

**COMMUNITY FOOD PROJECTS AS TOOL FOR PROMOTING  
SUSTAINABLE DEVELOPMENT AT SEDIBENG DISTRICT MUNICIPALITY.**

LORAINÉ BOITUMELO MZINI  
B.A. HONOURS (PUBLIC ADMINISTRATION)

Mini-Dissertation submitted in partial fulfilment of the requirements for the degree  
Master in Development and Management in the Department of Public Management and  
Administration at the North West University

Supervisor: Prof. E.P. ABABIO

North West University  
VAAL Triangle Faculty  
2006

## **DECLARATION**

**I DECLARE THAT THIS IS MY OWN WORK AND THAT ALL THE SOURCES THAT I HAVE QUOTED HAVE BEEN INDICATED AND ACKNOWLEDGED BY MEANS OF COMPLETE REFERENCE.**

**L. B. MZINI**

## ACKNOWLEDGEMENTS

I would like to thank the following people for their role and cooperation in making the compilation of this research work possible.

- The Almighty for the wisdom and strength that He gave me.
- Prof EP Ababio, for supervising this study. I am grateful to have a lecturer and a supervisor like you. Your understanding and constructive guidance is a treasure to my life and family.
- My husband Khethani Mzini, for the support and encouragement throughout the entire course. My son Mpumelelo Mzini (1 year & 9 months) whom I owe the time that I was absent to take care of during my studies.
- My parents, Minah and Norman Manyike, siblings Evelyn, Palesa and Tebogo for their support and understanding for taking care of my son when I couldn't spend the nights and weekends with him.
- My bus mate and colleague Zodwa Zwane for the inspiration and motivation that she brought to me to register for this degree, you go girl!
- Class of 2006, supporting each other to complete this study is an anchor to our future.
- I would also like to thank GDACE staff; Dr Alan Kalake, my manager (GDACE). It was an opportunity to have as a manager and mentor of your calibre throughout my studies. Your inquiry about my submissions encouraged my well being to strive high in order to complete this course. Ms Pricilla Pietersen your concern and interest on my studies made me to realize that my studies are important for community empowerment. Dr Steven Cornelius, Mr. Letebele Sebitloane , Mr. Mike Mosifane, Ms Lorato Matthews, Ms Elizabeth Lediga, Ms Shalotte Ledwaba, Mr. Lucky Lesufi, Ms Jeanette Matsapola (library) and colleagues thank you for the opportunity and time to avail yourselves through my difficult times .
- A special thanks to the library staff at NWU for your patience and assistance in the library.

- I would like to express my deepest appreciation to the SDM community for sacrificing their time and cooperation to provide me with the information related to this study.
- All my relatives and friends thank you for understanding my absence in your social lives.

***TOGETHER WE CAN MAKE A DIFFERENCE!!!***

# ABSTRACT

The total number of households in Sedibeng District Municipality is estimated at 224 307. Sedibeng District Municipality experience high level of unemployment and poverty (51% of the people of Sedibeng District Municipality live in poverty), education and literacy levels and an economy that does not yield the concomitant jobs. This is further compounded by low levels of skills. These aspects are closely related to the socio-economic conditions throughout the Sedibeng District Municipality. For the purpose of this study poverty is defined as the inability of the households to attain a minimal standard of living, measured in terms of basic consumption needs or the income required to satisfy them. A means to help obviate these economic hazards for sustainable living is community food gardens.

For the purpose of this study a hypothesis was constructed: the high incidence of poverty rates and food costs at Sedibeng District Municipality makes community food projects a necessary tool for sustainable development. To obtain the answers to verify the hypothesis, literature study was used to trace the practices of community food gardens in Sedibeng District Municipality. An empirical study was conducted to confirm the hypothesis of this study. The following was confirmed:

- This study shows that the level of poverty and of unemployment is high in SDM. This remains a challenge to the government and the community to utilize the natural resources in an effective manner.
- The study has shown that the communities are capable of empowering themselves. Households usually grow vegetables in their backyards. Due to common economical requirements, communities established groups to form community food gardens to assist each other, to feed their families and the hungry communities. The food that they grow is donated to the schools to feed disadvantaged learners, sick people who are on medication and disabled persons; they also sell the surplus to acquire additional funds.

- The ability to farm and to produce sustainably based on long term effects of various properties and processes essential to crop productivity and long term availability of inputs is seen as sustainable and effective, land may be used for a long term. SDM has the potential in all kinds of agriculture. That includes live stock farming to small gardens for sustenance. The land is fertile and there is vacant land that must be reserved for agricultural purposes.
- The method used for producing crops is proved to be effective as the CFGs continuously use the available resources at their best ability. An example is the crop rotation whereby participants always alternate their crops on their land. They do this to reduce the exhaustion of the soil form the same crops planted.
- Countless organizations including the private sector continue to contribute towards ensuring that more and more people have access to food.
- Food security in South Africa is a concern in Sedibeng District Municipality, and it remains a serious challenge to achieve food security in the Gauteng Province as well. Therefore food security is one of several key government priorities to ensure that all people have access to adequate, safe and nutritious food at all times.

The study concludes with recommendations for Government action and for further research.

# TABLE OF CONTENTS

<b>TITLE</b>	<b>PAGE (S)</b>
<b>Declaration</b>	<b>i</b>
<b>Acknowledgements</b>	<b>ii</b>
<b>Abstract</b>	<b>iv</b>
<b>List of Apendices</b>	<b>vii</b>
<b>CHAPTER ONE</b>	<b>1</b>
<b>INTRODUCTION, PROBLEM STATEMENT AND METHOD OF STUDY</b>	
<b>1.1 ORIENTATION AND PROBLEM STATEMENT</b>	<b>1</b>
<b>1.2 HYPOTHESIS</b>	<b>5</b>
<b>1.3 RESEARCH QUESTIONS</b>	<b>5</b>
<b>1.4 RESEARCH OBJECTIVES</b>	<b>6</b>
<b>1.5. RESEARCH METHODS</b>	<b>6</b>
<b>1.5.1 Literature Review</b>	<b>6</b>
<b>1.5.2 Empirical survey</b>	<b>7</b>
<b>1.5.2.1 Interviews</b>	<b>7</b>
<b>1.5.2.2 Questionnaires</b>	<b>8</b>
<b>1.5.2.3 Participant observation</b>	<b>8</b>
<b>1.6 PRELIMINARY CHAPTERS</b>	<b>9</b>
<b>CHAPTER TWO</b>	<b>10</b>
<b>THEORETICAL EXPOSITION OF SUSTAINABLE DEVELOPMENT</b>	
<b>2.1 INTRODUCTION</b>	<b>10</b>
<b>2.2 SUSTAINABLE DEVELOPMENT</b>	<b>10</b>
<b>2.2.1 Sustainable development</b>	<b>11</b>
<b>2.2.2 Poverty</b>	<b>12</b>
<b>2.2.3 Unemployment</b>	<b>14</b>
<b>2.2.4 Food security</b>	<b>15</b>
<b>2.3 ORIGIN OF SUSTAINABLE DEVELOPMENT</b>	<b>16</b>
<b>2.3.1 Agenda 21</b>	<b>17</b>
<b>2.3.2 World Summit on Sustainable Development (WSSD)</b>	<b>18</b>
<b>2.4 OVERVIEW OF SUSTAINABLE DEVELOPMENT</b>	<b>19</b>
<b>2.4.1 Models of development</b>	<b>20</b>
<b>2.5 SUSTAINABLE AGRICULTURE</b>	<b>21</b>
<b>2.6 COMPONENT OF SUSTAINABLE DEVELOPMENT</b>	<b>24</b>
<b>2.7 PRINCIPLES OF SUSTAINABLE DEVELOPMENT</b>	<b>25</b>
<b>2.8 REQUIREMENTS FOR SUSTAINABILITY</b>	<b>26</b>
<b>2.9 CHALLENGES FACING SUSTAINABLE DEVELOPMENT IN SOUTH AFRICA</b>	<b>27</b>

<b>2.10</b>	<b>INDICATORS SUSTAINABLE DEVELOPMENT INDICATORS</b>	<b>29</b>
<b>2.11</b>	<b>ROLEPLAYERS FOR SUSTAINABLE DEVELOPMENT</b>	<b>32</b>
<b>2.11.1</b>	<b>National Government</b>	<b>33</b>
<b>2.11.2</b>	<b>Provincial Government</b>	<b>33</b>
<b>2.11.3</b>	<b>Local Government</b>	<b>35</b>
<b>2.11.4</b>	<b>Community</b>	<b>36</b>
<b>2.12</b>	<b>CONCLUSION</b>	<b>37</b>
<b>CHAPTER THREE</b>		<b>38</b>
<b>AN OVERVIEW OF STRATEGIES AND ACTIVITIES OF COMMUNITY FOOD GARDENS IN SEDIBENG</b>		
<b>3.1.1</b>	<b>INTRODUCTION</b>	<b>38</b>
<b>3.2</b>	<b>GOVERNMENT PROVISION TOWARDS COMMUNITY DEVELOPMENT</b>	<b>38</b>
<b>3.2.1</b>	<b>Integrated Food Security Strategy</b>	<b>41</b>
<b>3.2.2</b>	<b>Gauteng Growth and Development Strategy</b>	<b>43</b>
<b>3.2.2.1</b>	<b>Strategy for Sedibeng District Municipality</b>	<b>45</b>
<b>3.2.3</b>	<b>Gauteng Agricultural Development Strategy</b>	<b>45</b>
<b>3.3</b>	<b>COMMUNITY FOOD GARDENS</b>	<b>46</b>
<b>3.3.1</b>	<b>Definition of community food garden</b>	<b>46</b>
<b>3.3.2</b>	<b>Origins of community food garden</b>	<b>47</b>
<b>3.3.3</b>	<b>Aims of community food gardens</b>	<b>48</b>
<b>3.4</b>	<b>CURRENT FOOD SECURITY TRENDS IN SOUTH AFRICA</b>	<b>49</b>
<b>3.4.1</b>	<b>Status of food security Gauteng Province</b>	<b>50</b>
<b>3.4.2</b>	<b>Status of food security in Sedibeng District Municipality</b>	<b>51</b>
<b>3.5</b>	<b>THE PROCESS OF ESTABLISHING CFG</b>	<b>51</b>
<b>3.5.1</b>	<b>Programme management</b>	<b>51</b>
<b>3.5.2</b>	<b>Project cycle</b>	<b>52</b>
<b>3.5.2.1</b>	<b>Time scheduling</b>	<b>53</b>
<b>3.5.2.2</b>	<b>Applications for projects</b>	<b>53</b>
<b>3.5.2.3</b>	<b>Project selection</b>	<b>53</b>
<b>3.5.2.4</b>	<b>Feasibility study</b>	<b>54</b>
<b>3.5.2.5</b>	<b>Business plans</b>	<b>54</b>
<b>3.5.2.5.1</b>	<b>Requirements for approval of project business plans</b>	<b>55</b>
<b>3.5.2.6</b>	<b>Project approval and preparation for implementation</b>	<b>58</b>
<b>3.5.2.6.1</b>	<b>Criteria for approval of projects</b>	<b>58</b>
<b>3.6</b>	<b>ORGANISATION OF THE PROGRAMME</b>	<b>59</b>
<b>3.6.1</b>	<b>Exit strategy</b>	<b>60</b>
<b>3.6.2</b>	<b>Role players and stakeholders</b>	<b>60</b>
<b>3.6.3</b>	<b>Methods of growing CFGs</b>	<b>61</b>
<b>3.7</b>	<b>CONCLUSION</b>	<b>61</b>

<b>CHAPTER FOUR</b>	<b>62</b>
<b>EMPIRICAL STUDY ON THE IMPACT OF COMMUNITY FOOD PROJECTS IN SEDIBENG DISTRICT MUNICIPALITY</b>	
<b>4.1 INTRODUCTION</b>	<b>62</b>
<b>4.2 RESEARCH METHOD</b>	<b>62</b>
<b>4.2.1 Qualitative Method</b>	<b>62</b>
<b>4.2.2 Quantitative Method</b>	<b>62</b>
<b>4.3 RESEARCH METHOD</b>	<b>63</b>
<b>4.3.1 Validity</b>	<b>63</b>
<b>4.3.2 Reliability</b>	<b>63</b>
<b>4.4 DATA COLLECTION INSTRUMENTS</b>	<b>64</b>
<b>4.4.1 Interviews and Questionnaire</b>	<b>64</b>
<b>4.4.2 Sampling</b>	<b>64</b>
<b>4.5 FINDINGS FROM SEMI STRUCTURED INTERVIEWS WITH THE PARTICIPANTS OF COMMUNITY FOOD GARDENS</b>	<b>65</b>
<b>4.2.3 Section A</b>	<b>65</b>
<b>4.2.2 Section B</b>	<b>69</b>
<b>4.2.3 Section C</b>	<b>74</b>
<b>4.3 Findings from the GDACE officials responsible for CFGs in SDM</b>	<b>77</b>
<b>4.3.1 Section A</b>	<b>77</b>
<b>4.3.2 Section B</b>	<b>78</b>
<b>4.3.3 Section C</b>	<b>79</b>
<b>4.3.4 Section D</b>	<b>80</b>
<b>4.7 CONCLUSION</b>	<b>82</b>
<b>CHAPTER FIVE</b>	<b>83</b>
<b>FINDINGS, SUMMARY, REALISATION OF THE OBJECTIVES AND RECOMMENDATIONS</b>	
<b>5.1 INTRODUCTION</b>	<b>83</b>
<b>5.2 SUMMARY</b>	<b>83</b>
<b>5.3 FINDINGS</b>	<b>85</b>
<b>5.4 REALISATION OF THE OBJECTIVES OF THE STUDY</b>	<b>88</b>
<b>5.5 TESTING THE HYPOTHESIS</b>	<b>89</b>
<b>5.6 RECOMMENDATIONS</b>	<b>89</b>
<b>6 BIBLIOGRAPHY</b>	<b>92</b>
<b>7 LIST OF APPENDICES</b>	<b>97-104</b>

## **CHAPTER ONE**

### **INTRODUCTION, PROBLEM STATEMENT AND METHOD OF STUDY**

#### **Keywords**

Food security, (GDACE) Gauteng Department of Agriculture, Conservation and Environment, community food gardens, sustainable development, Batho Pele Principles, food security, impact, determinant factors

#### **1.1 Orientation and Problem statement**

Sustainable development is a programme with the aim to change the process of economic development so that it ensures a basic quality of life for all people. It also protects the ecosystems and community systems that make life possible and worthwhile (Van der Merwe, 1999: 5). Sustainable development reflects a process that meets the needs of the present, without jeopardizing the ability of future generations to meet their own needs. It represents a development framework that leads to the conquest of poverty, the goal of full employment and the fostering of a stable, safe and just society; the overriding objectives of development policy and interventions (Adelzadeh, 2003: 5).

Sustainable development and policy making in South Africa focus on five challenges. Firstly, it promotes the eradication of poverty and extreme income and wealth inequalities. Secondly, it aims at the provision of access to quality and affordable basic service to all Africans. Thirdly, it is for the promotion of environmental sustainability. Fourthly, there is a sustained need for the reduction on the unemployment rate. Fifthly, the attainment of sustained high growth rate (Adelzadeh, 2003: 5). The sustainable development of any country can be effective only if the community want it to be.

Sustainable development brings a lasting benefit to the community. Therefore for a project to be sustainable, planners must ensure that the project meets the real needs of the

community. Further, mechanisms must exist to ensure that the community has the capacity to run and maintain the project and that the natural environment will not be damaged in future (Allan, 1996:5).

Sedibeng District Municipality (SDM) was established in the year 2000 on the rich history of Evaton, Heidelberg, Sharpeville, Boipatong, Sebokeng, Vereeniging, Vanderbijlpark, Vaal Oewers, Vaal Marina and Suikerbosrand. SDM is situated in South Eastern Gauteng, approximately 60 km from Johannesburg, along the scenic Vaal, Klip and Suikerbos rivers. A variety of attractions are offered encapsulating a vast cultural heritage and historical events, including the political breakthroughs that led to the country's turn about. Sedibeng District consists of three (3) Local Municipalities, namely Emfuleni, Lesedi and Midvaal (Sedibeng 1, 26-07-2006).

The total number of households in SDM is estimated at 224 307. SDM experience high level of unemployment and poverty (51% of the people of SDM live in poverty), education and literacy levels and an economy that does not yield the concomitant jobs. This is further compounded by low levels of skills. These aspects are closely related to the socio-economic conditions throughout the SDM (Sedibeng 1, 26-07-2006). For the purpose of this study poverty is defined as the inability of the households to attain a minimal standard of living, measured in terms of basic consumption needs or the income required to satisfy them (May, 1998:4).

The South African food situation has been and is still characterized by an apparent state of sufficiency for the nation but at the same time there are pockets of poverty both in rural and urban areas. Despite the comparative adequate national food security and relative wealth, the experience of 40% of South African households is that of continued poverty which is manifested in food insecurity, ill-health and arduous work of low returns (Nduli, 10-07-2006).

Food security in South Africa is a concern in SDM and it remains a serious challenge to achieve food security in the Gauteng Province as well. Therefore food security is one of several key government priorities to ensure that all people have access to adequate, safe and nutritious food at all times. The mission of GDACE (Gauteng Department of Agriculture, Conservation and Environment), through the Chief Directorate Agriculture is to optimize the contribution of sustainable agriculture towards the equitable development of all communities and the economy in the Gauteng Province. This is to enhance food security, income generation, job creation and the quality of life. The aim is to enhance the production, processing and accessibility of food, or sustainability at an affordable level. The objective is to contribute to food security, especially for the deprived and food-insecured communities. This is done in collaboration with local authorities and other stakeholders in food security, to serve mainly resource-poor communities in Gauteng (GDACE 1, 26-07-2006).

Food security is part of the section 27 of chapter 2 of the *Constitution of the Republic of South Africa* (Act 108 of 1996) which encapsulates the constitutional rights of South Africans. The Constitution states that every citizen has the right to have access to sufficient food and water, and that the state must by legislation and other measures within its available resources, avail to progressive realization of the right to sufficient food (DOA, 2002: 5-6).

Food security policy in South Africa has hitherto focused on national food self sufficiency. According to Sasix (3-08-2006), the following effects of food security in South Africa and prevalent in SDM had been identified:

- ❖ Food production programmes take time to yield sufficient food. In the case of food insecure households, there is the risk that immediate and short-term needs for sufficient food become urgent before the project has time to produce enough food and this could compromise the expected outcomes.

