 10 members were selected from each garden to participate in FGD. For Cloudia garden all ten members manage to attend and participate in the discussion, which gave 100% response rate , in Chiedza garden 8 members attended the discussion and the other two were absent due to personal commitments. Thus it gave an 80% response rate. In Kubatana garden all ten members manage to attend the discussion and gave 100% response rate. Thus the overall FGD response rate for all 3 gardens was 98%. Mbia (2006), asserts that FGD response rate which is above 90%, disclose a wealth of detailed information and deep insight to the topic under study. Mbia (2006), further state that, it also creates an accepting environment that put participants at ease allowing them to thoughtfully answer questions in their own words and add meaning to their answers. Picture 1 below shows members of Kubatana garden in a focus group discussion and Table 3 illustrates the response rate of FGD in all 3 gardens.

Picture 1: Members of Kubatana Garden in a Focus Group discussion.



Source: field data (2015)

Table 3: Focus Group Discussion Response Rate

Garden Name	Targeted respondents number	Respondents number	Response rate %
Chiedza	10	8	80
Kubatana	10	10	100
Cloudia	10	10	100

4.1.2 Interview Response Rate

KTC officials under the department of Housing, Education, Health and Community Service were interviewed. 5 officials under management were interviewed and all responded, which gave 100% response rate. Questions which being asked was upon the role of urban community gardens in addressing urban poverty.

4.2 Community Gardens Beneficiaries

Basing on the Community Service Officer's register of urban garden farmers, it has been noted that vulnerable groups in Karoi are the major participants of urban gardens. The vulnerable groups include orphans, elderly age (60 years and above) and widows. Table 4 below illustrates the composition of beneficiaries in all three gardens of Karoi.

Table 4: Beneficiaries Category in Percentage of Total Number per Community Garden.

Garden Beneficiaries categories.	Kubatana Garden		Cloudia Garden		Chiedza Garden	
	Total NO	%	Total NO	%	Total No	%
Elderly	10	20	0	0	2	10
Widows	15	25	13	60	10	25
Orphans	9	15	6	10	4	15
Other	25	40	10	30	13	50
Total	59	100	29	100	29	100

The table 4 above shows that Kubatana garden constitute the highest population of vulnerable groups than all gardens. Widows constitute 25% of the total population, while orphans and elderly constitute 15% and 20% respectively in Kubatana garden. According to KTC minutes of the 2009 October full council meeting, it stated that Kubatana garden was created so as to cater for orphans at Karoi orphanage and the elderly at Karoi inmates home. However in Cloudia and Chiedza gardens, the number of vulnerable is not as that of Kubatana because the gardens are in high density suburbs and widows are the most participants. According to the respondents' information, 80% of them from all three gardens, they stated that beneficiaries of the garden's selection are done by Councillors of wards and the Community Service Officer of KTC. Vulnerable groups are the first preference during selection. After selection, the names of the beneficiaries are kept in the CSO's urban farmers' register.

4.3 Effectiveness of Urban Community Gardens in Reducing Urban Poverty

4.3.1 Income Generation

Income generation is the most vital logic behind urban community gardens, this is because they provide fast money for members of the gardens and other players who are interested in urban farming, Kutiwa *et al* (2010). 110 members out of 117 (95%) of all three urban community gardens indicated that urban community gardens are effective in addressing urban poverty because they are helping in generating household income for them. The CSO of KTC also support the idea by mentioning that, income generation for garden beneficiaries is being realised by the demand of tomatoes, green vegetables, beans and maize in Karoi. The price of products on the market was provided by the CSO of KTC and is the one who work with vendors and urban farmers. On market green vegetable is being sold for US\$ 0.50c per bundle, beans US\$ 3.00 per 5kg bucket and tomatoes US\$ 1.50c per 5kg bucket. 100% of the

beneficiaries of urban gardens in Karoi, managed to state their weekly, monthly and yearly income which they raised through selling of harvested produce to the market.

Table 5 below summarises the estimated income which is earned by beneficiaries basing on prices on market and quantity sold by different beneficiaries of the three gardens.

The estimates shown below in table 5, shows that beneficiaries of urban community gardens in Karoi are earning at least \$US 440.00 per month on average which is relatively nearer to poverty datum line of Zimbabwe which is US\$ 534.00 a month. This shows that urban community gardens are effective in addressing urban poverty due to income being generated by beneficiaries.

Table 5: Estimated Income of Garden Beneficiaries

Types of crops grown	Estimated periodic income from sales of produce in US\$			
	Daily	Weekly	monthly	yearly
Tomatoes	15	70	150	1740
Beans	25	200	400	2750
Green vegetables	10	50	125	900
Other	40	300	440	2850
Total	90	620	1105	8240

4.3.2 Creates Employment

Since it had been found that the most participants of urban agriculture in Karoi are the vulnerable groups in society such as widows, orphans and elderly age, which are not employed. Urban agriculture in form of urban community gardens provides employment to these vulnerable groups.