- ❖ Vegetable gardening makes a valuable contribution to household food security but more food production and income generation interventions will be required for these households to become independent and sustainable.
- ❖ There is a risk of people becoming de-motivated and dropping out of the programme because the expected results, while worthwhile are still short of actual self-reliance
- ❖ There is key staff resignation and community members leave the projects.
- ❖ Agricultural projects have inherent risks of failure due to disease, pests and weather,
- Immediate need for food can compromise the future viability of these households developing the small food production businesses that would raise them out of a subsistence level.
- ❖ The lasting impact is dependent on community member's motivation and capacity to keep maintaining their gardens.
- ❖ The sustainability is also affected by whether there will be further diverse opportunities for them to expand their household food production beyond subsistence. This risk is being addressed by focusing on business skills training

About twenty (20) community food garden projects have been established in Sedibeng, amongst which is the Lwantsha Tlala Project. The Project was initiated in 1998 by 64 members with the aim to fight poverty and unemployment in the area. Members were approached by the Vaal Technikon to initiate the project. In December 2003 the project was officially approved by GDACE as a Household Food Security Project. Currently the project has 24 beneficiaries that include 6 men and 18 women. GDACE has provided the Project with fencing, a borehole, gardens tools, storage container, protective clothing and seeds. Members work from 9H00 till 15H00. They have a register in which they sign in and out. They have an agreement that if someone is absent from work for 2 weeks or more without any valid reason, that person will be dismissed. The projects produce basic food consumables like spinach, cabbage, lettuce, green pepper, green chilies, pumpkin, potato, tomato, onion and carrots (Agriteng, May/June 2006: 1)

The MEC for Agricultural Conservation and Environment Khabisi Mosunkutu outlined that agriculture could make a major contribution to enhance economic growth and fight poverty in line with national and provincial priorities. He further stated that his department would spend R25 million to establish 32 new community based food production units and would also assist emerging farmers (Gauteng News, March 2006: 7).

The preceding implications necessitate an investigation and a solution. The focus of this study is to reflect continuous public participation and development in community food gardens and educate the community about the government's objectives to meet the public needs. The outcomes will therefore be reviewed and considered in order to improve the service delivery and best practice that exist internationally as the policy framework and as approved by the National Department of Agriculture.

## **1.2 Hypothesis**

The high incidence of poverty rates and food costs at SDM makes community food projects a necessary tool for sustainable development.

## **1.3 Research Questions**

With regard to the problem statement above, the study attempted to find answers to the following questions:

- ❖ What is the community food project, food security and sustainable development?
- ❖ When was the community food project established, what is the aim and which strategies are undertaken to develop the community needs in SDM?
- ❖ How will the study measure the impact of community food projects in SDM.
- ❖ What are the determinant factors for the success or failures of community food projects in SDM?

- ❖ What recommendations can be offered to add value to the GDACE and towards the public participation in community food projects in SDM?

#### **1.4 Research objectives**

The research intended to evaluate the actual outcomes of the community food projects in order to establish a policy and operational plan for future initiatives. The following were outlined as objectives of this study:

- ❖ To give a theoretical exposition of the concepts “community food projects, food security and sustainable development”.
- ❖ To trace the historical development and outline the strategies that had been undertaken to develop the community needs in S DM.
- ❖ To conduct research on the impact of community food projects in SDM.
- ❖ To offer recommendations that may add value for GDACE on attaining community food projects and on how to regain effective public participation in Sedibeng District Municipality.

#### **1.5 RESEARCH METHODS**

This research project was undertaken through the utilization of various techniques which are classified under the qualitative research method. The researcher planned to obtain answers to the research questions by employing literature review and empirical survey.

##### **1.5.1 Literature Review**

Literature review was based on review of journals, newspaper articles, policy documents, government publications, books and Internet as sources of this work. The literature studied was obtained from the North West University, Vanderbijlpark, Vereeniging, GDACE, Johannesburg libraries, resource centers and data bases. Detailed literature study was applied to examine the historical background, strategies implemented for

community food projects in South Africa with specific reference to Sedibeng District Municipality. The theoretical framework created was used as a background for the empirical side of this research.

### **1.5.2 Empirical survey**

Empirical investigations were conducted only in SDM located in the Gauteng Province. The establishment of community food projects is aimed at developing the community of South Africa. Due to the limited scope of this study as a mini-dissertation, the empirical investigations was carried out in three locations of SDM: Emfuleni Local Municipality, namely Palm Springs, Sharpville and Evaton. The results of the study contributed towards the effective service delivery and it can have an influence on government initiatives.

The following research methods were applied;

#### **1.5.2.1 Interviews**

Unstructured Interviews were conducted through structured questionnaires with relevant agricultural officials in the GDACE. The management of Chief Directorate: Agriculture was consulted for approval; to interview the officials. The objectives of the interviews with the abovementioned officials were as follows:

- ❖ To determine the extent to which legislation has led to establishment of community food projects.
- ❖ To identify the strategies that have been undertaken to address determinant factors for the success or failures of community food projects.

A limited number of interviews were conducted with the relevant stakeholders. This involved the members of the community food projects of which in SDM there are about twenty community food gardens, therefore the study only concentrated on five groups.

The groups consulted represented the community members (disabled, men and women, youth, unemployed), clinic, and primary school. The objectives of the interviews with the relevant stakeholders are the following:

- ❖ To find out what their concerns are on community food projects,
- ❖ To determine the factors that might have adverse or positive influence on the community food projects,
- To obtain views on ideas on what can be done to ensure effective public participation.

#### **1.5.2.2 Questionnaires**

The researcher formulated two sets of questionnaires based on the research problem. The questionnaire aimed to obtain data of the activities undertaken, the method employed and the future expectations of the participants. The researcher gathered the data during the presence of the participants, the reason being that she was afraid to hand out the forms as the respondents might not understand the content, sometimes the documents are misplaced or delayed to reach the researcher.

#### **1.5.2.3 Participant observation**

The researcher resides in SDM: Emfuleni Local Municipality, therefore the problems of poverty and unemployment around the neighbourhood had inspired her to conduct a study on such issues. Participant observation is preferred since it enabled the researcher to acquire information on first hand, such information had never been recorded before, therefore it enabled the researcher to produce experienced facts.

## **1.6 PRELIMINARY CHAPTERS**

The mini-dissertation includes the following chapters;

- Chapter one: Orientation and Problem Statement,
- Chapter two: Theoretical exposition of Sustainable Development,
- ❖ Chapter three: A review of strategies, activities of community food gardens by GDACE in Sedibeng
- ❖ Chapter four: Empirical Study on the impact of community food projects, in Sedibeng District Municipality ,
- ❖ Chapter five: Summary, Findings and Recommendations

## **CHAPTER TWO**

### **THEORETICAL EXPOSITION OF SUSTAINABLE DEVELOPMENT**

#### **2.1 INTRODUCTION**

Sustainable development is the fashionable buzzword in environmental conservation circles and in much of the world of international development. Sustainable development reflects a process that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is multidimensional and encompasses complex interactions between economic, social, political and environmental issues. Further it represents a development framework that makes the conquest of poverty, the goal of full employment and the fostering of a stable safe society.

This study was set to investigate the potential contribution of community food gardens to the SDM communities; that is the poor, unemployment and low-income households. This chapter provides an exposition of sustainable development. In doing so, the origin of sustainable development is outlined. It defines sustainable development, poverty, unemployment and food security. Included in this chapter are the factors, principles, indicators, challenges and the requirement and the role players of sustainable development.

#### **2.2 SUSTAINABLE DEVELOPMENT**

This section defines sustainable development. To understand the term sustainable development this study explains poverty, unemployment and effective food security as they relate to sustainable development.

### **2.2.1 Sustainable development**

Sustainable development received its most popular exposition in the highly influential Brundtland Report in 1987. The concept of sustainable development (SD) incorporates two words- sustain and develop. According to Porritt & Wright (2002:13) in Lindeque (2003:8), sustainability means simply “the capacity for the continuance into the long term”. The capability of nature to sustain all of life is limited to the constraints of its self-regenerating systems. If humans learn to live within these limits, their prospects of survival as a species are guaranteed. For the current generation to survive their basic needs must be met and for the future generations to survive, their needs must also be met. If this is to continue into the future each generation must meet their needs within the limits of the self-regenerating systems of nature.

Sustainable development is defined as the development that is likely to achieve lasting satisfaction of human needs and improvement of the quality of human life. In broad terms the concept of sustainable development encompasses:

- Help for the poor because they are left with no option other than to destroy their environment;
- the idea of self-reliant development, within natural resource constraints;
- the idea of cost-effective development using different economic criteria to the traditional approach; that is to say development should not degrade environmental quality, nor should it reduce productivity in the long run;
- the great issues of health control, appropriate technologies, food self reliance, clean water and shelter for all; and
- the notion that human beings initiatives are initiated is needed (Elliot, 1994: 3).

Sustainable development reflects a process that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is multidimensional and encompasses complex interactions between economic, social, political, and environmental issues. It represents a development framework that makes the conquest of poverty, the goal of full employment and the fostering of a stable, safe

and just society the overriding objectives of development policy and interventions (UNDP, 2003:4).

Development involves the creation of wealth by improving the environment in order to raise productivity; thereby increasing the standard of living for humans. Sensible development is to use the natural resources in the most efficient and effective way, so that humans needs and wants can be satisfied, while improving the quality of life (Lindeque (2003:8).

One of the main goal of sustainable development is to ensure equal distribution of the earth's resources and of opportunity for human well-being not only between people currently living on earth, but also between the generations living now and all future generations (Du Plessis et al, 2002:7). Sustainable development is described as the process of continuously striving for dynamic balance between:

- Using and protecting the physical and natural environment and its resources.
- Creating equitable and viable economic systems with an ethical basis.
- Acknowledging and guiding social and cultural systems and values towards greater equitability, responsibility and human well-being (Du Plessis et al, 2002:7).
- A strategy that manages all assets, natural resources, and human resources, as well as financial and physical assets, for increasing long-term wealth and well-being (Pearce et al, 1994:4). The next section explains what poverty entails.

### **2.2.2 Poverty**

Poverty is characterized by the inability of individuals, households or communities to command sufficient resources to satisfy a socially acceptable minimum standard of living. Poverty is perceived by poor South Africans themselves to include alienation from the community, food insecurity, crowded homes, usage of unsafe and inefficient forms of energy, lack of jobs that are adequately paid or secure, and fragmentation of the family. In contrast, wealth is perceived to be characterized by good housing, the use of gas or

electricity, and ownership of a major durable good such as a television set or fridge (May, 1998: 4).

Inequality can be defined in terms of being the opposite of 'equality', a state of social organisation that enables or gives equal access to resources and opportunities to all members. However, there are a number of possible objectives for policy aimed at reducing inequality, such as increasing the relative income share of the least well-off, lowering the income 'ceiling' (the income earned by the most well-off), facilitating upward mobility, promoting economic inclusion, avoiding perpetuation of the advantages conferred by wealth, and achieving more favorable comparisons against international yardsticks. For the purposes of measurement, the PIR focuses on income inequality, because there is little reliable and readily accessible data on wealth in South Africa (May, 1998: 4).

The eradication of poverty is an indispensable requirement for sustainable development. At the same time, pronounced income and wealth inequality impedes sustainable development by contributing to a rise in poverty, distorting the utilization of society's productive resources, frustrating the growth potential of a country and jeopardizing the sustainability of its environmental well-being. About 48.5 per cent of the South African population (21.9 million people) currently fall below the national poverty line. Income distribution remains highly unequal and has deteriorated in recent years. This is reflected in the high Gini-coefficient, which rose from 0.596 in 1995 to 0.635 in 2001. The Human Development Index (HDI) for South Africa moved from 0.72 in 1990 to 0.73 in 1995 and declined to 0.67 in 2003. Poverty and inequality continue to exhibit strong spatial and racial biases. It is also stated that a number of proximate forces that have engendered poverty and inequality in South Africa. These include a highly skewed distribution of wealth, extremely steep earning inequality, weak access to basic services by the poor, unemployment and underemployment, low economic growth rates and the weakening employment generation capacity of the current growth path, environmental degradation, HIV/AIDS and an inadequate social security system (UNDP, 2003:4)

In the developing world, conditions such as rising poverty and mounting debt from the context in which individuals struggle to meet their basic needs of survival and nations wrestle to provide for their populations (Elliot, 1994:1). Du Plessis et al (2002:5) believes that as humans and their technology can conquer all problems, and that the answer to all the social problems such as poverty lies in economic growth fuelled by industry.

The biggest problem facing South Africa is that of unemployment and poverty. The expanded unemployment rate increased from 32.7% in 1994 to 37.6% in 1999, and a quarter of those employed earn less than R500 per month. Communities can contribute to the alleviation of poverty by supporting small local business and service providers. Community based organizations such as church groups, can help to train people in new skills and thus improve their chances of getting a job or their own business (Du Plessis et al, 2002:5). Currently about 800 million people in Africa go hungry each day. Approximately 75 percent of the absolute poor in developing countries live in rural areas, where they depend mostly on agriculture for their livelihoods. Thus reducing poverty and hunger in both rural and urban areas will depend heavily on the sustainable development in agriculture (Du Plessis et al, 2002:5).

The approach of government to address poverty is multi-faceted and includes facilitating the creation of jobs, income-generating opportunities and creating a social net. A part of the strategy is to provide government services in a manner that contributes to a social wage. The provision of basic services, free basic water and electricity are elements of this strategy (Fowler, 2003:3).

### **2.2.3 Unemployment**

Unemployment can be viewed as an idiosyncratic shock when one household member of an individual household loses a job. For an example, when the government retrenches numerous civil servants at once, or when a factory or mine closes and terminates employment for a significant portion of the local population (Bannard, 2000:16).

In Sedibeng, the declining steel industry has resulted in job losses. Over reliance on steel and lack of diversification is contributing to growing levels of unemployment. The Sedibeng Chemical Skills and Technology Transfer programme will contribute to skills development and provide significant spin-offs to the region. The department will be transferring approximately R8 million to Sedibeng for the project. It is envisaged that 5 Small, Medium and Micro Enterprises (SMMEs) operating in a wide range of downstream chemical products would be established in the first year (Fowler, 2003:3).

#### **2.2.4 Food security**

Bannard (2000:iv), defines food security as a state of having at all times both physical and economic access to sufficient food to meet dietary needs for a productive and healthy life. Food security is composed of three pillars elements. The pillars are the food availability, access and utilization.

Food security in South Africa is a concern in SDM and it remains a serious challenge to achieve food security in the Gauteng Province as well. Therefore food security is one of several key government priorities to ensure that all people have access to adequate, safe and nutritious food at all times. The mission of GDACE (Gauteng Department of Agriculture, Conservation and Environment), through the Chief Directorate Agriculture is to optimize the contribution of sustainable agriculture towards the equitable development of all communities and the economy in the Gauteng Province. This is to enhance food security, income generation, job creation and the quality of life. The aim is to enhance the production, processing and accessibility of food, or sustainability at an affordable level. The objective is to contribute to food security, especially for the deprived and food-insecure communities. This is done in collaboration with local authorities and other stakeholders in food security, to serve mainly resource-poor communities in Gauteng (GDACE 1, 26-07-2006).

Food security factors include human material and institutional resources that contribute to a household's ability to achieve food security. There is a growing recognition of the need

to address food security issues in South Africa (SA) and especially in SDM. This results from the high rate of unemployment and poverty. Food insecurity and famine were felt to be problems largely resulting from the unavailability of food. Urbanisation has been found as a triggering factor of food security whereby its outcome does not promote economic opportunity and prosperity for the SDM. Fifty percent of the worlds poor and forty percent Africans who are poor live in urban areas (Bannard, 2000: 3). Agriculture is also a significant contributor to economic growth of the country.

Food security is part of the section 27 of chapter 2 of the *Constitution of the Republic of South Africa* (Act 108 of 1996), which encapsulates the constitutional rights of South Africans. The Constitution states that every citizen has the right to have access to sufficient food and water, and that the state must by legislation and other measures within its available resources, avail to progressive realization of the right to sufficient food (DOA, 2002:5). The Reconstruction and Development Programme (RDP), in 1994 identified food security as a priority policy objective. As a result, the government re-prioritised public spending to focus on improving the food security conditions of historically disadvantaged people (DOA, 2002:5).

### **2.3 ORIGIN OF SUSTAINABLE DEVELOPMENT**

Sustainable development started as an idea that people were unable to sustain development if they do not protect the environment. It was realised that sustainable development would not be possible without certain social and economic changes, such as a reduction in poverty levels and greater social equality and fairness. The challenge of sustainable development is to balance the needs of the community for social and economic well being, with the protection of the environment. The literature states that the term was first used in the mid-1970's (Du Plessis et al, 2000: 6).

Sustainable development received its most popular exposition in the highly influential Bruntland Report in 1987. The report was prepared by the World Commission on

Environment and Development (WECD) and the United Nations (UN), as a result of the General Assembly resolution in autumn 1983 (Pearce, 1990: ix).

### **2.3.1 Agenda 21**

The United Nations (UN) held a Conference on Environment in Rio de Janeiro in 1992, generally known as the 'Earth Summit'. Agenda 21, an action plan and blueprint for sustainable development for action in every area in which activity impacts on the environment, was adopted at this event (Olivier, 2004:11). Underlying the UNCED agreements is the idea that humanity has reached a turning point. The world can continue with present policies that increase poverty, hunger, sickness and illiteracy and cause the continuing deterioration of the ecosystem on which life on earth depends or it can change course towards sustainable development (Olivier, 2004: 12).

This programme is upon community driven sustainable development. The programme seeks to empower people at a local level to design a sustainable community development strategy with other power brokers and local authority. The aim of the summit was to discuss the environmental challenges facing humanity. The international community agreed on a framework for global sustainable development (Du Plessis et al, 2000:6).

The summit came in the form of two non-binding agreements. Firstly, the Rio Declaration on environmental and development set out the principles for human interaction with the environment. The second form was the Agenda 21, which formed the international guideline and action plan for sustainable development. As a result Agenda 21 was adopted, as a detailed plan of action. Agenda 21 explains that population, consumption and technology are the primary driving forces behind environmental change. It offers policies and programmes to achieve a sustainable balance between consumption, population and the earth's life supporting capacity (Du Plessis et al, 2000:6).

### **2.3.2 World Summit on Sustainable Development**

The World Summit on Sustainable Development (WSSD) was held from 26 August to 4 September 2002 in Johannesburg. The summit aimed at emphasizing international commitment to achieve sustainable development through;

- Assessing implementation of Agenda 21.
- Reviewing the challenges and opportunities to achieve sustainable development.
- Suggesting actions and required institutional and financial arrangement to achieve sustainability.
- Identifying means to support institutional structures nationally and regionally (Du Plessis, 2000:6).

The main outcome of the WSSD was the Johannesburg Plan of Implementation (JPI). The JPI provides specific reference to the role of local authorities. The aim is to enhance the role and capacity of local authorities as well as stakeholders in implementing Agenda 21 and the outcomes of the Summit. This will be achieved in strengthening the continuing support for local Agenda 21 programmes, associated initiatives, partnerships, and encourage partnerships. Local authorities, other levels of government and stakeholders are responsible to advance sustainable development (SALGA, Aug 2003, in Olivier, 2004:16).

Pahad (in ANC 2002:10) remarked that with regard to the World Summit on Sustainable Development they were proud to host the largest international conference ever with approximately 65 000 people attending. The success of the conference would lay a solid basis for South Africa to achieve its foreign policy objectives. Three broad themes reflected the essential prerequisites for moving towards sustainable development, namely alleviating poverty and promoting sustainable livelihoods, realising sustainable consumption and production, and protecting the integrity of life-supporting eco-systems.

Certain important issues for the WSSD include:

- Establishing the link between global security and development, and strengthening the international commitment to global peace and security and the need for increased multilateralism;
- Strengthening the system of international governance for Sustainable, Development by developing smart partnerships aimed at poverty eradication and
- Ensuring that all stakeholders are committed to the improved implementation of Agenda 21 (ANC, (2002:10).

## **2.4 OVERVIEW OF SUSTAINABLE DEVELOPMENT**

Sustainable development is the acknowledged subject of much recent development thinking. Sustainable development is an economic strategy which simultaneously pursues increased food and fibre production for the immediate needs of the world's poor and the preservation of the common natural resources which will support their children and subsequent generations. It stresses the longevity of production systems. It aims at maximizing the long-term return on natural resources with an eye to extending their supportive capability indefinitely and even perpetually (Stoesz et al, 1999: 154).

The Sedibeng economy showed a steady growth of 2.2% for 2004 and a further projected economic growth rate of 3.8% for 2005. The growth rate of 2.2% is less than the Gauteng economic growth rate as well as the national economic growth rate. In spite of the fact that a substantial share of Gauteng's industrial manufacturing is located in SDM, the area faces industrial decline in conjunction with increasing urbanisation pressures. Both unemployment and poverty rank the highest in Gauteng. The economic structure is characterized by a dual economy, a legacy of apartheid which manifests in a split between the formal (developed) and informal (developing) economies, known colloquially as the first and the second economies (Sedibeng, 7-26-2006).

### 2.4.1 Models of development

The emphasis on sustainability implies a greater concern for the future and for the models of the development process. It may not be too unfair to suggest that previous models of the development process have tended to assume that the future will look after itself, whereas the sustainable development approach acknowledges that the ability of the future to do this can be seriously impaired by actions taken now. In this sense, sustainable development gives greater weight to the future (Pearce, 1994:19).

The different models of development are outlined on the table below. Sustainable development was rated best strategy amongst the three:

**Table2.1 Development models**

<b>FACTOR</b>	<b>ECONOMIC GROWTH</b>	<b>SOCIAL DEVELOPMENT</b>	<b>SUSTAINABLE DEVELOPMENT</b>
Goal	Growth with equity	Basic human needs	Growth with equity for prosperity
Method	Free trade, exports, Human Capital, Technology	Infrastructure, universal education, access to housing, health care	Input reduction, renewable fuels, appropriate technology, alternative agriculture
Organisation	Multilateral banks, development agencies., private sector	Non governmental organisations (NGO's), developmental agencies	Polycentric (banks, NGO's, government, community organisations, international treaty organisation)
Science	Economics	Sociology	Ecology
Orientation	Technocratic	Humanitarian	Naturalistic
Focus	Extractive	Redistribution	Reproductive

Source: Stoesz et al (1999:156)

## 2.5 SUSTAINABLE AGRICULTURE

Sustainable agriculture refers to the ability of a farm (land /environment) to produce perpetually. It involves two key issues. The first issue is the long-term effects of various practices on soil properties and processes essential for crop productivity. The second issue is the long-term availability of inputs. Practices that can cause long-term damage to soil include excessive tillage (leading to erosion) and irrigation without adequate drainage (leading to accumulation of salt in the soil). Long-term experiments provide some of the best data on how various practices affect soil properties essential to sustainability (Wikipedia, 2006: 1).

While air and sunlight are generally available in most geographic locations, crops also depend on soil nutrients and the availability of water. When farmers grow and harvest crops, they remove some of these nutrients from the soil. Without replenishment, the land would suffer from nutrient depletion and be unusable for further farming. Sustainable agriculture depends on replenishing the soil while minimizing the use of non-renewable resources, such as natural gas (used in converting atmospheric nitrogen into synthetic fertilizer), or mineral ores (e.g., phosphate) (Wikipedia, 2006: 1). Possible sources of nitrogen that would, in principle, be available indefinitely, include:

- recycling crop waste and livestock or human manure;
- growing legume crops and forages such as, peanuts, or alfalfa that form symbioses with nitrogen-fixing bacteria called rhizobia;
- adapting the current industrial nitrogen fixation process to use hydrogen made by electrolysis (perhaps using electricity from solar cells or windmills) instead of natural gas; or
- genetically engineering (non-legume) crops to form nitrogen-fixing symbioses or fix nitrogen without microbial symbionts. The last option was proposed in the 1970's, but would be well beyond the capability of current (2006) technology, even if various

concerns about biotechnology were addressed. Sustainable options for replacing other nutrient inputs (phosphorus, potassium, etc.) are more limited (Wikipedia, 2006: 2).

In some areas, sufficient rainfall is available for crop growth, but many other areas require irrigation. For irrigation systems to be sustainable they must be managed properly (to avoid salt accumulation) and not use more water from their source than is naturally replenished, otherwise the water source becomes, in effect, a non-renewable resource. Improvements in water well drilling technology and the development of submersible pumps have made it possible for large crops to be regularly grown where reliance on rainfall alone previously made this level of success unpredictable (Wikipedia, 13-09-2006: 2).

Sustainable agriculture integrates three main goals: environmental stewardship, farm profitability, and prosperous farming communities. These goals have been defined by a variety of disciplines and may be looked at from the vantage point of the farmer or the consumer (Wikipedia, 13/09/2006)

Agriculture is also a significant contributor to economic growth of the country. Agriculture has changed dramatically, especially since the end of World War II. Food and fiber productivity soared due to new technologies, mechanization, increased chemical use, specialization and government policies that favored maximizing production. These changes allowed fewer farmers with reduced labor demands to produce the majority of the food and fiber although these changes have had many positive effects and reduced many risks in farming; there have also been significant costs. Prominent among these are topsoil depletion, groundwater contamination, the decline of family farms, continued neglect of the living and working conditions for farm laborers, increasing costs of production, and the disintegration of economic and social conditions in rural communities. A growing movement has emerged during the past two decades to question the role of the agricultural establishment in promoting practices that contribute to these social problems. Today this movement for sustainable agriculture is garnering increasing

support and acceptance within mainstream agriculture. Not only does sustainable agriculture address many environmental and social concerns, but it offers innovative and economically viable opportunities for growers, laborers, consumers, policymakers and many others in the entire food system (Feenstra, 1997, 1). Sustainable Agriculture is still evolving.

Development professionals had high hopes that the farmer-to farmer methods for developing sustainable agriculture would help transform agriculture. A decade later, there is still hope, but it has become clear that in the face of powerful global agribusiness interests, the sustainable transformation of agriculture will require more than farmer-led techniques and methodologies. The development of sustainable agriculture will require significant structural changes, in addition to technological innovation and farmer-to-farmer solidarity. This is impossible without social movements that create political will among decision-makers to dismantle and transform the institutions and regulations which presently hold back sustainable agricultural development. Sustainable agriculture requires broad, multinational organizing by farmers and their supporters. The Campesino a Campesino Movement of Nicaragua has linked campesino communities across village, municipal and national divisions using agro-ecology and horizontal learning networks (Holt-Gimenez, E. 2006: 1)

Agriculture can make significant contributions to attain a healthy life style. It is the sector from which most of the rural and urban poor in developing countries derive their income. Women play an important role in production of food in this regard. As agriculture depends heavily on the natural resource base, it influences environmental sustainability. Agriculture is also closely linked to human health and education. Most of the land suitable for agricultural purposes is already in production. Therefore meeting current and future food requirements will require rapid increase in productivity, otherwise an undesirable expansion on to fragile and marginal lands will result (NCDI-CIDA, 2003: 4).

## 2.6 COMPONENT OF SUSTAINABLE DEVELOPEMENT

Sustainable development consequently has three principal components: economic growth, social equity and the protection of the environment. These are briefly described as follows:

- **Social factor:**

The social component refers to the relationship between nature and human beings, uplifting the welfare of people, improving access to basic health and education services, fulfilling minimum standards of security and respect for human rights. It also refers to the development of various cultures, diversity, pluralism and effective grass roots participation in decision-making. The issue of equity, for example the distribution of benefits and access to resource remains an essential component of both the economic and social dimensions of sustainable development (Olivier, 2004:7)

- **Economic:**

Underlying the economic factor is the principle that society's well being must be maximized and poverty eradicated through the optimal and efficient use of natural resources. The concept of "needs" refers in particular to the basic needs of the world's poor, to which overriding priority should be given (Olivier, 2004: 7).

- **Environment:**

The environmental component, on the other hand, is concerned with the conservation and enhancement of the physical and biological resource and eco-systems (Olivier, 2004: 7). For the purpose of this study the focus will be on how best community food gardens do promote the sustainability of the environment to save for the future generations and on how poverty can be eradicated by means of community food gardens.

Each of these systems tries to achieve certain goals, including maximum growth. In the process they affect each other often negatively (Du Plessis, 2000:7). For example in SDM there are various metal industries such as Mittal, Nampak, CWI and Cape Gate. These

industries produce steel and galvanized wire. These institutions earn foreign currency. The society agrees with this, because the project would provide jobs and money for infrastructure such as schools and shops. However these institutions excluded the fact that an important area would forever be destroyed. This will have a devastating effect to the local ecosystem and the livelihood of many people who may not find employment in these institutions. In twenty years time, when the mineral reserves have been exhausted, the area would have lost a major natural asset, people's traditional livelihood would have been destroyed, and the job opportunities created by such institutions would have dried up (Du Plessis et al, 2000:7). Therefore sustainable development looks at all these factors. A question asked is how can the communities optimize the goals of all three systems? A solution may be through participation with the local community, whereby provision of economic growth, jobs and infrastructure is maintained to protect the environment (Du Plessis et al, 2000:7).

Agenda 21 recognises that too often, economic, social and environmental factors are considered separately when decisions are made and that this has a direct impact on the actions of all groups in society, including governments, business and individuals. In setting out proposed actions, Agenda 21 therefore emphasises the need to intergrate economic, social and environmental considerations in addressing the challenges faced currently and responding to the needs of future generations (Nine lives, 1997, in Olivier, 2004:12)

## **2.7 PRINCIPLES OF SUSTAINABLE DEVELOPMENT**

The following are the principles of sustainable development.

- **Environment:** the physical 'carrying capacity' of the environment imposes limits to many human activities. This means that consumption of resources must be reduced. People should live within these so that they will be able to pass the planet on to the next descendants with its ability to support human life undamaged.

- **Futurity:** People have the moral duty to avoid compromising the ability of the future generations to meet their own needs.
- **Quality of life:** Human well-being has social, cultural, moral and spiritual dimensions as well as material.
- **Equity:** wealth, opportunities and responsibilities should be shared fairly between countries, and between different social groups within each country, with special emphasis on the needs and rights of the poor and disadvantaged.
- **Precautionary principle:** if the people are uncertain about the environmental effects of any actions/ developments they should apply this principle and err on the side of caution.
- **Holistic thinking:** solving a complex sustainability problem requires that all the factors that contribute to that problem be incorporated in the solution (Council for European Municipalities and Regions, 1997 in Olivier, 2002:9).

## **2.8 REQUIREMENTS FOR SUSTAINABILITY**

Fowler (2003:4), in his address outlined that building sustainable communities requires a clear understanding of the needs of the communities and a quick response to appropriately address these through information, support, and services. In broad terms, it requires local authorities to recognize the connections and impacts between different local and national priorities to make sure that they do not undermine each other. It also requires a distinctive approach to the way that services are planned and delivered, which goes beyond professional or service 'silos' to address the area's social, economic and environmental goals together (Sustainable-Development, 2005: 1)

In addition Elliot, (1994:4) outlines that sustainable development will require actions for change at all levels, in addressing both the human and physical environments and through interventions in physical, political-economic and social processes. The following are the requirements outlined:

- A political system that secures effective citizen participation in decision making.

- An economic system that provides for solutions for the tensions arising from disharmonious development.
- A production system that respects the obligations to preserve the ecological base for development.
- A technological system that fosters sustainable patterns of trade and finance.
- An international system that fosters sustainable patterns of trade and finance, and
- An administrative system that is flexible and has the capacity for self correction (Elliot 1994:4).

The challenge for promoting sustainable development in practice is an ongoing one. Sustainable development in the future will require a commitment to overcome poverty through a focus on the welfare issues of the poorest sectors of society, particular in the developing countries (Elliot 1994:4). The population is also required to accept the responsibility and follow a shared vision of basic values that provides an ethical foundation for the interaction with each other and with the earth as man belongs to the earth (Du Plessis et al, 2002: 7).

## **2.9 CHALLENGES FACING SUSTAINABLE DEVELOPMENT IN SOUTH AFRICA**

Sustainable development reflects a process that meets the needs of the present without compromising the ability of future generations to meet their own needs. The Development Report 2003 of the UNDP (United Nations Development Programme), (2003: 1) identifies and analyses five challenges facing sustainable development in South Africa. These are:

- The eradication of poverty and extreme income and wealth inequalities.
- The provision of access to quality and affordable basic services to all South Africans.
- The promotion of environmental sustainability.
- A sustained reduction in the unemployment rate.
- The attainment of sustainable high growth rates.

The report shows how these challenges are strongly inter-related and identifies underlying trends and policies that have contributed to weak and uneven development outcomes. As a result, the Human Development Index has worsened (from 0.73 in 1994 to 0.67 in 2003), poverty still engulfs 48.5% of the population (21.9 million in 2002), income inequality has increased (from 0.60 in 1995 to 0.63 in 2001), the majority of households have limited access to basic services, and the official unemployment rate has sharply increased to more than 30% in 2003 (UNDP, 2003: 1).

UNDP, (2003:1), offers a strategy and suggests a policy re-orientation to meet South Africa's sustainable development challenges. This includes:

- Changes in the current aims and utilization of fiscal and monetary policy to ensure that together they promote growth, redistribution, poverty reduction and the creation of employment.
- Withdrawal of explicit or implicit subsidies which favor capital-intensive and/or large-scale enterprises.
- Transformation of the private sector through the development of differential tax incentives, access to subsidies, and access to government procurement that support a more broadly based transformation of ownership, improved income distribution, and reduced unemployment.
- The Report argues that these policy changes depend on strategic political interventions that focus policies and support measures on achieving the goals of sustainable development. The Report emphasizes the importance of engendering processes that are inclusive, transparent and democratic, and that empower the poorest sections of the population.

The challenge of sustainable or lasting development is not to eliminate growth as the engine of development, but to redefine it. Sustainable development seeks to utilize materials in such a way as to restore them to alternate use. It shifts the economic paradigm from consumption to reproduction (Stoesz et al, 1999: 155).

One of the major challenges facing the World Summit on Sustainable Development (WSSD) is to intensify efforts to eradicate poverty and food insecurity in the world. Although progress has been made in reducing the overall poverty rate since the adoption of Agenda 21 in 1991, the global community now has to evaluate past impacts of sustainable development and intensify future actions (FAO, 2002:1).

Currently, over 1.2 billion people live in extreme poverty, lacking access to safe drinking water and sanitation. Eight hundred million people, especially women and children, still suffer from chronic malnutrition. Three-quarters of the world's poor live and work in rural areas and are largely dependent on the agricultural sector for sustenance and livelihoods. Hunger and poverty are linked in a vicious cycle to unsustainable practices and environmental degradation (FAO, 2002:1). It has become necessary to devise an international development perspective that accounts for the very real limits of renewable resources but allows for the increased economic output necessary to improve the quality of life for the world's burgeoning population (Stoesz et al, 1999: 156).

## **2.10 SUSTAINABLE DEVELOPMENT INDICATORS**

Chapter 40 of Agenda 21 calls for the development of indicators for sustainable development. An increasing number of organisations did respond to the challenge of Agenda 21 to develop indicators for sustainable development in the short-term. Some of this work is being undertaken around specific issues, such as health and the environment, or human settlements; others are attempting to define a full set of indicators (Du Plessis et al, 2000:10).

Du Plessis et al (2000:10) outlines that Sustainable Development is characterized by four indicators. Firstly, Economic indicators have been used for many years at national, regional and international levels. Secondly, Social indicators, this has also been developed over the past years and is widely used all over the world. It is feasible to select among the economic and social indicators those which capture the specific issues most relevant to sustainable development. Thirdly, Institutional indicators as related to Agenda

21 or sustainable development are largely undeveloped and are at this stage limited to so-called yes/no indicators. Fourthly, the Environmental indicators have been developed more recently.

Indicators of sustainable community measure how well a community meets the needs and expectations of its present and future members. From the experience in working with communities, it is found that everyone has the same set of basic questions and answers Sustainable Development Indicators (SDI) is a statistical value that collectively measure the capacity to meet present and future needs. The indicators measure progress towards sustainable development in the communities. It also measure progress towards sustainable development. SDI provide information crucial to decisions of national policy and to the general public (NASA, 13/09/2006)

Sustainable development indicators measure sustainability or sustainable development performance. As most environmental indicators have a sustainable development framework in which environmental, economic and social indicators are linked they have been included. Measurement of sustainable development should be based on indicators which signal:

- the pressure that society puts on the environment (In the form of pollution and resource depletion);
- the resulting state of the environment (especially the incurred changes) compared to desirable (sustainable) states; and
- the response by human activity mainly in the form of political and societal decision, measures and policies (IISD, 13-09-2006).

Such indicators are required to increase focus on sustainable development and to assist decision-makers at all levels to adopt sound national sustainable development policies.

Indicators of sustainable community are useful to different communities for different reasons. For a healthy, vibrant community, indicators help monitor health so that negative

trends are caught and dealt with before they become a problem. For communities with economic, social, or environmental problems, indicators can point the way to a better future. For all communities, indicators can generate discussion among people with different backgrounds and viewpoints, and, in the process, help create a shared vision of what the community should be (Sustainable Measures, 13/09/2006).