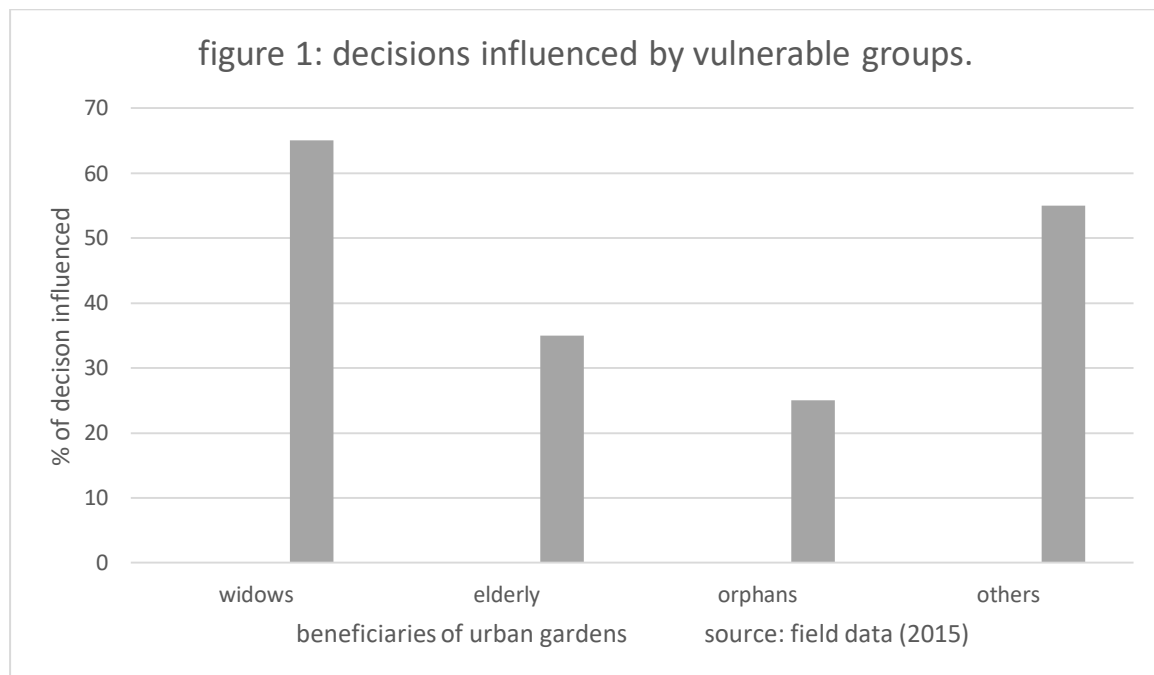
During the focus group discussion with the beneficiaries of Kubatana, Cloudia and Chiedza gardens, 110 members out of 117 (95%) of the members of the group concluded that farming is their employment despite that it is seasonal and challenges they encountered in farming. They only regard it as their employment which is benefiting every group of the society, FGD (10/04/15). In support of the above, in an interview with KTC officials, one of the respondent mentioned that, urban community gardens are effective in addressing urban poverty because, $\frac{3}{4}$ of the beneficiaries are not employed and farming at least gave them something to do for instance orphans and elderly.

4.3.3 Socio-Economic Empowerment

In this research, empowerment refers to extent which vulnerable groups in society which are in risk of urban poverty can have opportunities to and control of local resources, included in decision making and their contribution to family welfare. Basing on the findings of the research, 117 garden beneficiaries in total (100%), it indicated that the vulnerable groups and other groups which are not vulnerable jointly participate in management of local resources as well as gaining access to them through urban community gardens. Empowerment in decision making is being seen in all 3 gardens inn Karoi, women, orphans and elderly are being included in decision making. On empowerment in decision making, 45 members out of 59 (85%) of kubatana garden indicated that vulnerable groups have a chance to contribute a decision and that decision will be considered seriously. In chiedza and cloudia garden, 90%

of the members indicated that, widows, elderly and orphans are the major vulnerable groups which contribute to decision making in their respective gardens.

Figure 1, Decision Making in all 3 Gardens Influenced by Vulnerable Groups



From the 3 focus group discussions conducted, each consist of 10 members, about 25 (90%) members classified under vulnerable groups, mentioned that, they are responsible for deciding what activity to be done in the garden, some occupy highest ranks in the garden committee and some are responsible for deciding what crops to cultivate. This constitutes 80% of the vulnerable groups in decision making. Thus it makes it crystal clear that urban farming informs of urban gardening increases the vulnerable group’s contribution to livelihood strategy hence indicating socio-economic empowerment.

4.4 Household Food Security from Urban Community Gardens.

4.4.1 Increased Meals per Day

Sebeta *et al* (2014), state that the duration which the produce from urban gardens is sufficient for beneficiaries is an indication of its food or consumption gap. From the responses of the questionnaires, all 117 members (100%) of the garden beneficiaries noted that meals being taken a day increased after harvesting. This increases the level of household food security. Also it has been noted that 90% of the respondents rely on harvested produce such as maize, beans, green vegetables, tomatoes etc as food supplement for their families. Figure 2 and figure 3 shows the frequency of meals per day before and after harvesting.

Figure 2: Frequency of Meals per Day before Harvesting.