An indicator is something that helps understand where one is, which way one is going and how far and from where an individual want to be. A good indicator alerts one to identify a problem before it gets too bad and helps to recognize what needs to be done to fix the problem. Indicators of a sustainable community point to areas where the links between the economy, environment and society are weak. They allow one to see where the problem areas are and help show the way to fix those problems (Sustainable Measures, 13/09/2006).

An indicator is something that points to an issue or condition. Its purpose is to show how well a system is working. If there is a problem, an indicator can help determine what direction to take to address the issue. Indicators are as varied as the types of systems they monitor. However, there are certain characteristics that effective indicators have in common (Sustainable Measures, 13/09/2006).

Just as sustainability is about finding the balance point between a community's economy, environment, and society, developing a set of indicators for a sustainable community requires balancing many different needs within that community. A brainstorming session might produce hundreds of indicators. Deciding how many to keep can be difficult. More is not better. Less is not better. The right number depends on many factors including what type of audience the indicator report will have, how much time is available to research the data, the number of issues involved, and any specific needs of the community (Sustainable Measures, 13/09/2006).

## 2.11 ROLEPLAYERS FOR SUSTAINABLE DEVELOPMENT

Central and local governments share the ambition of creating genuinely sustainable communities. Sustainable communities are places where people want to live and work, now and in the future. They embody the principles of sustainable development at the local level. This means they:

- Balance and integrate the social, economic and environmental components of their community;
- meet the needs of existing and future generations; and
- respect the needs of other communities in the wider region and internationally to make their communities sustainable (Sustainable-Development, 2005: 1).

Delivering genuinely sustainable communities requires a different approach from local government. In broad terms, it requires local authorities to recognize the connections and impacts between different local and national priorities to make sure that they do not undermine each other. It also requires a distinctive approach to the way that services are planned and delivered, which goes beyond professional or service 'silos' to address the area's social, economic and environmental goals together (Sustainable-Development, 2005: 1)

The transition to sustainable agriculture ultimately depends on a combination of efforts between farmers and economic and social institutions; the markets, banks, government ministries, agricultural research institutions, farmers' organizations, churches, and nongovernmental/nonprofit organizations (NGOs). Each of these institutions including the market has its own strengths and weaknesses; and each responds to the political agendas of the actors who are able to use it. Scaling up the successes of any experience unsustainable agriculture, is therefore not simply farmers teaching other farmers to farm sustainable, but a political project that engages the power of these institutions to permit, facilitate, and support sustainable farming itself is embedded. But if sustainable agriculture is to become the norm rather than the exception, then these embedded, agro-

ecological experiences must scale out, geographically; and up, into the institutions that shape agriculture's social, economic, and political terrain; and in, into the culture of agriculture itself (Holt-Gimenez, 2006: 1)

The Food and Agriculture Organization of the United Nations (FAO), as the lead agency for agriculture, forestry and fisheries assists countries to raise levels of nutrition and to improve the condition of rural populations. It is an important stakeholder in addressing the Challenges of Sustainable Development being task manager for the land-related chapters of Agenda 21 such as Integrated Planning and Management of Land Resources, Combating Deforestation, Sustainable Mountain Development and Sustainable Agriculture and Rural Development: SARD (FAO, 2002:1).

### **2.11.1 National Government**

Central Government of South Africa works with provincial governments, local authorities, partner agencies and local people to help create genuinely sustainable communities. The core departments in South Africa that are involved towards promoting sustainable development include Social Development, Department of Agriculture (DOA/ NDA), Department of Environmental Affairs and Tourism (DEAT), Department of Provincial Local Government (DPLG), and Department of Health and Housing. Government is helping to strengthen local leadership on sustainable development with guidance and training for local strategic partnerships. It is also embedding sustainable development into community planning through local area agreements and sustainable community strategies (Sustainable-Development, 2005: 3).

### **2.11.2 Provincial Government**

Food security in South Africa is a concern in SDM and it remains a serious challenge to achieve food security in the Gauteng Province as well. Therefore food security is one of several key government priorities to ensure that all people have access to adequate, safe and nutritious food at all times. The mission of GDACE (Gauteng Department of

Agriculture, Conservation and Environment), through the Chief Directorate Agriculture is to optimize the contribution of sustainable agriculture towards the equitable development of all communities and the economy in the Gauteng Province. This is to enhance food security, income generation, job creation and the quality of life. The aim is to enhance the production, processing and accessibility of food, or sustainability at an affordable level. The objective is to contribute to food security, especially for the deprived and food-insecure communities. This is done in collaboration with local authorities and other stakeholders in food security, to serve mainly resource-poor communities in Gauteng (GDACE, 26-07-2006).

Gauteng Province is a better place to live. Fowler, (2003: 1), in an address on the tabling of Development Planning and Local Government Departmental (DPLG) Budget vote to the Gauteng Legislature, stated that, the budget they presented is in essence about sustainable development or what they have referred to as “Building Sustainable Communities”. In 2001 the Gauteng Province announced the Municipal Institutional Support Centre (MISC). In 2002 the MISC was formally launched, thus contributing to “Making Sustainable Communities a Reality”. These specific interventions in support of advancing development have yielded many vital benefits.

Fowler further stated that the Gauteng Provincial Government can therefore proudly declare that in the year 2003, there will be consolidation for sustainable service delivery. The concept of development has guided the conception of the legislation guiding the transformation of the 51 municipalities to the current 15. The trajectory of DPLG and its strategies assist the government to achieve the ultimate goal of sustainable communities in Gauteng Province. The department strives for effective municipal institutions to be able to meet the developmental needs of the communities. This is focused on the following areas: improving the effectiveness of revenue management and billing systems and processes; improving customer care and responding to community and business needs; facilitating and encouraging employment creation and formulate integrated development planning. Further, the province focus on equitable development across all

communities; improving communication with communities and stakeholders and involves the people in governance and service delivery. (Fowler, 2003: 2).

### **2.11.3 Local Government**

The South African government recognition of the necessity for economic development is reflected in the well-known RDP. In attacking poverty, the government adopted a multiple approach focusing on building institutions and organisations on macro-regional and local levels to facilitate growth and reconstruction. These include the Growth, Employment and Redistribution (GEAR) macro-economic strategy of 1996, and the declaration and development of so-called Spatial Development Initiatives (SDIs). To address spatial inequalities and the creation of nine provincial governments through which public expenditure on health and education are redistributed, the local government system was also established (Van Wyk, 2004:4).

A budget for 2003/2004 has been allocated to the Integrated Development Planning (IDPs) programme for interventions aimed at building sustainable communities and improving provincial and municipal planning. This programme is mainly focused on interventions and policies aimed at improving spatial, social and economic planning at provincial and local government level, to build sustainable communities. The core of building sustainable communities is a developmental local government. The IDPs aim to capture the community's needs in the municipalities' planning and budgeting programme, so that key priorities in poverty eradication and integrated socio-economic development are addressed (Fowler, 2003: 2).

Sustainable communities cannot be delivered by local government alone. Many organisations and agencies need to play their part, including central government and individuals within the communities themselves. Yet local authorities have a critical role to play in creating sustainable communities, through effective local leadership and by making it possible for local people to get involved. In all this, councils also need to lead

by example, ensuring that sustainability becomes embedded into local services and council operations (Sustainable-Development, 2005: 2).

Local authorities can make a significant contribution to the creation of sustainable communities through local services and council operations. At the same time, councils that lead by example can have an important influence on the habits of residents. In order to create the necessary change, local government is developing new ways of working, employing a broad range of new and different skills (Sustainable-Development, 2005: 2). For example local government can encourage people to make different sustainable choices by involving them in creating sustainable communities. For this study community food project is a means to involve the local authorities to maintain the sustainable livelihoods.

#### **2.11.4 Community**

Action by citizens and communities is central to sustainable development. Local authorities have an important part to play in enabling communities to become more involved by encouraging informed debate and including citizens in local decision-making. Local government has also demonstrated that it can invigorate community action and support individual behavioral change by working with community groups delivering sustainable development (Sustainable-Development, 2005: 2). Involving communities towards promoting sustainable development is an important action, as it enables them to be self reliant, to protect their environment and to ensure that they utilize the available resources at their convenience and reasonably.

Du Plessis et al (2000:4) states that neighborhoods are building blocks of a nation. They are the cells of social unrest or community creativity. They are where all people live. Success in South African cities will require multi-class and multiracial coalitions for sustainable growth, development and distribution of services and opportunities that will bring about stable, healthy, vibrant and safe neighborhoods. The Earth Summit

recognized the vital role that all levels of society, including communities, the private sector and local authorities can play in the successful implementation of Agenda 21. Therefore the full participation and commitment of all people is crucial in fulfilling the objective of Agenda 21 and in creating the sustainable future (Du Plessis et al, 2000:4).

## **2.12 CONCLUSION**

To achieve the problems of poverty and unemployment the sector must promote the pro-poor economic growth at rates, at least, as fast as population growth rates. This in turn will require raising agricultural productivity integrating agriculture into local and international markets effectively. Unemployment is a significant contributor to poverty. Sustainable agriculture integrates three main goals: environmental stewardship, farm profitability, and prosperous farming communities. Agenda 21 calls on countries to adopt national strategies for sustainable development (NSDS) that “should build upon and harmonize the various sectoral economic, social and environmental policies and plans that are operating in the country”. The environmental, economic and social components can best be improved by local people, at the local level.

Creating more sustainable communities will not only benefit today's residents, through a better quality of life, it will crucially help to secure the future for later generations. They will then be better prepared to face a future of reduced resources and tougher environmental limits. Agenda 21 recognises that partnerships between communities and local authorities are crucial to develop a strategy that can create action, for example job creation and self reliance.

## **CHAPTER THREE**

### **AN OVERVIEW OF STRATEGIES AND ACTIVITIES OF COMMUNITY FOOD GARDENS IN SEDIBENG DISTRICT MUNICIPALITY**

#### **3.1 INTRODUCTION**

In chapter two, sustainable development was defined. The challenges, requirements, indicators and role players were discussed. This chapter outlines the strategies and the activities undertaken for community food gardens. Further it defines the CFG, its origins, aims, and the process of establishing CFG and the importance of CFG in communities.

#### **3.2 GOVERNMENT PROVISION TOWARDS COMMUNITY DEVELOPMENT**

The South African government has placed the need to address poverty and inequality firmly at the centre of the nation's agenda. This is reflected in the poverty audits that have been undertaken, as well as in the range of policy documents and strategies that have been developed in the first years of the government. President Mbeki has further reinforced this through his challenge to the nation to create "a caring society". As he stated, such society "must guarantee the dignity of every citizen on the basis of a good quality of life for every woman, man and child, without regard to race colour or disability'. In this speech, issues that featured strongly on the agenda as crucial to local development were urban renewal and integrated rural development strategy (Mokate, 1999: 185 in Rabali, 2005:50).

The national, provincial and local governments are involved in public policy implementation, that includes addressing the needs of the communities on poverty and unemployment. The implementation of public policy by the public institutions is also an expensive exercise, which at the end of the day it is imperative to portray professionalism

and accountability (Sindane, 2006:308). Therefore every public institution exist to satisfy the real needs and the justified expectations of the population (Cloete, 1994: 99).

Agriculture plays an important economic role and employs a significant number of people. It has a considerable impact on rural-urban areas and most importantly on food supply. The National Department of Agriculture (NDA), through its socio-economic development initiatives, is committed to reduce poverty in South Africa and on the continent, broaden access to agriculture, and increase productivity and profitability within the agriculture sector (SAGI (South African Government Information), 4-10-2006:1)

The NDA aims to lead and support sustainable agriculture and promote rural and urban development through:

- providing access to sufficient, safe and nutritious food;
- eliminating skewed participation and inequality in the sector;
- maximizing growth, employment and income in agriculture;
- enhancing the sustainable management of natural agricultural resources and ecological systems;
- ensuring effective and efficient governance; and
- ensuring knowledge and information management (DOA, 2002:11).

The right of access to sufficient food is enshrined in Section 27 of the *Constitution of the Republic of South Africa* (Act 108 of 1996). The Constitution obliges the State to provide legislation and other supporting measures to ensure that all citizens are enabled to meet their basic food needs (DOA, 2002:11).

The strategic framework for action to achieve food security was first outlined in the Reconstruction and Development Programme (RDP, 1994), which identified food security as a basic human need. It recognized poverty and food insecurity as the legacy of

the apartheid socio-economic and political order. The RDP food security framework was then refined in subsequent policy papers, such as the, BATAT, and the Agricultural Policy Discussion Document (1999) (DOA, 2002:11).

As a result, the South African government reprioritized public spending to focus on improving the food security conditions of historically disadvantaged people. This policy resulted in increased spending in social programmes of all spheres of government. The programmes include the school feeding schemes, child support grants, free health services for children between 0-6 years, for pregnant and lactating women, pension funds for the elderly, working for water, community public works programmes, provincial community food garden initiatives like Lwantsha Tlala project in SDM. Further the Land reform and farmer settlement, production loans scheme for small farmers, infrastructure grant for smallholder farmers and the Presidential tractor mechanization scheme are amongst the initiated government programmes. The scheme will enhance the previously disadvantaged communities to be empowered and be able to provide a plate for their families (DOA, 2002:5).

With regard to the government provision towards community development, programmes such as Integrated Food Security Strategy (IFSS) and Gauteng Growth Agricultural Development Strategy (GDS) have been implemented to address the issues of poverty and unemployment. The two strategies are outlined below.

CFGs is intended to contribute to the mitigation of household level food insecurity through the production of food, primarily for own consumption. CFG in urban areas creates a stronger local economies by creating jobs. Some researchers indicate that unemployed population in large cities and suburban towns would decrease if put to work by local food movements. Schools have foreseen the asset of local food production and are beginning to incorporate an agricultural section in their curriculum and present it as a career opportunity. Urban agricultural projects are beginning to open a new labor market

in areas that have been negatively affected by industrial outsourcing of jobs (Wikipedia, 11-10-2006).

### **3.2.1 Integrated Food Security Strategy**

The Cabinet of South Africa approved the IFSS and Nutrition Programme in July 2002 as one of the key programmes of the Social Cluster. The Programme aims to achieve physical, social and economic access to safe and nutritious food for all South Africans. Its goal is to eradicate hunger, malnutrition and food insecurity by 2015. In June 2004, the National Department of Agriculture together with the provincial departments of Agriculture had distributed production support packages to 37 000 household out of the target number of its target of 50 000 households (SAGI, 04-10-2006: 20).

The NDA is the convener and chair of the core of Social Cluster Director Generals responsible for the IFSS. It has also joined forces with its neighboring Southern African Development Community (SADC) countries and adopted an action plan for food security. Specifically, it will provide the IFSS with secretarial services; establish a food security unit to coordinate food security activities within national and provincial government spheres, by means of Private Public Partnerships (PPPs) (DOA, 2002:9). This includes the establishment of domestic support measures for vulnerable small-holder farmers, to ensure access to key agricultural input, and to encourage research and the development of affordable farming equipment (SAGI, 04-10-2006: 20).

The South African government is looking for alternate ways of delivering high services to as many citizens as possible over a short period and to maintain viable systems in the medium and long term. Traditionally, government programmes and services were delivered through government departmental organisations. However the South African government is now entering into partnerships with more independent agencies to deliver public goods and services to improve the general welfare of inhabitants. The aim of the PPP is to produce practices that improve the citizen's quality of life in public service

delivery on all spheres of government. PPPs also desire to develop and sustain close working relationships with the external market, public authorities and private companies. PPPs are important as they supplement capacity and enhance the cost effectiveness of services and to encourage local development. This is evident in SDM, the service providers for fencing the CFGs and for seed packs are the private companies such as Effectko Company for seeds (Kroukamp, 2005: 71, 74 & 77).

The vision of the Integrated Food Security Strategy is to attain universal physical, social and economic access to sufficient, safe and nutritious food by all South African at all times to meet their dietary and food preferences for an active and healthy life. This statement is also a definition of food security by the Food and Agricultural Organisation of the United Nation (FAO). Its goal is to eradicate hunger, malnutrition and food insecurity over 2015. (DOA, 2002:6).

The strategic objectives of IFSS are to:

- Increase household food production and trading.
- Improve income generation and job creation opportunities.
- Improve nutrition and food safety.
- Increase safety nets and food emergency management systems.
- Improve analysis and information management system.
- Provide capacity building.
- Hold stakeholder dialogue (DOA, 2002:6).

The expected outcomes of the IFSS are the following:

- Greater ownership of productive assets and participation in the economy by the food insecure.
- Increased competitiveness and profitability of farming operations and

rural enterprises that are owned and managed by or on behalf of the food insecure.

- Increased levels of nutrition and food safety among the food insecure.
- Greater participation of the food insecure in the social security system and better prevention and mitigation of food emergencies.
- Greater availability of reliable, accurate and timely analysis, information and communication on the conditions of the food insecure and the impact of food security improvement interventions.
- Enhanced levels of public private civil society common understanding and participation in agreed food security improvement interventions.
- Improved levels of governance, integration, coordination, financial and administration management of food security improvement interventions in all spheres of government; between government and the private sector and civil society (DOA, 2002:10).

### **3.2.2 Gauteng Growth and Development Strategy**

The (GPG) Gauteng Provincial Government, Gauteng Growth and Development Strategy (GDS) was adapted on November 2004 at the Gauteng Provincial Growth and Development Summit. Efforts are made to ensure that women are given as it delivers services, fight poverty, build infrastructure and transform government and the economy. The GPG has set a number of strategic priorities to achieve this in the five years to 2009. The GADS will embark on the following priorities:

- Enabling faster economic growth and job creation.
- Fighting poverty and building safe, secure and sustainable communities.
- Developing healthy, skilled and productive people.
- Deepening democracy and realising the constitutional rights of our people.
- Building an effective and caring government (GPG 1, 2005: 1).

The key element of the strategy is the development and promotion of co-operatives. A cooperative is defined as an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs, aspirations through a jointly owned and democratically controlled enterprise. GPG has 266 co-operatives that currently compose a co-operative sector that span about twenty different sub-sectors of economic activity. Fifty-nine (59) of these co-operatives are concentrated in food and agriculture. The aim of the co-operatives is to ensure that sustainable enterprises are capable of realizing their objectives and fulfilling the needs of their community (GPG 2, 2006: 4).

All GPG programmes are guided by the abovementioned priorities mentioned. The aim is to impact positively on the lives of the people of Gauteng, especially the poor. Special efforts are made to reach the most vulnerable sectors of the society, that is the elderly, youth, children, women and people infected and affected by HIV/Aids (GPG 1, 2005: 1).

GPG has embarked on specific programmes to achieve the above. The programmes include the following:

- ❖ Poverty alleviation, including improving access to social grants and ensuring that women and children have access to adequate nutrition. The initiatives involve feeding schemes and food gardens, which is the center of this study.
- ❖ Skills development, the focus includes the Adult Basic Education and Training (ABET), life skills and skills for economic empowerment.
- ❖ Expanding work opportunities through promoting small business, broad-based black economic empowerment (BBBEE), public works programme, and food production. Programmes improving the health of women (GPG 1, 2005: 1).

### **3.2.2.1 Strategy for Sedibeng District Municipality**

District municipalities such as SDM also implement the objectives GADS. The Executive Mayor in his presentation stated that GDS will be integrated with a national programme AsgiSA, which will optimize development nodes and corridors and links for the upliftment of the poorest community in SDM. He further mentioned that GDS holds great promises for areas such as Evaton, Sebokeng, Mamelo and the rural parts of Heidelberg (Sedibeng 2, 25-10-2006).

The implementation of GDS involves all municipalities of SDM. The three municipalities in SDM were in the process of stakeholder consultations that led to a summit held on 14-15 November 2006. Prior to the summit the Executive Mayor said that the outcome of the summit would produce a first generation of Sedibeng Growth and Development Strategy. He concluded that GDS should be the interest of all residents of SDM, as it will amongst others, define the role of women, youth, small and big business industries, the agricultural sector and education and training in contributing to a master plan for economic and social development (Sedibeng 2, 25-10-2006).

### **3.2.3 Gauteng Agricultural Development Strategy**

The Gauteng Agricultural Development Strategy (GADS) is underpinned by the GPGs commitment to Broad Based Black Economic Empowerment (BBBEE) and further development of the first economy for the benefit of all communities. GADS is the GDACE initiative to address the problems of poverty alleviation, unemployment and economic growth in Gauteng. GADS was launched on the 23 February 2006 at Saul Tsotetsi Community Hall, Sebokeng. The strategy comprises the overall GDACE objectives, which include farmer settlement, household food security and community food gardens (GPG 1, 2005: 1).

Towards the realization of the objectives of this strategy the GPG shall not be stymied by absurd and dangerous sentiments such as those advanced by AGRI SA to the effect that only market forces should guide land and agrarian reforms. The intention of GPG through GDACE is to contribute towards job creation and economic development. The GPG Treasury has committed to allocate R14 million for this strategy. The funds will be utilized for the purchase and redistribution of farmland to historically disadvantaged individuals in Gauteng province. The success of this pre-supposes easy access to high potential agricultural land (GDACE 2, 25-07-2006) Community food gardens as the focus of this study is defined below.

### **3.3 COMMUNITY FOOD GARDENS**

The term community food garden (CFG) is defined below, the purpose is to understand and obtain insight for the scope of this study. The origin of the CFG is also outlined below.

#### **3.3.1 Definition of community food garden**

Community food garden is a means of becoming involved in community based food production by sharing in the costs and the profits (in the form of fresh produce) of a local farm (Phelan C. 2005). CFG is a relatively socio-economic model of food production, sales and distribution aimed at both increasing the quality of food and the quality of care given the land, plants and animals, while substantially reducing potential food losses and financial risks for the producers. It is also a method for small-scale commercial farmers and gardeners to have a successful, small-scale closed market. A variety of production and economic sub-systems are in use worldwide (Wikipedia, 11-10-2006:1).

CFG generally, is the practice of focusing on the production of high quality foods using ecological, organic or biodynamic farming methods. This kind of farming operates with a

much greater-than-usual degree of involvement of consumers and other stakeholders resulting in a stronger than usual consumer-producer relationship. The core design includes developing a cohesive consumer group that is willing to fund a whole season's budget in order to get quality foods. The system has many variations on the theme of how the farm budget is supported by consumers and how the producers then deliver the foods and thus also a variety of levels of risk for the producers. The greater the whole-farm and whole-budget support, the greater the focus that can be on quality and the less risk of food waste or financial loss (Wikipedia, 28-8-2006:1). With regard to the definition of the CFGs, its origins are outlined below.

### **3.3.2 Origins of Community food garden**

The community food garden programme has been formulated on the basis of assessment of all household level food production projects which the GDACE: Directorate of Agriculture has been involved in since April 1994. The assessment was intended to evaluate the actual outcomes of the projects in order to establish a policy and operational plan for future initiatives. The programme is intended to contribute to the mitigation of household level food insecurity through the production of food, primarily for own consumption (GDACE 2. 2006:1).

Contemporary South Africa evolved at the turn of the 20th century from an agrarian setting through the rapid growth of commodity markets that sprung around major industrial mining, urban population and commercial agricultural centers. Initially, African farmers and entrepreneurs had successfully participated in the growing commodity markets under conditions of relative land abundance, low population size, low production, processing and distribution technologies, weak government interventions and relatively undistorted markets (DOA, 2002:11).

Poverty and food insecurity in South Africa is the result of several centuries work of colonial and apartheid policies designed specifically to create general conditions unfavorable to the well being of black people in all its aspects, especially in the former

homelands. In order to design effective policy interventions to redress the injustices of the past, it is important to better understand these historical processes. Food insecurity and poverty among the majority African population, which at the time was largely constituted of independent producers and entrepreneurs, was almost non-existent (DOA, 2002:11).

The decline of African farming led to a gradual loss of agricultural and rural capital, wealth, farming and entrepreneurial skills and experience. Farming and rural enterprise activities ceased to be a window of African entrepreneurial opportunity, management and technical development. The process of modern industrial development in South Africa thus became the driving force that created the contemporary poverty and food insecurity among black people in South Africa (DOA, 2002:11).

The position of African people in the urban areas was not much better than those in the reserves and former homelands. They were located far from places of work and from the general white population. They had very limited access to education, health and social services. To a greater extent these historical legacies led to the current situation, in which a majority of citizens (particularly Africans) are vulnerable to food insecurity. This is in spite of the good food security conditions at national level (DOA, 2002:11). The aims of CFGs are outlined in the next section.

### **3.3.3 Aims of community food gardens**

Community food gardens as type of agricultural project is also aimed at addressing food insecurity. The groups who need assistance approach the department directly. All have a shared commitment to building a more local and equitable agricultural system. Each project is structured to meet the needs of the participants. There is a level of commitment and active participation by the shareholders (Phelan, 2005:3).

Urban farming is practised for income-earning or food-producing activities. It contributes to food security and food safety in two ways: firstly, it increases the amount of food available to people living in cities, and secondly it allows fresh vegetables and fruits to be made available to urban consumers. Because it promotes energy-saving local food production, urban agriculture and sustainability practices (Wikipedia, 28-8-2006:1).

CFG programme is established to eliminate stress, create a sense of belonging and restore human values such as compassion, non violence, generosity and ethic of service and caring for all lives. These projects relate to health, education, sustainable development and conflict resolution (Ndashe, 2005:2).

The primary objectives of CFG are the following:

- To create food gardens as local centre's for skills development & learning regarding urban agriculture.
- To uplift communities, challenged by poverty, unemployment & HIV-AIDS.
- To enhance awareness, empower and the quality of life those affected & infected with HIV/ AIDS.
- Improve diet of the human beings and reduce poverty.
- To enhance support from local service providers, NGO'S, Local & National Government (Ndashe, 2005:2).
- To improve their livelihoods and conserve their natural resources (Holt-Gimenez, E. 2006: 2).

### **3.4 CURRENT FOOD SECURITY TRENDS IN SOUTH AFRICA**

The current food security challenge in South Africa consists of two dimensions. The first dimension seeks to maintain and increase the ability of South Africa to meet its national food requirements. This involves meeting these needs from domestic agricultural resource, import food items that cannot be produced efficiently, and to export

commodities with comparative advantage. The second dimension seeks to eradicate the widespread inequalities and grinding poverty among the majority of households that is manifested in inadequate and unstable food supplies, lack of purchasing power, weak institutional support networks, poor nutrition, inadequate safety nets, weak food emergency management systems and unemployment (DOA, 2002:11).

### **3.4.1 Status of food security in Gauteng Province**

Due to the legacy of apartheid, the South African economy has developed very unevenly. The economy is divided between a developed and underdeveloped reality, all within a single market economy. Gauteng is the industrial center of the South African economy. It has a population of 8.8 million, a diversified economy base ranging from farming, mining, manufacturing and services and contributes 33% to national gross domestic product (GDP) (GPG 3, 2006: 4).

Gauteng Province is challenged by:

- Increasing levels of absolute and relative poverty.
- Unemployment has increased from 1 to 2 million since 2001. Most unemployed people are black communities and 2% of employed Africans earn less than R800 per month.
- There are 406 994 shack dwellings which increased due to migration into the province.
- About 8% of the population in Gauteng does not have education,
- Many households require electricity.
- About 2.5% of households still require piped water supply (GPG 3, 2006: 4).

It is in this context that the Gauteng government intends to halve the poverty and unemployment as part of the national government's priority by 2014.

### **3.4.2 Status of food security in Sedibeng District Municipality**

The Executive Mayor Councilor Mlungisi Hlongwane for SDM (31 May 2006: 5) tabled the state of SDM at Vereeniging Civic Theatre. He mentioned that SDM have a great potential in all kinds of agriculture that includes livestock farming to small gardens for sustenance. The Mayor highlighted that SDM is challenged by poverty and high unemployment levels that cannot be addressed, for instance the small community of Devon in Lesedi Local Municipality and Evaton in Emfuleni Local Municipality. He further mentioned that SDM shall double their efforts to ensure that established agriculture associates join them in strengthening their potential to halve poverty and unemployment. The driving force towards agricultural development in SDM resulted from the Agri-Summit that was held in December 2005. He concluded that, agricultural sector is the best hope for economic survival and for future progress for SDM community.

## **3.5 THE PROCESS OF ESTABLISHING CFG**

The procedure for the establishment of CFGs is outlined below.

### **3.5.1 Programme Management**

Project management refers to the management of the programme, this includes setting of objectives, establishment of plans, organising of resources and providing staff, setting up control mechanisms, issue directives, motivate personell and applying innovation for alternative action (Van der Waldt, 2006:6)

The secret of sustained success is based on leadership, accountability, trust and teamwork. Project management involves values that are likely to nurture policy implementation. This include democratic values such as openness and the public interest; ethical values such as loyalty and integrity; professional values such as team work and

innovation and people values such as responsibility, respect and ubuntu (Sindane, 2006:310). Project management comprise of two teams they are discussed below.

- **Programme Management Team:**

The programme management team (PMT) consists of representatives from the Departments of Health; Welfare; Public Safety and Security; Housing and Land Affairs; Development Planning and Local Government; Education; Agriculture, Conservation and Environment; and the external representatives with relevant expertise. The representatives of the PMT are formed based on the GPGs strategic priorities to alleviate poverty. Therefore each department contributes its expertise with regard to the upliftment of the community. For example Department of Education assists with the curriculum to be taught for agriculture. Housing department assist about land issues for the title deed for the CFGs in SDM. GDACE initiates the introduction of CFGs and job creation in SDM (GDACE 2, 2006: 1).

- **Operational Management Team:**

The operational management team (OMT) is made up of officials employed on the organisational structure for the implementation of this programme. The lead department for the CFG programme is the GDACE. The OMT comprise of extension officers, who specialize in agriculture. The OMT is responsible for different municipalities, such as SDM to guide the community on CFGs GDACE (GDACE 2, 2006: 2).

### **3.5.2 Project Cycle**

Project cycle is a process that provides a useful framework for looking at project dynamics over time. It is used to conceptualize work stages and the budgetary and organizational resource requirement of each stage (Van der Waldt, 2006:12). The aim of a project is to ensure that the goals of the institutions are achieved.

### **3.5.2.1 Time scheduling**

Projects operate at particular time frame. A project has the start and the ending phase. Institutions are concerned with performance, cutting costs and reducing product or service time to render goods and services in a rapidly changing socio-economic environment (Van Der Walt, 2006: 44). The time scheduling is important as to monitor the time scales, cost and overall quality of the established projects in SDM. The project cycle is aligned to the budget cycle of GDACE of each financial year. The time scheduling involves the receipt of application, selection, approval and implementation of the established community food gardens (GDACE 2, 2006: 2).

### **3.5.2.2 Applications for projects**

Applications of CFGs in SDM are received through direct approaches to GDACE, they are invited from:

- Provincial Departments of Health, Welfare, Housing and Education.
- Regional office of the National Department of Land Affairs.
- Local Authorities.
- NGOs.

All applicants are required to complete a pro forma application form (GDACE 2, 2006: 2)

### **3.5.2.3 Project selection**

Projects are selected annually in May, August and November by the operational team on the basis of applications received directly from groups of beneficiaries and projects solicited from local authorities. The number of projects selected is determined on the basis of the budgeted guide (GDACE 2, 2006: 2).

### **3.5.2.4 Feasibility study**

Feasibility study is conducted on the land chosen by the community food gardens members. Feasibility studies are conducted for conditional approval of projects. It is carried out by officials in the operational management team (GDACE 2, 2006: 2).

Feasibility study is a process that aims to ensure that the project is feasible and to make the best use of the company's resources (GDACE) (Burkes, 2003: 43). The feasibility study focus on the following matters,

- to consider the effect of the location towards the established projects.
- how the environment will affect the production for example on highly polluted environment.
- how will the project affect the environment.
- To calculate the size of the end product and to assess the market supplies (Burke, 2003: 47).

### **3.5.2.5 Business plans**

A business plan is a summary of how a business intends to organize an entrepreneurial endeavor and implement activities necessary and sufficient for the venture to succeed. It is a written explanation of the organization's business model. Business plans are developed for ventures in both business and government. Business plans are used internally for management and planning of the organisation intentions (Wikipedia: 20-10-2006).

For the purpose of this study on CFGs, the advantages of business plans are that, they assist:

- To focus the time and energy on activities that are most likely to be achieved,
- To know how to allocate resources.
- To put a solid strategy in place to set the business apart from the competition.

- The groups can communicate their plan to each other, and be held accountable for results.
- The department can track the results of the CFGs efforts and make mid-course corrections to get back on track.
- The department can adapt the plan to create a second business plan to raise sustainability (Wikipedia: 20-10-2006).

Business plans for conditionally approved projects with viable feasibility studies is finalized in the period May to November annually (GDACE 2, 2006: 2).

#### **3.5.2.5.1 Requirements for approval of project business plans**

In addition to the normal requirements for a business plan for each project the business plan include descriptions as set out hereunder namely, constitution, production strategy, marketing strategy, training and monitoring and evaluation:

##### **◆ Constitution**

Every institution is required to have a binding agreement that will govern its activities. This applies to the CFGs. This assist when they require funds from the sponsors. Therefore a constitution for the project indicates procedures to be followed to address the following issues:

- Establishment of a legal person (entity).
- Number of beneficiaries.
- Selection of beneficiaries.
- Selection and running of management structure.
- Handling of input costs.
- Sharing of produce and personal use of produce.
- Marketing and handling of excess produce.
- Sharing of profits.

- Banking or savings.
- Succession arrangements (GDACE 2, 2006: 3).

#### ◆ **Production strategy**

The production strategy indicates how the beneficiaries of the project will utilize the available resources to create a sustainable initiative. The production strategy must generate adequate funds to maintain the initiative; create spendable income for the beneficiaries where possible; create additional capital for the further expansion of the project where possible (GDACE 2, 2006: 3).

The production strategy indicates:

- Plot size per beneficiary which will not be less than 720 square meter.
- Crops to be grown, for example tomatoes, potatoes, cabbage and spinach.
- Infrastructure requirements, for example the irrigation equipment and fencing to demarcate the area.
- Requirements for production inputs for example manure, fertilizers and seeds.
- Production program plan, for example how the infrastructure and consumables will be utilized.
- Labour. The group should identify the methods that they will utilize to achieve their needs. There are two methods utilized for agricultural food production. Firstly it is the technology based farming, the farmer employ tractors; chemicals, electricity operated machines; automated pipes to water the farm in the morning or in the afternoon at the prescribed time. Secondly, the manual methods which is less expensive. The farmer use family spades and forks, wheel barrows and their physical being to water, plough, to sow and to kill weeds. They use rotten food, spoiled papers, egg-shells and dead leaves to produce manure. The community food gardeners in SDM employ the manual methods, because it is less expensive and it does not require them to purchase extra goods for farming.

- Time and the programme for production. This includes the planning cycle since the agricultural production occurs in seasons, for example summer, spring, winter and spring (GDACE 2, 2006: 3).

#### ◆ **Marketing strategy**

The marketing strategy quantifies the expected crop output with indications of utilization for own consumption and marketing of surpluses. SDM is challenged with poverty and unemployment problems. Community food gardens are a means to develop and empower the disadvantaged community of SDM. The group produce food such as vegetables and fruits. They should specify the strategy that will be employed with regard to the produced food. Produced crops may be shared amongst the group to feed their families. Other groups prefer to donate to the shelters and orphanages. Some prefer to sell the surplus or the produce crops to retailers and the public to gain profit and to earn a living (to pay bills or to purchase tools for their business). Therefore they must specify what they will do with the produced items (GDACE 2, 2006: 4).

#### ◆ **Training**

Training is provided to the established CFGs participants of SDM. The aim is to promote and teach food gardening to the participants in order to set up the project (Niland, 2005: 1) The training needs for participants is based on management, production, processing or value adding and marketing. The training needs are identified and a training programme described planned according to the needs of the participants. The institution has ongoing support and guidance towards promoting sustainable development. GDACE has established links with the three local municipalities of SDM (GDACE 2, 2006: 4).

A dedicated agricultural officer with agricultural qualification works with the SDM groups to deliver training. Thus they develop the curriculum of training the participants in partnership with the Department of Education. Each group receives a resource pack of

vegetable seeds and fruit trees as a follow up on the training provided (Sasix: 03-08-2006: 2).

#### ◆ **Monitoring and evaluation**

The OMT visits the different projects. The aim of the visits is to monitor and evaluate the progress of the projects. It also ensures that the projects are in line with their production strategy. The OMT conducts the visits on weekly basis for the newly established CFGs. The visits for the existing CFGs are conducted twice a month. If there is a CFGs that does not reach each targets the officials will guide them until to a stage where they are able to cope with its objective (GDACE 2, 2006:1).

#### **3.5.2.6 Project approval and preparation for implementation**

The operational team prepares for the implementation on the basis of budgeted guide allocations as approved by the MEC for Agriculture, Conservation and Environment (GDACE 2, 2006: 2).