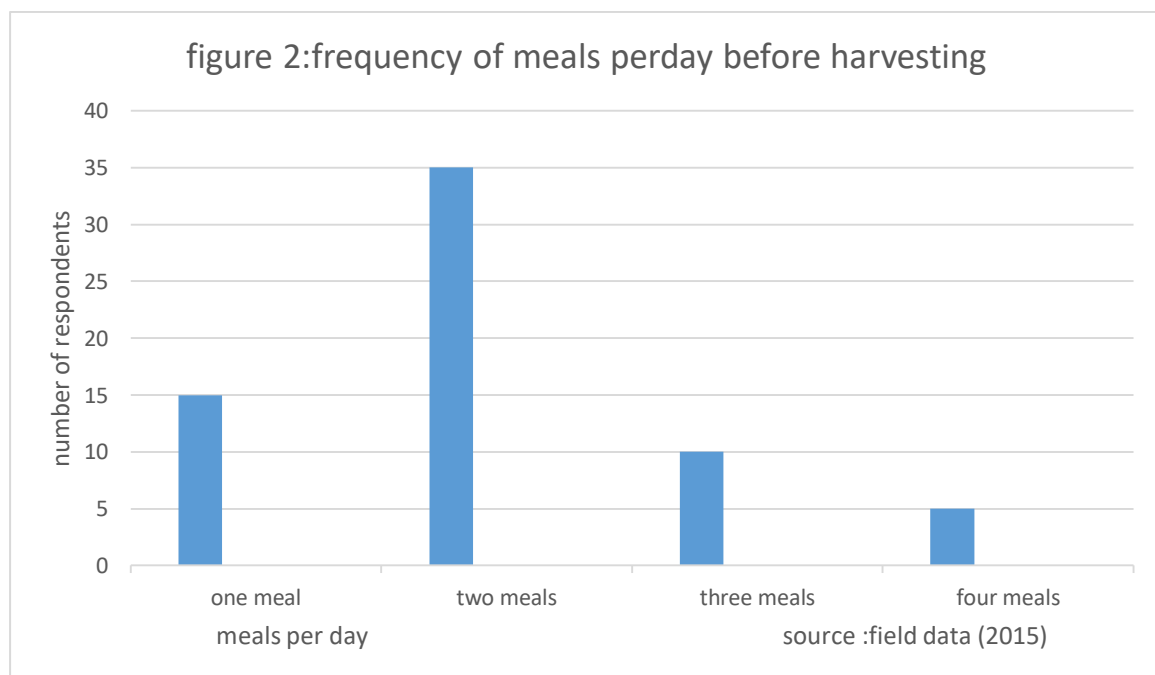
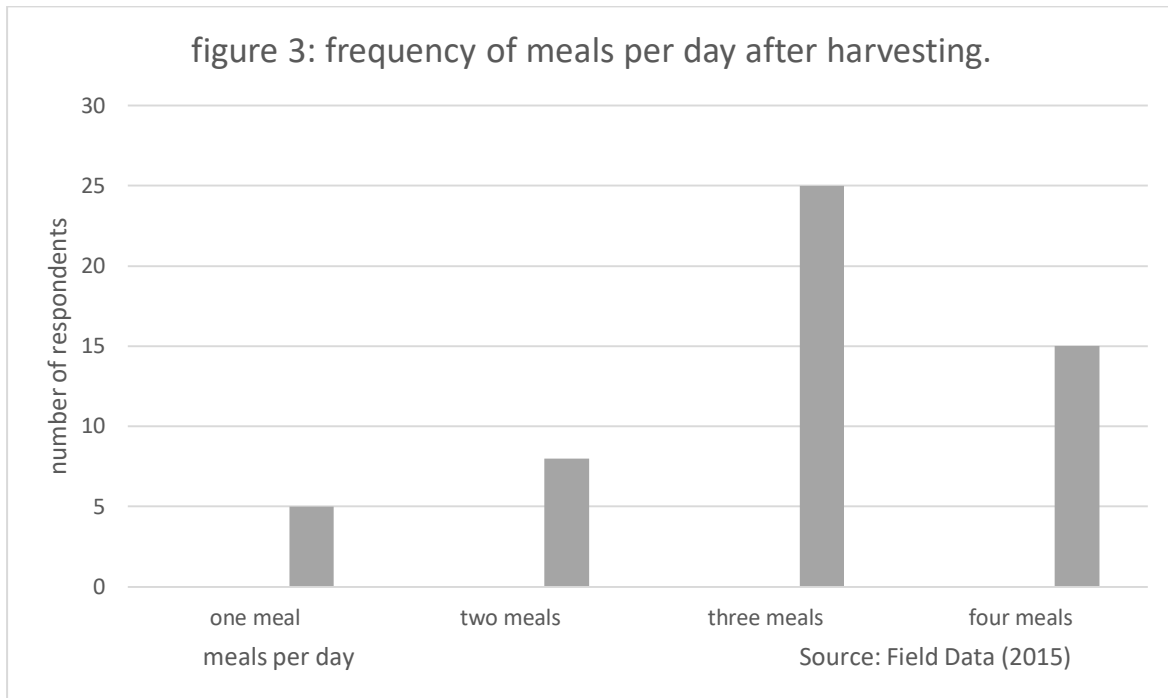


Figure 3: Frequency of Meals per Day after Harvesting.



Food security is being affected by seasonal crops and depending on rainfall. For instance in Kubatana their production is better because they don't rely on rainfall, they use borehole, but in Chiedza and Cloudia 90% of the beneficiaries have mentioned that their food supplement is being affected because they rely on rainfall. However they also emphasized that during perfect rainy seasons, their harvests are always good and this definitely changes their frequency of meals. Figure 2 shows that most beneficiaries are having 2 meals before harvesting while after harvesting they will be having 3 to 4 meals a day as shown in figure 3.

4.4.2 Nutritional Diversity to Beneficiaries

Nutritional level was not easy to judge from the field visits and using respondents without carrying out a proper survey. For this research, nutritional levels were measured by the researcher basing on crops being grown in the gardens, with the assumption that these crops are for home consumption. for instance in Kubatana, Cloudia and Chiedza gardens, crops grown include, carrots, beans, potatoes, maize, green vegetables etc. thus basing on this

crops, if they are used for home consumption, it means that there is nutritional diversity at home due to various crops which are being consumed, hence eradicating urban poverty.

4.5 Challenges faced by Garden Beneficiaries

4.5.1 Inadequate Water Supplies

Water shortage during dry spells is the main challenge that was mentioned by 117 (100%) beneficiaries of all three gardens. The CSO of KTC also states that the problem of water is becoming worse because Cloudia and Chiedza garden relies on rain water and sometimes with wells during dry spells. Only Kubatana garden is the one with borehole but most of the time the borehole will not be functioning and when it is functioning there will be pressure from residents of Kubatana fetching water. Picture 1 below shows Kubatana residents fetching water in the Kubatana garden borehole. One of the beneficiaries during focus group discussion said that water shortages had reduced production during dry spells and some of the members had to stop farming during dry spells due to water shortages. More so, one of the beneficiary of Chiedza garden mentioned that, during dry spells they rely on running untreated sewage water, which has health risk.

Picture 2: Kubatana Residents Fetching Water in the Garden Borehole



Source field data (2015)

Basing on the picture above it can be seen that water is a challenge during dry spells in Karoi and due to pressure from residents fetching water, beneficiaries cannot irrigate their crops properly hence posing a challenge to urban farmers.

4.5.2 Shortage of Capital

Since the vulnerable group dominates the population in urban farming, shortage of capital is affecting them to fully boost their farming. For instance they are failing to buy adequate inputs needed for farming, because some of the money they set after harvesting is channelled for other domestic purposes. Basing on the responses from the questionnaires, 80% of the beneficiaries have stated that, we have been allocated land for farming and for inputs and other related materials needed; it is our own baby to feed.

4.5.3 Weak land Tenure Systems

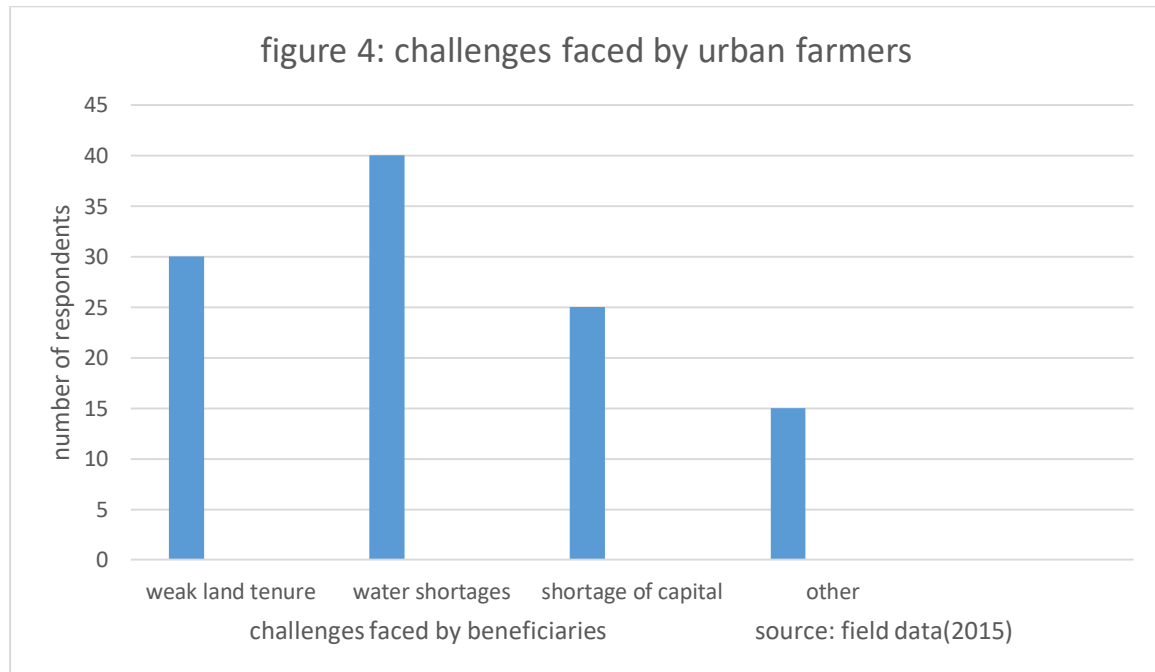
This is the major problem that is affecting urban farmers. Kekana (2006), states that in Zimbabwe there is no legislation that protects urban farmers and their plots are free to be taken by the council of their jurisdiction for other developments. Weak land tenure systems have been noted by 100 garden beneficiaries (80%), in the questionnaires that, the land in Karoi is owned by the council and they are being affected by changes in terms of residential development. For instance in Cloudia, half of the garden land was taken by the council and a school was built, which cause 20 members to lose their farming plots.