The projects are implemented after the business plans are approved. The implementation is performed in accordance with the financial regulations that is from April of the first budget cycle to March of the third budget cycle (GDACE 2, 2006: 2).

The department receives a large volume of applications. The applications which are not selected for consideration are reserved for the future budget cycle alternatively they are referred to alternative service providers (GDACE 2, 2006: 2).

#### **3.5.2.6.1 Criteria for approval of projects**

The criteria set out hereunder are the requirements for the approval of projects:

- contribution of own resources by the prospective beneficiaries from a stokvel or savings club,
- security of tenure on the land to be utilized for production,
- direct involvement of the relevant local authority (GDACE 2, 2006: 3).

Preference is given to projects which comply with as many as possible of the additional criteria set out hereunder:

- targeting of women and children; youth; the unemployed; the differently abled and persons living with HIV/AIDS,
- direct involvement of an NGO or service provider,
- potential to link the initiative to other community based development initiatives,
- potential to leverage additional funds from sources outside of government (GDACE 2, 2006: 3).

The project management team meets once annually and set guidelines for the selection of projects as well as to ensure that there is geographic spread of the approved projects (GDACE 2, 2006: 3).

### **3.6 ORGANIZATION OF THE PROGRAMME**

The financial accountability for the implementation of the programme is the responsibility of the Directorate of Agriculture in GDACE. It manages the finances and it is responsible for the procurement of services and products for all the projects in the process of implementation by the directorate (GDACE 2, 2006: 4).

The budgeted amount for each project is determined as set out hereunder:

- a) The once off grant for consumables and capital items received from the state and the private sector may not exceed the financial benefits (gross margin on the produce

consumed or marketed from the project) by the beneficiaries calculated over a period of not more than 3 years from the date of initial funding.

- b) The grant from the state will not exceed the sum of R 4000,00 per direct beneficiary unless amended according to (d) below.
- c) Deviation from a) for relatively capital intensive projects will depend on a calculation of the Net Present Value.
- d) The programme management team or the MEC may amend the sum of the grant from the state for GDACE in future, according to the rate of inflation or any other reason deemed applicable at the time.
- e) The programme management team or the MEC may channel the above grant to an implementing agency in line with treasury regulations and only in the form of credit facilities.
- f) The provision of funding needs for training will not be included in the grant funding for project implementation (GDACE 2, 2006: 4).

### **3.6.1 Exit strategy**

The support services rendered for the implementation of each project have the duration of a maximum of three years. After three years the directorate will only provide extension services in the form of periodic visits of not less than once per quarter and/or on the basis of a request (GDACE 2, 2006: 4).

### **3.6.2 Role players and stakeholders**

The directorate of agriculture consults with role players and stakeholders in SDM, in order to streamline and co-ordinate efforts for purposes of improved efficiency and effectively of parallel initiatives. The role players and stakeholders for SDM are the GPG departments, NGOs, private sector, Sedibeng District municipality (the three local authorities: Mayor, councilors and Ward councilors, and the MMC for Social development), the schools, clinics, churches, community projects and community at large. (GDACE 2, 2006: 4).

### **3.6.3 Methods of growing CFGs**

Farmers typically use organic or biodynamic farming methods, in order to provide sustainable, fresh, high quality foods. More people are needed in organic and biodynamic farming production than on conventional farms, and many projects encourage members to work on the farm in exchange for a portion of the membership costs. Others give members the option to work or pay for their share. Some require a nominal amount of work in addition to membership costs (Phelan, 2005:3). Community food gardens offer a diversity of vegetables, fruits, and herbs in season. Each project is structured to meet the needs of the participants (Phelan, 2005:3);

## **3.7 CONCLUSION**

The IFSS approach is a developmental one. This approach entrenches public private civil society partnerships and focuses on household food security without overlooking national food security. One of the primary objectives of the IFSS is to overcome rural food insecurity by increasing the participation of food insecure households in productive agriculture sector activities and thereby creating both forward and backward linkages that will spread resulting in growth and development benefits to all South Africans.

Given the complexity of food security issues, the proposed strategy requires a comprehensive and multisectoral approach of all spheres of government, and the active participation of the private sector and civil society. Chapter four involves empirical study to determine the feasibility. With regard to the procedures outlined above, *chapter four will report whether the CFGs in SDM prove to be the best tool for sustainable farming.*

## **CHAPTER 4**

### **EMPIRICAL STUDY ON THE IMPACT OF COMMUNITY FOOD PROJECTS IN SEDIBENG DISTRICT MUNICIPALITY**

#### **4.1 INTRODUCTION**

This chapter aims to report on the findings of the empirical research that was conducted at the Sedibeng District Municipality. Information and data was gathered from the participants of the food gardens in SDM and officials responsible for CFGs in GDACE. The purpose of the empirical study was to establish the extent to which community food gardens promote sustainable development in SDM.

#### **4.2 RESEARCH METHOD**

This research examined the effect on which the community food project serve as tool to promote sustainable development. The qualitative and some part of quantitative research method was employed as it enabled the researcher to obtain the data for the completion of this study. Unstructured interviews through questionnaires were also employed. The research method is employed in order to attain the required information.

##### **4.2.1 Qualitative Method**

Qualitative methods concentrates on verbal responses and the approaches are not limited, this does not have the formality. The advantage is that the data is obtained in words. This method enabled the researcher to gather sufficient data as one can choose the authors, the language and the area of concern. This method interprets the reality as interactive as a distributed experience viewed by individuals (MacMilan and Schumacher, 1997: 35).

The method enabled the researcher to study selected matters in depth and detail, while quantitative method compel standardized measures to be used in order that the perspective and experiences of people could be placed into categories which are predetermined and to which numbers are allocated (Cresswell 1994: 146).

#### **4.2.2 Quantitative Method**

This method was also employed. Quantitative method deals with numbers, for instance the number of participants of CFG, the number of years, units that are used for the tools. The research should be quantitative as it represents an endeavor to detect laws, relationships and explanations.

Quantitative methods measure the reaction of many people to a limited set of questions, thus facilitating comparison and statistical aggregation of the data. The data obtained for this study symbolize that the quantitative method is unique.

### **4.3 RESEARCH INSTRUMENTS**

The instruments that were used for this study are validity and reliability, they are discussed below.

#### **4.3.1 Validity**

Validity is the way of discovering the truth of the information required. This is proven by the findings of the empirical study conducted below.

#### **4.3.2 Reliability**

Reliability refers to the consistency of measurement to the extent to which the results are similar over different forms of the same instrument or occasions of data collecting.

## **4.4 DATA COLLECTION INSTRUMENTS**

Data collection instruments forms an important part of any research because it does not only give a description of what data could be collected and how it should be collected, but it constitutes the basic information a research.

The instruments that were used to collect data in this study are interviews through questionnaires. Questionnaires were used to obtain the primary data.

### **4.4.1 Interviews and Questionnaire**

There are many ways of gathering data, directly from the participants if such data is not obtained from the observation. The first way is to obtain data from the interviews. An Interview involves direct personal contact with the participant (Bless, 1995: 106).

A questionnaire is a set of questions with fixed wording and sequence of presentations, as well as more or less precise indications of how to answer each question (Bless, 1995: 107). Two questionnaires were employed to collect data. The first questionnaire consisted of questions to the community food garden participants and the second one consisted of the questions posed to the officials of GDACE. A questionnaire has advantages to an extent that the researcher is able to target her sample and is able to acquire more information if she is not satisfied.

### **4.4.2 Sampling**

Sampling is the scientific foundation of the everyday practice. It is a technical accounting device to rationalize the collection of information, to choose in an appropriate way the restricted set of objectives, persons, events from which the actual information will be drawn (Bless, 1995: 85). For the purpose of this study it was effective to have a sample population, the advantage was that the time spent was effective. The advantage is that it

is less costly for travel allowance. The empirical study was conducted within the researcher's area jurisdiction.

#### **4.5 FINDINGS FROM SEMI STRUCTURED INTERVIEWS WITH THE PARTICIPANTS OF COMMUNITY FOOD GARDENS.**

Three locations were visited in SDM to obtain information and data. The data was obtained on Sunday afternoon, 12 November 2006. The reason to gather information on Sunday afternoon was that, firstly the author is employed in Johannesburg; she arrives home in the evening (after 18h00). Secondly the areas reached were within the author's area of jurisdiction. Thirdly Sunday afternoon was the most suitable time to socialize with people, participants were available in their homes, and therefore it was an advantage for the author to meet the participants of the CFG's as they both did not have commitments. That also enabled the author to view the participants food gardens. The weather was not conducive, it was raining but the job was completed.

##### **4.5.1 Section A:**

###### **Profile of participants**

Five groups of community food gardens were interviewed out of twenty established community food gardens in SDM. The groups represented are from different categories of the poor population in SDM.

**Question 1.** Respondents were asked the names of their projects.

The names of the groups are captured in the table below.

Tabled 4.1: projects name and category.

Participants	Projects name	Location
Group 1	No project name as the group is still developing	Tshepiso, Sharpville
Group 2	Lwanstha Tlala community project	Sharpville
Group 3	Moloantoa School Project	Palm Springs
Group 4	Palmodeveer Agricultural Project	Palm Springs
Group 5	Ebenezer Child Care & Community Centre	Evaton

**Question 2.** Respondents were asked to identify their municipality.

All the respondents are well informed about the municipality that they belong to, the SDM: Emfuleni Local Municipality.

**Question 3.** Respondents were asked to identify the years of participation and the number of participants in their groups.

Group 1. They have six months (June 2006 – to date (November 2006)). The premise was utilized by the municipal council for agricultural purpose. The local municipality used to grow crops such as flowers, vegetables and fruits. At a later stage the place had no one to look after and the premise was vandalized. They saw a need to grow crops in that area to fight poverty. They approached the municipality to utilize the premises. The project was discontinued. They reached a consensus to take over to perform their agricultural activities. The group has four members and they are still looking for additional members.

Group 2. They started their project in 2003 at the school. In March 2004, their sponsor organised them a vacant land where they are situated at the moment. The group started with 65 members, but currently (2006) they are left with 11 members. The reduction of the group member's results from the loss of interest by participants, they have expectations to obtain remuneration but the income is only received when there is excess production. They become impatient due to the long production process and there is power struggle.

Group 3. The group started in 2002 to date (2006). Initially they were 10 and they are now left with two members. They request the learners to assist in their spare time. This serves as an opportunity for the learners as they are exposed to agricultural activities.

Group 4. The group started in 2001 at Walkerville in MidVaal, they left the place due to transport tariffs being expensive for them. They paid R11.00 (return trip) from Palm Springs to Walkerville on daily basis. The group started with 25 members, but was reduced to five members.

Group 5. This group was established in 1984 to date (2006). That was during the times of NGOs such as Operation Hunger. They started in Sharpville and later moved to Evaton. They are a group of 15 permanent staff. They include other members who are not consistent in terms of growing vegetables. Group 5 is a Child Care & Community Centre; therefore the participants are child minders, educators and family members to the Ebenezer community. They reported that reduction of the members was due to job offers, conflicts (unhappiness, dissatisfied) no compensation and others were starting new families (marriage). Some members also felt that the production period of the crops is slow, as they are hungry. Some participants joined the groups on high hopes; they thought that they would be compensated for the activities rendered.

**Question 4.** Respondents were asked to indicate the types of gender represented in their groups.

The response from the participants is recorded in the table below.

Table 4.2: Data of gender details

Group	Male (s)	Female (s)
Group 1	2	2
Group 2	2	8
Group 3	1	1
Group 4	1	4
Group 5	5	10

The females seemed to dominate the participating groups. The females commented that the women are the ones who take care of the family and most of the women are unemployed therefore they meet to empower each other.

**Question 5.** Respondents were asked whether they had disabled members and to provide the number of disabled members.

Group 5 is the only group with disabled employees. They have ten disabled participants.

**Question 6.** The groups were asked to provide the age groups represented in their organization.

The data obtained is recorded on the table below:

Table 4.3: Age difference of the five groups

18-24	25-31	32-37	38-44	45-52	53-58	59-65	66 and older
1	2	7	8	7	3	2	3

The youth was found to be less concerned with community projects involvement; the participants reported that the youth does not have interest on agricultural issues. The dominant age group is between age 32 – 52, this groups participation depend on the CFGs as it is their last resort because they are unable to secure better jobs due to their educational qualifications that does not meet the workplace requirements. The age group 53-66 is found to be on the advantage side as most of their age group is unable to partake on activities that require physical mobility. This last group was found to be experienced in agricultural matters. They grew up on farms and rural area’s, therefore agricultural practices was their source of living and for their survival.

**Question 7.** Respondents were asked to identify the participants that are employed and unemployed.

Group 1 has two employed participants, one participant is employed as a Security Guard and the other is employed as a Domestic worker. They are both employed part time; they relieve the employees who are on leave.

Group 4 has one employed participant; the participant is a Bus-driver. He participates only on Wednesdays per week. Therefore the rest of the 33 participants are unemployed.

**Question 8.** Respondents were asked to provide their education achievements.

The data obtained is recorded below:

Table 4.4: Highest level of education

Form three/ Standard six	Matric	Adult basic education (ABET)	Tertiary (university, technikon or technical college	Other
31	4	1		

The participants of the group are older generation. Therefore thirty participants fall under the category of form three/ standard six. The second category is the youth that obtained Matric certificates; this category had opportunities to study unlike the previously disadvantaged old generation. One participant is found to have ABET education, it was reported that this participant wishes to obtain her Matric certificate. One participant from group five had enrolled her studies with Stellenbosch University to obtain a degree in BA (Social Work) through distant learning. Even though most of the older generations have not obtained their Matric certificates they were found to be genius, they are repeatedly pronounced the Afrikaans and English words and sentences. They have the insight of agricultural context and background as if they studied agriculture as a discipline.

#### 4.5.2 Section B

##### Resources:

**Question 9.** Respondents were asked if they currently practise agriculture.

All the groups practise agriculture in their premises.

**Question 10.** Respondents were asked to identify where they practise their agricultural activities.

It was found that the groups practise their activities on different premises. They are discussed below.

Group 1 and Group 2 utilize the land that belongs to Emfuleni Local Municipality.

Group 3 said that they practise their agricultural activities in the school premises. The response from Group 4 was that they practise at a clinic. Group 5 utilize the plot with a house structure on it.

**Question 11.** The groups were asked whether they obtained an authority to use the premises.

All the groups have authority to utilize the premises for agricultural purpose.

**Question 12.** The groups were asked how they obtained the premises.

The property that is utilized by Groups 1, 2, 3 and 4 is the community-based environment. Group 5 said that they own the place.

**Question 13.** The groups were asked to provide the size of their areas.

Only Group 5 had an idea of the size of their area that is 4045 square meter. The rest of the Groups did not have an idea of the size of their areas. The author thinks that the groups should be well informed about the project information, such as the size of the area. It is important to have this information on hand as they might meet a possible sponsor or if there are incidents they will be able to respond to the questions asked to them.

**Question 14.** The groups were asked whether they use tools to practise agriculture.

They all use tools to practise agriculture.

**Question 15.** The groups were asked to identify the tools that they use.

The tools utilized by the groups are noted below.

**Table 4.5: Tools used by the group**

Type of tools	Group 1	Group 2	Group 3	Group 4	Group 5
Spade	1	5	2	5	1 3 is broken
Fork	1	5	2	5	
Rake	1	5	2	5	3 1 is broken
Pick axe	1	5		5	
Hoe	1				
Wheelbarrow	1	4	1	4	3 2 is broken
Hose pipe	1	5	1	5	1 but not long , it is old and repaired repeatedly
Sprinkler			1		
Net		x		x	
Spray for ants					x
Buckets	5				
Watering can		5		5	1 on repair
containers		1		1	

**Question 16.** The groups were asked how they obtain the tools.

Group 1 responded that they contributed their own tools. Group 2 and 4 said that they received a sponsor from GDACE. The response from Group 3 was that they also received a sponsor from the school committee. Group 5 had sponsors long time ago from the Operation Hunger but currently they said they live by Gods grace.

**Question 17.** Respondents were asked where they obtained water from.

Group 1, 3, 4 and 5 said that they obtain water in their premises of practice and they have a tap structure. Further the first group found a tap structure but there was no tap handle, they said they made contributions to purchase and replace the tap handle. Group 2 does not have a tap structure; they obtain water from the neighborhood. They said the first house which used to provide them with water started to complain that their rates and taxes increased therefore they can not provide water to them anymore. They later approached another family which they currently obtain water from at the moment.

## **Risks:**

**Question 18.** The groups were asked whether their place was secure.

The response from Group 1, 2, 3 and 4 was that their premises are safe. Group 5 reported that their place is not safe.

**Question 19.** Respondents were requested to elaborate on the safety of their place.

Their response was that; Group 1 has one member who resides on the premises, the reason being that if the place does not have a caretaker it would be vandalized again. Group 2 responded that they are safe, their premises is surrounded by the neighborhood, their advantage is that one neighborhood have a business that operates on 24 hour basis therefore there is no one who can steal their produce or tools. Group 3 and 4 said that there is Security personnel employed for seven days to guard the premises on a 24 hour basis. All their tools are stored on their premises.

**Question 20.** Respondents were requested to clarify where they keep their tools as the place was not safe.

Their response was that the place is not secured due to a fact that their premises are old, the fence structure is old. People jump over the fence to steal their tools and produce. They said that this happens on continuous basis and most especially at night. They further stated that, they sometimes hear the thieves talking and their footsteps outside at night. They are afraid to go out at night to chase them because they have dangerous weapons; they also think of the lives of the children that they take care of that maybe it might be disturbed. They tried to report to the police authority but they are unable to identify the culprits. A community police forum (CPF) was established but the members of the CPF did not last due to non-compensation. They concluded that on daily basis they place their tools inside the house in the kitchen and remove them every morning.

## Production:

**Question 21 (a)** Respondents were asked to identify their type of interest on the different types of agriculture.

All the groups responded that their interest was based on vegetable and fruit and fruit production. Group 4 reported that they practised broiler production at first when they were at Walkerville but due to space constraints they discontinued their broiler production.

(b) The groups were asked to name their types of produce for vegetables and fruits.

Their response is recorded on the table below.

Table 4.6: Types of vegetables produced by CFGs

Output	Group 1	Group 2.	Group 3	Group 4	Group 5
Beetroot	x	x	x		x
Brinjal	x			x	
Cabbage			x	x	
Carrots	x	x	x	x	x
Cucumber	x				
Garlic					x
Green beans		x	x		x
Maize	x	x	x	x	x
Green pepper				x	
Onion		x	x	x	x
Peas		x			
Potatoes		x	x	x	x
Rhubarb					x
Spinach	x	x	x		x
Pumpkin			x		x
Spring onion				x	
Tomatoes	x		x	x	x
Turnip		x			

They further reported that they plant their crops based on seasonal cycle. They said that currently (spring) they planted maize, spinach, tomatoes, spring onion, carrots and beetroot. They also grow fruits on seasonal basis. They reported that they like fruits because they don't have to purchase seeds to grow and it is an advantage to them.