4.5.4 Market Challenges

Surrounding households, buyers outside the communities and vendors constitute the source of market of the garden farmers. 80% of garden beneficiaries in total of all three gardens mentioned that low demand on market is a challenge to them. The demand on market is being affected because surrounded farmers on farms which surround Karoi and villages, also come with their produce on the same market with urban farmers. That is when supply increase

demand decrease. Figure 4, summarises the challenges being faced by urban farmers in Karoi.

Figure 4: Challenges Faced by Urban Farmers



4.6 Strategies to Enhance Urban Community Gardens Activities

4.6.1 Borehole Drilling in Gardens.

Water shortages are the main challenge that is affecting production in all urban gardens in Karoi. So in order to solve this challenge, 117 (100%), beneficiaries of all three gardens have urged the council and other stakeholders that support urban agriculture, to assist by drilling boreholes in their gardens. They mentioned that it will easy water problems and boost their production during dry spells.

4.6.2 Inputs to be Affordable.

Respondents from urban gardens mentioned that, what to grow and how do you find inputs, its individual's case. On being asked what should be done to make inputs available, all (100%) garden beneficiaries respondents mentioned that government, council and NGOs must intervene and subsidise agricultural inputs for urban farmers, and this will make inputs affordable.

4.6.3 Extension Services on Urban Farmers

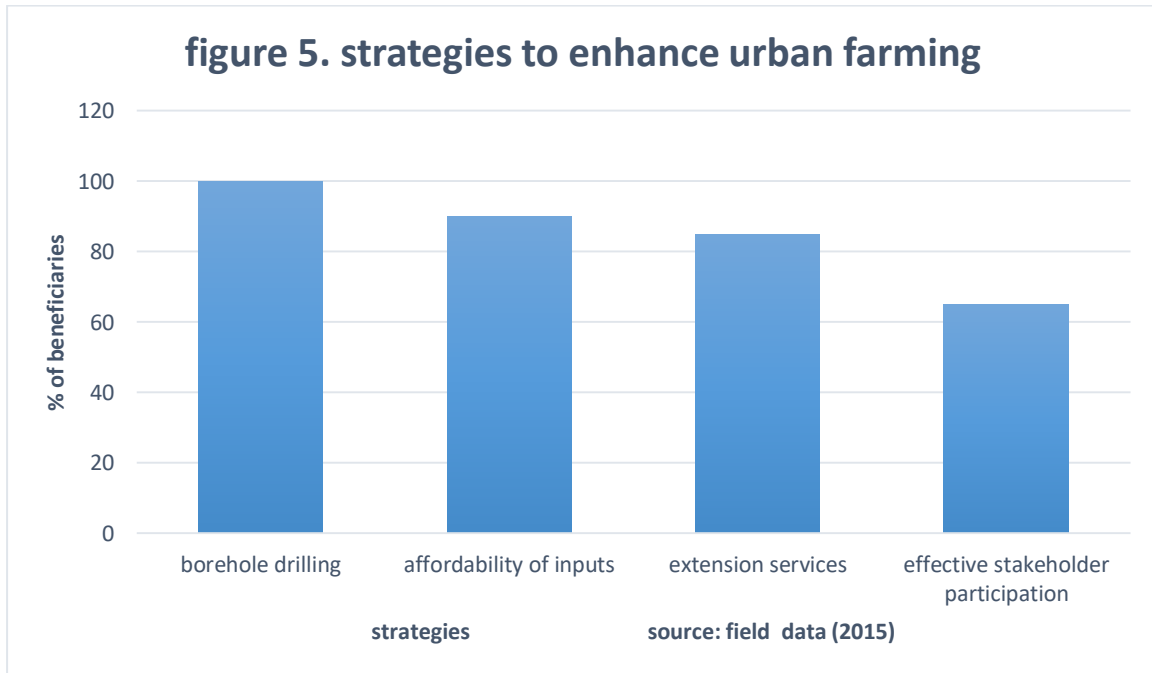
The issue of receiving extension services and training of urban farmers on various aspects of agricultural production was cited by 70% of garden beneficiaries. The respondents requested pre-planting, planting, fertiliser application and crop monitoring training so that they will be well equipped with know-how on farming. They also urged Agritex, KTC and NGOs to provide with extension services as strategy to enhance production on urban gardens.

4.6.4 Effective Urban Agriculture Stakeholders Participation

Support from stakeholders is important in the sense that it creates an element of continuity of projects and sustainability, Chadyiwa (2013). On responding to the question, what must be done to improve the conditions of urban gardens, 30 (60%) of garden beneficiaries respondents asserts that various stakeholders must participate actively in support of urban agriculture. Various tasks were proposed by beneficiaries to be performed by various stakeholders that support urban agriculture. For instance, central government was urged to put in place legislation and permits that protects urban farmers. Local councils must be involved into day to day business of gardens and must provide with tractors for tillage, fences and sometimes farmers training workshops, so that farmers will be aware of dos and don'ts of urban farming. NGOs to provide with complete package of inputs, such as fertilisers, seeds and extension services. All of these strategies were cited by beneficiaries, so that it will

improve production on urban gardens. Figure 5 below summarises the strategies proposed by urban garden beneficiaries.

Figure 5; Strategies Proposed by Urban Gardens Farmers



4.7 Summary

Data analysis and presentation of the research findings has been shown in this chapter, which is upon how urban community garden reduces urban poverty. The research has found that urban community gardens are playing a major role in reducing urban poverty through, income generation, creation of employment, food supplement at home etc. The analysis and presentation of data in this chapter was based on the research questions and objectives which guides the achievement of the research. Information which was presented in this chapter was from questionnaires, FGD and interviews. More so the researcher also presented his findings through pictures, tables and graphs. The next chapter will be on summary conclusion and recommendations upon the research topic.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

In this chapter, the researcher draws up the summary and conclusions of the research findings based on previous discussion. The summary and conclusions provide a brief description on the role of urban community gardens in addressing urban poverty. Recommendations with respect to key findings are also provided. The study also makes provisions for future research and practice. Lastly a concluding statement about the entire project is also presented.

5.1 Summary

The study focused on, addressing urban poverty in context with urban community gardens in the case of Karoi Town Council. Basing on this title, the main focus of the study was to show the prevalence of urban community gardens and how community gardens can reduce urban poverty. The statement of problem states that, due to the prevailing situation in Zimbabwe of poor economy and limited employment opportunities has led urban dwellers to survive under poverty conditions, earning below poverty datum line of \$US 534,00 and surviving with one meal a day. Thus it is the essence of the study to show how urban community gardens solve such challenges being faced by urban dwellers as well as reducing urban poverty. The objectives of the research were; to evaluate the effectiveness of urban community gardens in reducing urban poverty, to assess the extent to which urban community gardens meet the demands of household food security, to find out challenges being faced by urban community gardens beneficiaries and to identify strategies that can be used to improve the conditions of urban community gardens in Karoi town.

The literature review which focuses on urban community gardens and poverty was used to

examine the role of urban community gardens in addressing urban poverty. The role of literature review to the study, which is to describes, evaluates, summarises and clarifying the works of the study being carried out was highlighted. It also defined urban poverty and urban community gardens as well as tracing their history of occurrence to date. Furthermore the literature review also, explains the nature of poverty in the world and in the Zimbabwean context. The role of MDGs and SDGs to poverty and agriculture were also explained and how urban community gardens may assist to the attainment of both MDGs and SDGs were also outlined. Two theories were used which are Johanne Henry Von Thunen's Spatial location Theory and Cultural and Structural Theory, which explains urban agriculture and urban poverty respectively. For empirical evidence, two case studies were implied; these include the case of Gamakalle community garden in Niger and Masizame community garden in South Africa.

Quantitative and qualitative research design was employed by the study. The target population for this study was the beneficiaries of urban community gardens of Karoi and KTC employees with the actual population of Karoi of 28 606. The population sample which participated in carrying out and the study were 40 beneficiaries of urban community gardens and 10 KTC employees. The sampling techniques which were used to select population sample were, purposive or judgemental sampling and simple random sampling. Both primary data and secondary data were used in this study. Focus group discussions, structured interviews and questionnaires were the research instruments used to gather data from a sample of 50 populations upon the topic under research. Ethical consideration, reliability and validity and pre-test were all put into consideration.

The research findings were analysed and presented through tables, pictures and graphs. More so, the results of the study revealed that vulnerable groups which include elderly age, widows and orphans is the largest population involved in urban gardens and they constitute to 75%

altogether and the remainder is the other groups which constitutes to 25%.

More so, the study revealed that urban agriculture is a female dominated livelihood activity. Marital status for beneficiaries varied from single 16%, married 40%, widowed 50% and divorced 4%. This means that majority of the beneficiaries are married and they are fathers and mothers at their home, responsible for seeking food for their families. The age of beneficiaries varies from 18 to 65 years.

It has been found that urban gardens are playing a pivotal role in reducing urban poverty; this is evidenced by their harvest, increased meals after harvest, income generation, employment creation, socio- economic empowerment and nutritional diversity. This shows that urban gardens are playing a pivotal role in addressing urban poverty.

The study found that few institutions are supporting urban agriculture in Karoi. Only KTC is partially supporting urban agriculture in Karoi. Both NGOs and Central Government has no programmes in Karoi that are meant to develop urban community gardens. This means that a lot should be done in support of urban agriculture for it to be effective and efficiency.

5.2 Conclusions

A hindsight on the research revealed that urban farming is now a widespread activity in most cities of developed and developing countries and something without which some urbanites cannot afford to make ends meet. This means that, urban agriculture is viewed as the most vital tool to reduce urban poverty. This is because urban farming boost household food security creates employment, socio-economic empowerment and diet diversity, thereby reducing urban poverty.

Land for urban farming is readily available, although there are often controls on its usage. Urban agriculture is not yet viewed as something permanent as there is no land dedicated to that activity by some local authorities. Residents are known for using more than one piece of land within a walk-able distance from homesteads to maximise on use of inputs and to cope

in the event of eviction from urban garden.

Urban community gardens emerged as a result of urban poverty in various cities of developing countries. Urban poverty is caused by rapid urbanisation, poor agricultural policies which affect the supply of domestic food, wage cuts, inflation, and unemployment. That is urban poverty triggered to the practice of urban community gardens so that urbanites will escape from urban poverty.

Although the local residents of Karoi are the one who are partaking into urban community gardens projects, in order to address poverty issues. It is of vital importance for the residents to collectively hands-on for the issues pertaining to development and activities of urban community gardens so that they will be effective. Also they will be able to solve the challenges together and contribute income for development of their gardens.