**Question 22.** Respondents were asked if their groups are registered as a legal entity. The only groups that are registered are Group 2, 4 and 5. Group 1 and 3 said they wished to be registered but they are unable to process their documents because they do not form a quorum. The maximum number must be seven (7) members per group.

#### **4.5.2 Section C**

##### **Methods of agriculture:**

**Question 23. (a)** The groups were asked to state the methods that they use for their agricultural activities. The response from the groups was that they use manual method for their agricultural activities. They also use an organic method to plant their crops.

**(b)** The groups were asked if the method was cheaper or expensive.

Their response was that their aim of growing such crops is for them to consume and sell the surplus. Therefore the method is cheaper as they can repair the broken tools. They said the method is also expensive as they must search their pocket to purchase the urgent items required.

**(c)** Respondents were also asked about the effectiveness of the method.

All the groups seemed to be happy with the methods employed. They pointed out that as long as they can feed their hungry stomach, it is a blessing to them. The advantage of the method is that they consume fresh food from the soil with no chemicals involved. Their advantage is that they also produce their own fertilizers. They do this by means of digging the holes and place all the used egg shells, papers, food, grass and leaves.

The disadvantage is that they work for long hours. They said they wished to own a tractor that will turn the soil for them to enable them to place the seeds easily.

##### **Management plan of project:**

**Question 24. (a)** The groups were asked why they produce crops.

Their response was that they aim to defeat poverty. Therefore they feed themselves and their families. They sell the surplus after dividing their produce. Groups 2, 3, 4 and 5 also

donate part of their crops to the child headed households, schools for disadvantaged learners, hospice, people on health treatment and the elderly.

**(b)** Respondents were asked if they will divide any income that result from production. Their response was that they do divide the income they receive. They further stated that they do not consume all the funds; some part is deposited to group's bank accounts.

**(c)** Respondents were asked if they are prepared to contribute financially towards the project through stokvel/ savings. Their response was that they are prepared to contribute financially. They need to buy and repair tools therefore it is a must for them to contribute.

**(d)** Respondents were asked if a member can be expelled and on which grounds. They all said that they have a constitution that governs them. They can not expel the participant, because of the situation that they are faced with of poverty and unemployment. They rather communicate with the person. They said they do not see a reason to expel participants as they are their last hope to feed them selves. Usually the participants who are not happy just disappear without notice.

**(e)** Respondents were asked if they will replace the participants who are expelled or who disappeared. Their response was that they do not replace the participants. The community members who are interested do approach them.

**(f)** The groups were asked how and where they market their produce. Their response was that, at the moment they sell their produce directly to the community. They are all fortunate because their premises are within the vicinity of the community. They said that they want to start selling to the local community to weigh their confidence and strengths. They want to expand their areas so that they can feed themselves and sell to gain profits. They wish to supply retailers such as Shoprite, Score, Spar, Pick n pay and other retailers that sell fruits and vegetables.

**Question 25. (a)** Respondents were asked if they receive any sponsorship.

Groups 1 and 5 do not receive any sponsor. Group 2 and 4 said they received sponsorship from GDACE. Group 3 receives a sponsor from the school committee.

**(b)** Respondents were asked to identify what they received.

Groups 2, 3 and 4 said they received the infrastructure (fence), production inputs (tools and seeds) and protective clothing (overalls and gumboots).

**Communication:**

**Question 26.** The groups were asked if they had a leader.

All the groups have leaders. They also said that they have an established committee that includes the chairperson, treasurer and the secretary.

**Question 27.** The groups were asked when they hold meetings.

Group 1 said they hold informal meetings. Group 2 hold their meetings on Tuesdays (weekly). Group 3 hold their meetings on Wednesday (weekly), from 8h30 to 9h00, they involve the school representatives. Group 4 and group 5 hold their meeting on monthly basis.

**Question 28.** The groups were asked if they receive invitations from the Government, NGOs and other institution.

Group 1, 3 and 5 have not received invitations from any institutions. Group 2 and 4 are the only groups who receive invitations.

**Question 29.** The groups were asked to specify the types of invitations they attended.

They are the beneficiaries of GDACE therefore they are invited to workshops, farmers days and information days, imbizos and female farmer of the year.

**Question 30.** The groups were asked if they benefit from meetings attended.

Their response was that, they become motivated, groomed and educated.

### **Future of the project:**

**Question 31.** The groups were asked about their future project plan.

Their response was that, they would like to see themselves being business associates to minimize unemployment rate in SDM. They said they want to excel in SDM with their produce and represent the province. They wished to export their produce to other provinces. They also want to provide enough food to the disadvantaged and stop poverty. They wished to practise poultry and broiler production.

**Question 32.** The groups were asked if the future generations will be able to use the land that they are currently utilized.

Their response was that, future generations might use the land provided they are interested in agriculture. They believe that they can use the land because there are no chemicals used. They said they may use the land only if there are no developments in those areas. For instance business associates purchase the vacant land therefore the opportunities to farm is minimal for the upcoming community food garden participants.

## **4.6 FINDINGS FROM THE GDACE OFFICIALS RESPONSIBLE FOR CFGS IN SDM**

The empirical study was obtained from GDACE officials. GDACE is situated in Gauteng province.

### **4.6.1 Section A**

#### **Scope of the projects**

**Question 1.** GDACE was asked if they are involved in community food projects and to state the types of projects.

GDACE responded that they are involved with the community food projects. Firstly it is the community food gardens which focus on the community development. Secondly they focus on Homestead food gardens (HFGs); this type is directed on individual families. They grow crops in their backyards. The aim is to fight poverty and unemployment.

**Question 2.** The department was asked when the first project was initiated.

The response was that the department started CFGs in 1998 and the HFG was started in 2003.

**Question 3.** The department was asked to outline the number of community food gardens established in SDM.

The department has established more than twenty (20) CFGs in SDM.

#### **4.6.2 Section B**

##### **Integration:**

**Question 4 (a).** The department was asked to provide the institutions that they liaise with regard to the CFGs in SDM.

GDACE is in partnership with the National departments, Gauteng municipalities, Department of Health, Education, Social Development, Home Affairs and the NGOs.

**Question 4 (b).** The department was asked about their beneficiaries towards the established.

The GDACEs beneficiaries are the elderly, disabled, HIV/AIDS infected and affected community, unemployed, and the youth.

##### **Management of the project:**

**Question 5.** The department was asked to state how they manage the established community food gardens.

The response was that they monitor and maintain the CFGs. The monitoring is done on continuous basis. For example there are CFGs that are started from the scratch and those that have basic requirements; therefore they will have to monitor their progress to ensure that they achieve their expectations. They also guide the CFGs and advise them on proper management of their crops. The official stated that they communicate with the CFGs, by means of meetings.

**Question 6.** The department was asked if they provide training to the CFGs.

GDACE do provide the CFGs with training. The training is based on food production, watering the crops, pest control and the cycles of production and seasons of planting crops. The department has partnered with Department of Labour to train the CFGs. The training is provided on the language spoken by the beneficiaries, for IsiZulu, Sesotho and Sepedi.

Manuals with diagrams, which demonstrate a person digging the soil, planting seeds and the development of the crops, supplement the training.

#### **4.6.3 Section C**

##### **Sponsorship:**

**Question 7.** The department was asked if it provides sponsorship to the projects.

GDACE said that they do sponsor the CFGs. They provide;

- Infrastructure: Fencing, tank and borehole systems,
- Production inputs: seeds, fertilizers and tools, and
- Protective clothing: gumboots, overall and gloves.

##### **Communication:**

**Question 8.** The department was asked how they communicate with the participants and how many visits are conducted per year.

The response was that they communicate with the CFGs on individual basis, by scheduled visits. Also if there are urgent issues they phone them.

They said they visit the new projects fifty two (52) times a year (once a week). With the old projects they visit them twenty six (26) times.

**Question 9.** The department was asked if they host sessions/ meetings with the community.

The response was that they host meetings such as Imbizos with the MEC for GDACE, market days, information days and female farmer's days and world Food day which is celebrated yearly on 13 October.

**Question 10.** The department was requested to specify the methods used to communicate and invite the community to the events that they host.

The communication is based on the following:

- Formal invitations sent by the extension officer to the CFGs,
- They personally address the CFGs,
- Telephone as the department has the data base. This is used on urgent matters, and
- Newsletters and manuals
- Media such as radio, television and newspapers for example the Sowetan and Daily Sun.
- 

#### **4.6.4 Section D**

##### **Risk Management:**

**Question 11.** Projects are associated with risks, the department was requested to elaborate on the risk they encountered on established projects and how they manage the risks.

The official stated the following risks that they are faced with;

- Crime and theft of tools, infrastructure and produce. They are trying to erect razor fence on the CFGs premises.
- The participants fight for the income obtained. Some do not want to work, but at the end of the day they expect to receive funds from the produce sold.
- Shortage of water. They are in the process of erecting boreholes for the participants.

- Weather conditions. If there is no rain the crops die and the participants lose interest.

The department does follow up on the outstanding issues.

**Human resource:**

**Question 12.** The department was requested to identify the role-players in the management of the established projects.

The response is that the Extension officers are responsible for establishing and managing the CFGs. The extension officers report to the Principal Agricultural officers and to the Senior Management.

**Sustainable development:**

**Question 13.** The department was asked if the community food gardens can serve as a tool for promoting sustainable development.

The response from the department was that some participants do not take projects seriously. But others do take it seriously therefore it can be a tool for promoting sustainable development, in terms of alleviating poverty, creating unemployment and using the natural resource with out destroying the surplus.

**Question 14.** The department was asked which methods they think are best for maintaining community food gardens.

The response was that of organic method. This method is cheaper and accessible. The participants grow the crops that they want.

## **4.7 CONCLUSION**

The interviews revealed that the idea behind the established CFGs is to promote sustainable development and to defeat poverty and reduce unemployment. The five groups interviewed showed that they are serious and they want to stop poverty and unemployment. It is evident that the GDACE strives to meet the challenges of poverty reduction and unemployment in Gauteng province as stated in the GPG strategy to halve the poverty rate by 2010. Chapter five will discuss the recommendations and the solutions to minimize the challenges facing SDM.

## **CHAPTER 5**

### **FINDINGS, SUMMARY, REALISATION OF THE OBJECTIVES AND RECOMMENDATIONS**

#### **5.1 INTRODUCTION**

The aim of chapter four was to investigate the impact of community food gardens to determine the extent to which they promote sustainable development in SMD. The empirical research was conducted to determine the impact of community food gardens on participants of CFGs and the management of the CFGs by the implementing department that is GDACE. This chapter reviews the previous four chapters. Furthermore this chapter will outline the findings, summary, realization of the objectives and the recommendations of this study.

#### **5.2 SUMMARY**

The summary of this study is based on four chapters.

In chapter one as problem statement, it was stated that sustainable development is a programme with the aim to change the process of economic development so that it ensures a basic quality of life for all people. Sustainable development represents a development framework that leads to the conquest of poverty, the goal of full employment and the fostering of a stable, safe and just society. The challenges of sustainable development in South Africa were identified. Chapter one highlighted that resources must be available to maintain the implemented projects for the future and to ensure that the community has the capacity to run and maintain the projects and available resources. The effects of food security in South Africa and prevalent in SDM were identified. In SDM there are 20 established community food gardens. Chapter one also outlined the MECs speech that stated the GDACE intentions to contribute to agricultural development in SDM. The intentions include the enhancement of economic growth and fighting poverty in line with national and provincial priorities. The aim, questions and objectives and the method of data collections were identified.

Chapter two focused on the theoretical exposition of sustainable development. This was elaborated based on the definition of sustainable development, poverty, unemployment and food security. In this chapter sustainable development was defined as the development that is likely to achieve the lasting satisfaction of human needs and improvement of the quality of human life. The origin, the outcomes of Agenda 21 and the World Summit on the sustainable development were discussed. The effects of sustainable agriculture were outlined. Sustainable development is characterized by principles and the three factors, namely social, economic and environmental factors. Such factors need not be isolated when the service delivery is implemented. The requirements for sustainable development outlined that human activity should use natural resources at an effective rate. Also the community is required to accept responsibility and follow a shared vision of basic values that provides an ethical foundation for the interaction with each other and with the earth as man belongs.

The challenges mentioned in chapter two of sustainable development in South Africa is strongly inter-related and identifies underlying trends and policies that have contributed to weak and uneven development outcomes. The four indicators, namely, economic, social, institutional and environmental indicators are use to measure how well a community meets the needs and expectations of its present and future members. The full participation of national, provincial and local governments and the community is crucial in fulfilling the objectives of Agenda 21 and in creating the sustainable future.

An overview of strategies and activities of community food gardens in SDM was outlined in Chapter three. The national government is responsible to make policies to develop the communities for example the food security policies. Therefore the provincial government in conjunction with the local municipalities implements such policies into programmes projects, for example the GPG strategic priorities on GDS. All GPG programmes are guided by the GPG strategic priorities. The lead department for implementing the policies on community food gardens is GDACE with specific reference to SDM. GPG and GDACE have launched the Gauteng Agricultural Development Strategy in February

2006, held in Sebokeng. CFG as a means of becoming involved in community based food production by sharing in the cost and the profit of a local farm was defined. The CFGs were outlined. The aim of the CFGs to address food insecurity and the primary objective of CFGs were also outlined.

Chapter three outlines the two dimension of current food security in South Africa, namely, the dimension to maintain and increase the ability of South Africa to meet its national food requirements and grinding poverty among the majority households that is manifested in adequate and unstable food supplies. The current food security trends of South Africa is a crucial issue that requires attention by the authorities. The process of establishing CFGs is defined. The process involves role-players and stakeholders form government institutions. The process is undertaken on the project management cycle. The cycle includes the conceptualization phase and the concluding phase, which involves the approval of the projects. The CFGs employs manual labour and organic farming methods. The importance of the CFGs is intended to contribute to the mitigation of household level, food insecurity through the production of food primarily for own consumption.

Chapter four focused on the results and findings of an empirical study conducted in SDM. The data regarding the CFGs in SDM was obtained from the five groups representing different categories of the CFGs in SDM and from the GDACE. Two types of questionnaires were employed to obtain data.

### **5.3 FINDINGS**

This study shows that the level of poverty and unemployment is high in SDM. This remains a challenge to the government and the community to use natural resources in an effective manner.

Sustainable development was defined as the development that is likely to achieve lasting satisfaction of human needs and improvement of the quality of human life. This definition was found to be effective as it assisted the poor community to utilize the

available land to satisfy their needs. An example of this is groups 1, 2, 3 and 4 mentioned in chapter four. The CFGs have brought the idea of self-reliant as the participants are able to provide food for their families and they can also provide the produce to the needy communities such as the elderly and the learners in schools.

The study has shown that the communities are capable of empowering themselves. Households usually grow vegetables in their backyards. Due to common economical requirements the communities have established groups to form community food gardens to assist each other, to feed their families and the hungry communities. The food that they grow is donated to the schools to feed disadvantaged learners, sick people who are on medication, disabled persons; they also sell the surplus to acquire additional funds. These groups have the vision that they will be prospective business associates in the near future and supply the produce to the markets around Gauteng province.

Poverty affects every member of the community. The GPG priority strategy states that the policies implemented targets the following categories: youth, women, HIV/AIDS (infected and affected persons), disabled and unemployed. In contrast to the above-mentioned categories, it was found that the youth is less represented on CFGs activities. The dominant category is the elderly people, largely females. Public participation could be construed as beneficial for citizens themselves. Personal intellectual enrichment comes from broadening one's horizons to concerns extending beyond family, friends, work and neighbors. Further, communities who participate in the CFGs are able to satisfy their needs and demands. This is proven from the five groups interviewed in chapter four. These groups have acquired skills on crop management, communication and effective ways to produce healthy food.

According to the sources consulted there are about twenty established CFGs in SDM. This proves that the government plays an important role in ensuring that economic development is maintained in SDM.

It is evident that GDACE does comply with Batho Pele principles. This is stressed on the consultation (visits) that the department conduct on monthly basis to the established CFGs. The follow up assist the department to account for their commitments and the service level of agreement when the MEC accounts to the legislature about the performance agreements of the respective financial year. Democratic values are maintained and all citizens are treated fairly.

The intentions of GDACE to enhance economic growth and fighting poverty are in line with national, provincial and local priorities. Therefore it enables the communication to flow easily amongst the institutions.

Safety measures for the participants of the CFGs are considerable. Their premises are safe guarded on 24Hr basis. Group 5 is the only group with security problems; thieves steal their crops at night. This causes a draw back to them, they are not able to monitor their produce and they live in fear that they may be robbed all their belongings.

Natural resources (long grass and rocks), rodents and snakes are a threat to Group four participants. The land surrounding the clinic is an open veld, it is polluted and the grass grows tall to an extent that it covers the rocks. The rodents feed themselves on crops (fruits and vegetables) as a result the crops are being poisoned. Due to long grass, rocks and the availability of rodents the snake's habitats around the clinic. The participants killed three snakes and they were unable to get rid of them due to environmental factors. The problem was reported to the local authority and the group requested the municipality to make a tractor available in order to remove the weeds and rocks in their cultivating land.

The resources utilized by some groups are old and they repair continuously. Even though there are problems with the resources the groups are able to meet their targets and to feed the hungry.

The ability to farm and to produce sustainably based on long term effects of various properties and processes essential to crop productivity and long term availability of inputs

is seen as sustainable and effective, as the land may be used for a long term. SDM has the potential in all kinds of agriculture. That includes live stock farming to small gardens for sustenance. The land is fertile. There is vacant land that must be reserved for agricultural purposes.

The method used for producing crops is proved to be effective as the CFGs continuously use the available resources at their best ability. An example is the crop rotation. The participants always alternate their crops on their land. They do this to reduce the exhaustion of the soil form the same crops planted.

The participants are environmental conscios. They use the waste products (eggshells, used water for washing, all types of papers, and wood and dead leaves) to produce fertilizers for their crops. The method is cheaper and there are no chemicals involved. Therefore they eat their food fresh from the garden.

The method of data collections that was employed was found useful. Therefore the researcher was able to acquire the literature and the problem statement, the areas of the interviews were accessible, the respondents were cooperative, and thus it made the study to be interesting.