The research concludes that urban community gardens are effective in addressing urban poverty because many residents are benefiting from the gardens. However for urban community gardens to be more effective external stakeholders, such as NGOs and Donors must intervene and assist garden beneficiaries.

5.3. Recommendations

Strategies that promote effectiveness and efficiency of urban community gardens are many and complex. There is dire need to strengthen these strategies to ensure that urban community gardens activities are propelled towards high-yields and in turn reducing urban poverty. Therefore, every stakeholder of urban community garden is hereby urged to contribute accordingly to make this activity continue to thrive. Below are the recommendations that could be useful in improving the viability of urban community gardens.

5.3.1 Inclusion of urban community gardens in planning.

The results of the research showed that urban community gardens are playing a vital role in reducing urban poverty in urban areas, thus it is essential for Urban Councils to include urban community gardens in planning and development. For instance, during the planning of residential area, at least one or two gardens must be also included, so that urban residents will find something that will assist them in escaping from urban poverty.

5.3.2 Legalising of urban community gardens

Results of the study have revealed that urban community gardens are only tolerated or accommodated by urban local authorities but not legalised. It is hereby urged that government should work to provide a legal framework for urban gardens. If legalized, steps could be taken to improve the cultivation techniques and assist in creating the right environment for food generation. Also, this will enable urban gardens to be planned for and supported easily even by development partners like NGOs. In a sense, legalising urban gardens would reduce the fear of slashing and theft and motivate high yield cultivation, reducing food shortages in the city. To this end, residents should be actively involved in the processes of urban community gardens such as master plan designing and formulation of by-laws through relevant structures. However, the legal framework should give Council the mandate to maintain and sustain order in the whole process of urban community gardens.

5.3.3. Improved urban community gardens technology

Results of the study indicated that urban community gardens farmers uses simple and affordable inputs. There is need to consider use of high-tech technology in the form of tractors for land preparation, drip irrigation, high-yield short-term seed varieties and use of pesticides and herbicides which can facilitate high crop yields. To be exact, residents need assistance from central government, City Council and NGOs to access modern technology that can enable intensive use of available small pieces of land.

5.3.4. Increasing Extension Services Coverage

Given the low coverage of extension services as indicated by the number of respondents who had received extension services, consideration should be given to establishment of mechanisms to make sure all residents receive much needed extension services. NGOs must increase their field staff to cover even those outside their target group. Central government may strengthen the capacity of AGRITEX to recruit more field officers to cater for the urban populace and also, the available few may be assisted to be mobile to cover many residents at a given time. Training of trainer programmes could be facilitated by all stakeholders concerned to ensure that some urban residents are capacitated to train others or even learn from each other through lateral learning processes like demonstration plots

5.3.5 Improving market linkages for urban community gardens produce

Results of the study showed that in the event of surpluses residents only sold to the local neighbourhood. Urban community gardens farmers should be linked to other profitable markets like supermarkets and institutions like schools whenever they need to sale their surplus produce. This requires providing assistance to process of self-organization of urban community gardens farmers, such as producer's organizations, marketing co-operatives and machinery pools. In a nutshell, this could motivate residents to produce in abundance as there will be value for their effort.

5.3.6 Collective responsibility to strengthen urban community gardens activities

Collective responsibility to strengthening urban community activities is necessary, in the sense that, care should be taken to ensure collaboration among urban residents, Urban Council, NGOs and Central government for urban gardens gets necessary support. Urban Council could work as the secretariat of this team approach to make sure that urban gardens are well regulated and residents have access to land and other input support in a co-ordinated and equitable manner.

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Appendix I



MIDLANDS STATE UNIVERSITY



FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF LOCAL GOVERNANCE STUDIES

Survey Questionnaire for Beneficiaries of Urban Community Gardens.

Introductory Statement

This questionnaire is designed for collecting information on the role of urban community gardens in addressing urban poverty. Your support in responding to this questionnaire will help the researcher Birsal Chinhanga to complete the fourth year research project for Bsc (Honours) Degree in Local Governance Studies at Midlands State University.

Information collected through this questionnaire will remain in utter most privacy and remain anonymous. The information is only for academic purpose

Instructions

- i) Do not write your name
- ii) Tick and fill the blank space provided

Section A

Personal Information

- 1) Sex male female (please tick)
- 2) What is your age (tick below)
- Over 60
- 40-50
- 30-40
- 20-30
- Under 20
- 3) Are you employed? YES NO , if yes state where you are
employed.....
- 4) Are you the bread winner in your family?
- YES NO (please tick)
- 5) How many dependants you have
- Children
- Adults

Section B

Level of Income and Expenditure

- 6) What is your source of income..... Your weekly income.....and your monthly income
- 7) How much do you spend for food of your family.....
- 8) How many meals do you take a day? 1 only, 1-2 2-3

Section C

Urban Agriculture

- 9) Are you a member of urban community gardens? YES NO
- 10) What is the size of land you cultivate? 1 acre 1 hectare
2 and over hectares
- 11) What crops do you cultivate? Carrots beans maize
Cabbages sweet potatoes potatoes
If there is any other please state.....
- 12) What are the benefits of community gardens to you and the crops you cultivate?
- a) Aids food supplement at home b) supply with various nutritional food
b) Source of income d) creates employment

If there is are any other benefits state below.....

.....
.....

.....
.....

13) What are the challenges are u facing in urban community gardens?

- a) Shortage of inputs b) water shortages c) vandalism and theft
d) Market challenges e) shortage of capital

If there are any challenges state below.....

.....
.....

14) What percentage of income are you getting from the crops you sold to the market?

- 10%-40% 40%- 60% 60%-100

15) For your household food, what percentage do you obtain from the garden?

- 10%-40% 40%- 60% 60%-100%

16) What do you think must be done to overcome those challenges and enhance the effectiveness of urban community gardens?

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The End

Appendix II



MIDLANDS STATE UNIVERSITY



FACULTY OF SOCIAL SCIENCES

DEPARTMENT OF LOCAL GOVERNANCE STUDIES

Survey Questionnaire for KTC Employees.

Introductory Statement

This questionnaire is designed for collecting information on the role of urban community gardens in addressing urban poverty. Your support in responding to this questionnaire will help the researcher Birsal Chinhanga to complete the fourth year research project for Bsc (Honours) Degree in Local Governance Studies at Midlands State University.

Information collected through this questionnaire will remain in utter most privacy and remain anonymous. The information is only for academic purpose.

Instructions

- iii) Do not write your name
- iv) Tick and fill the blank space provided

Section A

Personal Information

1) Sex male female (please tick)

2) What is your age (tick below)

Over 60

40-50

30-40

20-30

Under 20

3) Do you hold a managerial post? YES NO (please tick)

4) Specify your department

Section B

Karoi Town Council to Urban Agriculture

5) Does KTC supports Urban Community Gardens? YES NO

6) If yes, how does it supports urban community gardens? (Tick below)

a) Supports with funding and inputs b) Provides free spaces for gardens

c) Provides market for urban farmers c) Supports with transport

If there are some other ways KTC is supporting urban community gardens please add below

.....
.....
.....

7) What are the challenges faced by KTC in supporting urban agriculture?

- A) Financial challenges b) shortage of enough space for gardens
c) Absent of a legislation that supports urban agriculture

If there are any challenges please state

.....
.....

8) What do you think must be done by council so that it will fully supports Urban Agriculture in form of Urban Community Gardens? A) Council should provide urban farmers with inputs B) Council should be fully involved in day to day management of urban community garden

If there are any other measures state below

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.....

9) What percentage of revenue are you getting from farmers who come to the market with their crops? (Tick below)

- 10%-40% 40%- 60% 60%-100

10) Are urban community gardens in Karoi helping in reducing urban poverty?

YES

NO

11) In what way does urban poverty addressed by urban community gardens in Karoi?

a) It adds food supplement at home b) its source of income for poor

c) Creates employment d) adds variety of nutrients to diet

If there is any other please add below.

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.....

12) What ways does council use to monitor and control the activities of urban farmers?

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13) What do you think must be done for urban community gardens fully practiced?

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Appendix III



MIDLANDS STATE UNIVERSITY



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DEPARTMENT OF LOCAL GOVERNANCE STUDIES

Interview Guide Questions for KTC officials of Department of Housing, Health, Education and Community Service.

Introductory Statement

Thank you for your willingness to participate in our interview. The purpose of this interview is to hear your ideas and opinions about urban community gardens and their role in addressing urban poverty. Your support in responding to these questions will help the researcher Birsal Chinhanga to complete the fourth year research project for Bsc (Honours) Degree in Local Governance Studies at Midlands State University.

Information collected through this questionnaire will remain in utter most privacy and remain anonymous. The information is only for academic purpose.

Interview Guide Questions

- 1) What do you understand about urban poverty and community gardens?
- 2) In what way do urban community gardens address urban poverty?
- 3) To what extent do urban community gardens increase household food in Karoi residents?
- 4) Basing on Karoi, what are the impacts of urban poverty to Karoi residents?
- 5) What are the challenges faced by urban beneficiaries of community gardens?

- 6) What strategies do you think must be introduced in order to enhance the effectiveness of urban community gardens?

The End

Appendix IV



MIDLANDS STATE UNIVERSITY

FACULTY OF SOCIAL SCIENCES



DEPARTMENT OF LOCAL GOVERNANCE STUDIES

Focus Group Discussion Guide for Urban Gardens Beneficiaries of Karoi.

Introductory Statement

Thank you for your willingness to participate in this focus group discussion. The purpose of this discussion is to hear your ideas and opinions about urban community gardens and their role in addressing urban poverty. Your response to the questions will be kept anonymous. There is no right or wrong answer in this focus group discussion, we want to hear your different views and opinions upon urban community gardens and urban poverty and would like to hear from everyone. In respect of each other, we ask that only one individual speak at a time in the group and that responses made by all participants will be kept confidential.

Questions for Focus Group Discussion

Engagement Questions

- 1) What do you understand about urban poverty and urban community gardens?
- 2) What are the signs of urban poverty?

Exploration Questions

- 3) How effective is urban community gardens in addressing urban poverty?
- 4) In terms of food supplement at home, how much are you earning from your gardens?
- 5) What are the challenges are you facing in urban community gardens?

Exit Question

- 6) What strategies do you think must be initiated to improve the effectiveness of urban community gardens?

The End