#### **5.4 REALISATION OF THE OBJECTIVES OF THE STUDY**

The first objective of this study was to provide an exposition of the concepts community food gardens, food security and sustainable development. To meet this objective, the exposition of the concept community food gardens, food security and sustainable development was provided in chapter two.

The second objective was to trace the historical development and outline the strategies that had been undertaken to develop the community needs in SDM. The historical developments and overview of strategies in South Africa and Gauteng Province especially in SDM were outlined. The process of establishing community food gardens,

the team responsible and the processes undertaken were identified in chapter three. The purpose was to prove that the government is aware of the situation of the challenges facing SDM and that there are remedies to develop the economy and social being of the SDM communities.

The third objective aimed to conduct a research on the impact of community food gardens in SDM. The outcome of the research was outlined in chapter four. The aim was to establish how the community food garden could act as a tool to promote sustainable development in SDM.

## **5.5 TESTING THE HYPOTHESIS**

The aim of this study was to test the central statement that was made in chapter one, namely that:

- The high incidence of poverty rates and food costs at SDM makes community food garden a necessary tool for sustainable development.

The findings from the literature review and the empirical research conducted support the stated central statement. CFGs are a tool for promoting sustainable development in SDM.

## **5.6 RECOMMENDATIONS**

Flowing from the empirical study in particular, the following recommendations are offered for further actions:

- Food security results in poor nutritional status, and it does not necessarily guarantee good nutritional status, therefore to improve the nutritional status of

food insecurity to the South Africans, a multi-pronged approach should be considered.

- Poverty and unemployment in SDM is escalating to greater level therefore the municipality should ensure that strategies are aligned with the GDS strategy to uplift the economy of the SDM.
- An effective network with communities should be established in order to promote their involvement for CFGs especially in SDM. Amongst the five groups that were interviewed only two groups are informed about the government assistance towards the established groups. Therefore if the community is informed they will be able to contact the departments for assistance.
- It is recommended that the local authorities must ensure that open land is free from weeds, long grass and life endangering species. This will benefit the participants by expanding their cultivating land and to live a healthy lifestyle.
- Public participation should be encouraged, so as to empower them with the knowledge of self-help.
- SDM has fertile soil and have available land in all areas. Therefore the land that is not used must be made available to the unemployed and poverty stricken communities to utilize it for the agricultural activities.
- Municipalities in SDM must ensure that the land that is available is protected for agricultural purposes. Such protection is necessary because in SDM there is an escalating developments that are taking place in building shopping malls and residential areas leaving minimal land for agricultural activities. This will give a chance to SDM communities to generate and share agro-ecological knowledge freely; they will be capable of developing sustainable development, even under highly adverse conditions. The capacity to develop agriculture locally is not only the agro-ecological key to sustainable agricultural development and a matter for survival but to enhance the community to be economically independent and be able to invest with their resources.
- The department in charge for developing communities in SDM should review their policies of receiving applications from the communities for the CFGs. This is a problem as other communities are unable to call the departments or send

mails. Therefore it is recommended that the institutions should go out to the communities to convey their goals and objectives.

- The departments should open regional offices or mobile offices in the communities to enable easy access to the communities to visit the officials.
- One group participant (woman) mentioned that they are unable to contest on Female farmer competitions at community levels due to lack of female participants on CFG's. The GPG priorities to halve poverty states that the benefiting people are females therefore the policy makers should ensure that their targets groups are well informed about the strategies of the province to the municipalities.
- This study was of great interest to the researcher. Due to the limitations of this study as mini-dissertation, it is recommended that further study on the challenges of poverty and unemployment, community food gardens in SDM should be continued. The data obtained from such studies can assist future generations and the government as a whole.

## 6 BIBLIOGRAPHY

Adelzadeh, A. 2003. **South Africa Human Development Report 2003**. The Challenge of Sustainable Development in South Africa: Unlocking Peoples Creativity. Published for the United Nations Development Programme (UNDP). Cape Town: Oxford University Press

Agriteng. (May/June 2006). **Good management make Lwantsha Tlala Project successful**. New Farmer & African Entrepreneur. Bi-monthly agricultural news to Gauteng Small Scale Farmers. South Africa.

Allan, K. 1996. **Creating Jobs in Rural Areas**. A guide for Councillors. Pretoria: Land & Agriculture Policy Centre. South Africa.

ANC (African National Congress), (2002), **Umrabulo No 15**. Hosting the World Summit on Sustainable Development. July 2002.

Bannard, P. 6 July 2000. **Assessing urban food security. Adjusting the rural vulnerability assessment framework to urban environments**. USAID. USA.

Bless, C. & Higson-Smith, C. 1995. Fundamentals of Social Research Methods, an African Perspective. 2<sup>nd</sup> Edition. Juta and Co, LTD. South Africa.

Burke, R. 2003. **Project Management**. Planning and control techniques. 4<sup>th</sup> Edition. Burke Publishing. Cape Town, South Africa.

Cloete, J.J.N. 1994. **Public Administration and Management New Constitutional Dispensation**. J.L. Van Schaik. Pretoria.

Cresswell, J.W. 1994. Research Design: Qualitative and Quantitative Approaches. London: Sage

DOA (Department of Agriculture). 17 July 2002. **The Integrated Food Security Strategy for South Africa**. Pretoria.

Du Plessis, C., Lundy, J. and Swanepoel, 2000 P. **Manual for Sustainable Neighbourhood Development**. Department of Environmental Affairs and Tourism Pretoria, South Africa.

Elliot, J.A. 1994. **Introduction to sustainable Development**. The developing world. Routledge. London.

FAO (Food and Agricultural Organisation), (2002) **Challenges and opportunities for the World Summit on Sustainable Development: FAO'S Perspective**. World Summit on Sustainable Development. Johannesburg. 26 August – 4 September 2002.

Feenstra G. 1997. **Sustainable Agriculture Research and Education Program**, University of California, Davis, California. Retrieved 13-09-2006, from <http://www.sarep.ucdavis.edu/concept.htm>

Fowler, T. (MEC). (2003). **Address by MEC Trevor Fowler on the tabling of Development Planning and Local Government Departmental (DPLG) Budget vote to the Gauteng Legislature) issued by: Department of Development Planning and Local Government, Gauteng Provincial Government**. Retrieved 3 June 2003, from <http://organicgardening-review.com/articles/Community-Organic-Gardens.html>.

Gauteng News. (March 2006). **Agriculture to boost jobs**. Newsletter of the Gauteng Provincial Government. South Africa.

GDACE 1 (Gauteng Department of Agriculture, Conservation and Environment 1). **Directorate of Agriculture**. (26-07-2006). [www.gdace.gov.gpg.za](http://www.gdace.gov.gpg.za). South Africa.

GDACE 2 (Gauteng Department of Agriculture, Conservation and Environment 2). **Criteria for Establishing CFG**. Retrieved 27-07-2006, from <http://www.gdace.gov.za/html/BudgetSpeech.htm>. South Africa

GDACE 3 (Gauteng Department of Agriculture, Conservation and Environment 3). **Criteria for Establishing CFG**. Retrieved 10-09-2006, from [www.gdace.gov.za](http://www.gdace.gov.za). South Africa

GPG 1 (Gauteng Provincial Government 1). 2005. **Women's Directory**. A handbook for Services provided to women by the Gauteng Provincial Government. Office of the Premier: Gauteng Province. South Africa.

GPG 2. (Gauteng Provincial Government 2). 2006. **A cooperative Development Policy for Gauteng Province**. Retrieved 20-09- 2006, from [www.gpg.gov.za](http://www.gpg.gov.za). RSA.

GPG 3 (Gauteng Provincial Government 3). 20-09-2006. **Rate of poverty in Gauteng**. Retrieved 2006, from [www.gpg.gov.za](http://www.gpg.gov.za).

Hlongwane, M. 31 May 2006. **State of the District Address**. Executive Mayor of Sedibeng District Municipality. Vereeniging Civic Theatre.

Holt-Gimenez, E. Winter/ Spring 2006 **Backgrounde.r** Movimiento Campesino a Campesino: Linking Sustainable Agriculture and Social Change. Food first. Volume 12, Number 1.

IISD (International Institute for Sustainable Development). **Sustainable Agriculture and Rural Development...Concept**. Retrieved: 13/09/2006, from <http://www.iisd.org/ic/info/ss9507.htm>)

Kroukamp, H. October 2005. **Partnership in Local Government to improve service delivery in South Africa**. Journal of Public Administration Conference Proceedings.

Lindeque, R.C. 2003. **Integrated Environmental Management (IEM) In South Africa: A Critical Assessment (Mini-Dissertation)**. North West University. Potchefstroom.

Mannis, (1995-2002) **Indicators of Sustainable Development**. Retrieved: 13-09-2006, from <http://www.ess.co.at/GAIA/Reports/indics.html>.

May, J. 1998. **Poverty and Inequality in South Africa**. Report prepared for the Office of the Executive Deputy President and the Inter-Ministerial Committee for Poverty and Inequality Summary Report. 13 May, 1998. South Africa.

McMillan, J.H. and Schumacher, S. 1997. **Research in Education: A conceptual introduction**. New York: Harper Collins College.

NASA (2006) **Sustainable Development Indicators**. Retrieved: 13/09/2006, from <http://www.hq.nasa.gov/iwgsdi/Welcome.html>.

Ndashe, N. **Sezeni Food Garden Project**, Workshop on urban micro and HIV-AIDS, Johannesburg- Cape Town, South Africa 15-26 August 2005. Art of living Foundation. South Africa.

Nduli, N. (April 1995). **Strategic framework for Agricultural Technology Thrust**. A report of the BATAT Technology design team for broadening access to Agricultural Thrust. <http://www.nda.agric.za/docs/batat/tech.htm>. 07-07-2006.

Niland, J. 1995. **The food gardens foundations**. Food gardens in South Africa, City Farmer. Canadian Office of Urban Agriculture. Africa.

Olivier, E. 2004. **An approach to sustainable development in Ekurhuleni: The role of sustainable management tools (Mini Dissertation)**. North West University. Potchefstroom.

Pearce, D., Barbier, E. and Markandya, A. 1994. **Sustainable Development**. Economics and Environment in the Third World. Edward Elgar Publishing Company. England.

Phelan C. 2005. **Organic Gardening Review**. Organic gardening tips, techniques and resources to encourage self-sufficiency and sustainability. Community Supported

Rabali, H. 2005. **The role of Multi-Purpose Community Centre (MPPC) service and information providers towards improving quality of community life- A case of Sebokeng (Mini Dissertation)**. Potchefstroom: North West University.

Rubin, J. and Rubin, S. 1995. **Qualitative interview: The art of hearing data**. London: Sage.

SAGI (South African Government Information). 2006. **Agriculture and land Affairs**. Retrieved 4-10-2006 from <http://www.info.gov.za/aboutsa/agricland.htm>.

SASIX. (May 2004). **Increasing Household Food Production for Improved Nutrition and Health**. <http://www.sasix.co.za/projects/view/FS-FSMAY-0004/> . 3-08-2006.

SASIX (South African Investment Exchange) 3 August 2006. **Boosting Household food Production for Consumption and income generation**. South Africa.

Sedibeng 1 (Sedibeng District Municipality 1). **Historical Background**. Retrieved 7-26-2006, from [www.sedibeng.gov.za](http://www.sedibeng.gov.za).

Sedibeng 2 (Sedibeng District Municipality 2). **Mayor Announces Growth and Development Strategic Process**. Retrieved 25-10-2006, from <http://www.sedibeng.gov.za/developmentalgrowthstory.htm>. Johannesburg.

Sindane, AM. September 2006. **Public Service values and ethics for improving, implementation and accelerating delivery**. Journal of Public Administration. Conference proceedings.

Stoesz, D. Guzzetta, C., Lusk, M. (1999), **International Development**. Allyn & Bacon, United States of Africa.

Sustainable Development, (2005) **Sustainable Development: What is a sustainable community?** Retrieved 24/07/2006, from <http://www.sustainable-development.gov.uk/advice/local/index.htm>.

Sustainable Measures, (2006) **Organising indicators**, Retrieved 13/09/2006, from <http://www.sustainablemeasures.com/Indicators/Organize.html>.

UNDP (United Nations Development Programme), 2003. **Development Report 2003**. Retrieved 24-09-2006, from <http://www.undp.org.za/NHDR2003.htm>.

Van der Merwe, I. & Van der Merwe, J. 1999. **Sustainable Development at local Level**. An introduction to local Agenda 21- a South African version. Pretoria: Department of Environmental Affairs and Tourism

Van Der Waldt, H. 2006. **Applied Project Management**. Study guide for MPGA 815 ET, Faculty of Arts NWU, Potchefstroom.

Van Wyk, W.J. (Prof). 2004. **Development Economics for Public Management**. Study Guide for DOBA 712 ET. Faculty of Arts. North West University. South Africa.

Wikipedia, 11-10-2006, **Urban Agriculture**, the free encyclopedia. Retrieved 11-10-2006, from [http://en.wikipedia.org/wiki/urban\\_agriculture](http://en.wikipedia.org/wiki/urban_agriculture)

Wikipedia. 13 - 09 - 2006. **Sustainable Agriculture**. Retrieved 13 - 09 - 2006, from <http://en.wikipedia.org/wiki/sustainableagriculture>

Wikipedia. 28 - 8 - 2006. **Community supported agriculture**. Retrieved 28 - 08 - 2006, from <http://en.wikipedia.org/wiki/Community-supported-agriculture>.

# APPENDIX 1

## COMMUNITY QUESTIONNAIRE IN SEDIBENG DISTRICT MUNICIPALITY

**Topic:** Community food gardens as a tool to promote sustainable development in Sedibeng District Municipality

**Name of interviewer:** Mrs Loraine Boitumelo Mzini (Student)  
**Institution:** North West University  
**Year:** 2006

### Section A Profile of respondent:

1. Name of the Project?  
.....

2. What is the name of your municipality?  
.....

3. How long have you started and how many members are in your group?  
.....

4. You have males ..... and females..... in your project.

5. Do you have disabled members? Yes..... No.....  
If yes, how many.....?

6. Age range:

18-24	25-31	32-37	38-44	45-52	53-58	59-65	66 and older

7. How many members are employed ..... and unemployed .....?

8. What is your highest level of education?

Form three/Standard six	Matric	Adult basic education (ABET)	Tertiary (university, technikon or technical college)	Other

**Section B  
Resources:**

**9. Are you currently practicing agriculture?**

.....

**10. Where do you practice your agriculture? Please tick.**

House/ yard/ plot	Church	School	Clinic	Vacant land	Government land (municipality/provincial or national)

**11. Do you have authority to use these premises?**

.....

**12. How did you obtain the premise? Please tick.**

Own/ Inherited	Title deed	Rent	Community usage	Purchased/ bought	Other

**13. What is the size of your area?**

.....

**14. Do you use tools to practice agriculture?**

Yes .....

No .....

**15. Which tools do you use?**

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

**16. How did you obtain these tools? Please tick.**

Buy	Sponsor	Own contribution	Rent	Borrow

**17. Where do you obtain water and how?**

.....  
 .....

**Risks:**

18. Is your place secured?

.....

19. If yes, how?

.....

20. If no, how do you ensure that the tools are kept safe?

.....

**Production:**

21. (a) Which type of agriculture are you interested in practicing? Please tick.

Vegetables		Fruit	
poultry		Flowers	

(b) If so, which type of agriculture?

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

22. Is your group registered as a legal entity?

Yes .....

No .....

**Section C**

**Methods of agriculture:**

23. (a) Which method do you use for your agricultural practice?

.....

(b) Is it cheaper ..... or  
expensive?.....

(c) Is it effective, please clarify?

.....

**Management plan of your project:**

24.(a) Is your aim to produce crops for:

Home consumption	
Income generation	
Both	
Donate or feed the poor	

(b) Will you divide any income which will result from production?

.....

**(c) Are you prepared to contribute financially towards the project through your stokvel/ savings?**

.....

**(d) Can a member be expelled from the projects, and if so, on which grounds?**

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

**(e) How will replacement be selected?**

.....  
.....

**(f) How and where will you market your produce?**

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

**25. (a) Do you receive any sponsorship?**

Yes.....

No .....

**(b) What did you receive?**

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

**Communication:**

**26. Do you have a leader in your group?**

.....

**27. When do you hold meetings?**

.....

**28. Do receive invitations from the Government, NGOs and other institution?**

.....

**29. Please specify the types of invitations that you attend?**

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

**30. Does your group benefit from meetings attended?**

.....

**Future of the project:**

**31. What is your project future plan?**

.....  
.....

**32. (a) Do you think your future generations will be able to use the land that you use currently?**

**(b) If yes, how?**

.....  
.....

**(c) If no, what is the solution?**

.....  
.....

**Thank you for your responses**

**Have a nice day!!!**

## APPENDIX 2

### INSTITUTIONAL/ GOVERNMENT/ NGOs QUESTIONNAIRE FOR SEDIBENG DISTRICT MUNICIPALITY

**Topic:** Community food gardens as a tool to promote sustainable development in Sedibeng District Municipality

**Name of interviewer:** Mrs Loraine Boitumelo Mzini (Student)  
**Institution:** North West University  
**Year:** 2006

#### Section A

##### Institutions profile:

##### Scope of projects:

1. Are you involved in community food projects?  
.....

2. When was the first project initiated?  
.....

3. How many community food projects are established in Sedibeng District Municipality, please provide data per local authority below;

Emfuleni	Lesedi	Mid Vaal

#### Section B

##### Intergration:

4. (a) Does your department work with the other institutions in Gauteng with regard to community food gardens?  
.....

Please tick the relevant institutions below?

National departments	Provincial departments	Municipality	NGOs	

**(b) Who are the beneficiaries towards the establishment of community food gardens?**

.....

**Management of the project:**

**5. How do you manage the community food gardens established?**

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

**6. Do you provide training to the community?**

.....

**Sponsorship:**

**7. Do you provide sponsorship to the projects?**

.....

**Communication:**

**8. How do you communicate with the projects, how many times do you visit the each project per year??**

.....

**9. Does your department host sessions/ meetings with the community?**

.....

**10. What methods do you use to communicate and invite the community to the events that you host?**

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

**Risk Management:**

**11. Projects are associated with risks, have you encountered problems in established projects, how do you manage risks with regard to CFG?**

.....  
.....

**Human resource:**

**12. Who is responsible for managing the established projects?**

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

**Sustainable development:**

**13. Do you think community food gardens serve as tool for promoting sustainable development?**

**If yes, please explain.....**

.....  
.....

**If no, please explain.....**

.....

**14. Which methods do you think it is best for maintaining community food gardens (e.g. organic methods, and others)?**

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

**Thank you for your co-operation**

**Have a nice day!!!**