



**The Implementation of Two Garden Projects within a Community Gardening
Programme: Successes and Challenges**

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EXECUTIVE SUMMARY

This study is a process and short-term outcome evaluation of two garden projects within a community gardening programme. The Abalimi community gardening programme supports individuals and community groups in the Cape Flats to develop and maintain garden projects, which produce vegetables. The goal of the Abalimi community gardening programme is to address the problems of hunger, household food insecurity, malnutrition, and poverty which are affecting the poor in the informal settlements of the Cape Flats. Five evaluation questions about service utilisation (coverage), service delivery (process) and programme outcomes (impact) were used as a framework for the evaluation. These are:

- ✓ Do the garden projects attract the intended beneficiaries? (Coverage)
- ✓ Are services offered by Abalimi perceived as adequate by Fezeka and SCAGA gardeners? (Process)
- ✓ Are the activities of Fezeka and SCAGA gardeners adequate for achieving the outcomes of the programme? (Process)
- ✓ What is working and not working as expected in the implementation of the garden projects? (Process)
- ✓ What are the achievements of the garden projects from the gardeners' perspective? (Impact)

For the purposes of the study, five data sources/providers were used. These included programme records, the Fezeka and SCAGA gardeners, extension field officers, Abalimi management, and a garden centre field worker. Data collection methods included participant observation, face-face interviews, and focus group discussions. Additional materials included a checklist that was developed for the gardeners to evaluate the programme. The qualitative data was analysed thematically. The findings of the study showed that basic gardening training was provided to all the gardeners and it was highly regarded, appreciated and has

contributed significantly to the promotion of gardening among the untrained people. However, regular and consistent gardening advice, training, and extension were identified as critical needs in the garden projects since new initiatives are being introduced in the programme. The Fezeka and SCAGA gardeners indicated their concern about the implementation of their garden projects in terms of, decision making on the type of vegetables to grow, the formulation of the income invoice, low returns obtained from Harvest of Hope sales, and lack of organic pesticides, among other things. The gardeners indicated that as a result of their participation in the garden projects, they have managed to reduce hunger in their homes, they and their families eat more healthily (i.e. better nutrition), they save on household food purchases, and although too small, they earn some income. The findings of the study suggest that the garden projects have been instrumental in reducing hunger, promoting healthy eating, and nutrition. However, income generation and poverty alleviation seems not to be achievable in the context of garden projects.

CHAPTER ONE

INTRODUCTION

This study aims to evaluate the implementation of Fezeka and SCAGA garden projects within the Abalimi Bezekhaya (Abalimi) community gardening programme based in the Cape Flats in Cape Town. The study consists of a process and a short-term outcome evaluation of the two garden projects.

The community gardening movement became popular in Western countries in the 20th century, during both world wars. The main aim of establishing community gardens was to supplement food supplies in response to food shortages (Kingsley & Townsend, 2006; Lautenschlager & Smith, 2007). Since then, community gardens have spread worldwide both in rural and urban areas. Depending on local needs and circumstances, community gardens differ in what they offer to the communities. Some offer open space, greenery and flowers, while some offer vegetables and fruits (Ferris, Norman, & Sempik, 2001).

A community garden means many things to many people. For some, it is a place to grow food, flowers and herbs in the company of friends and neighbours while for others, it is a place to reconnect with nature or get physical exercise (McKelvey, 2009). Holland (2004) defines a community garden as a green space managed (and may be developed) by a neighbourhood community in which agricultural activities take place. Common characteristics from different definitions of a community garden include the fact that it is owned and operated by more than one person within a community for a specific purpose of gardening. Ferris et al. (2001) noted that a community garden differs from a private garden in terms of ownership, access, and degree of democratic control.

Programme description

The Abalimi community gardening programme supports individuals and community groups in the Cape Flats to develop and maintain garden projects which produce vegetables. Abalimi is a non-governmental organisation which was started in 1983 by the Catholic Welfare and Development in order to help poor communities to alleviate the problem of malnutrition through vegetable gardening (Karaan & Mohamed, 1998). Originally, Abalimi was called "Farming in the City", and the name was changed to Abalimi in 1990. Abalimi started the community gardening programme in order to assist individuals and community based groups to initiate and maintain organic food growing projects as the basis for poverty alleviation.

Abalimi has two garden centres which supply inputs to the gardeners, serve as training venues as well as demonstration gardens. Abalimi also owns a packing shed where the vegetables are packed, and administrative offices, both located in Philippi. The different garden projects that are supported by Abalimi are located all over the Cape Flats.

As mentioned earlier, this process and short-term outcome evaluation is based on two garden projects within the Abalimi community gardening programme, namely Fezeka and SCAGA. Fezeka garden project is located in Gugulethu Township. It was started in 1999 but Abalimi started supporting it in 2002. Fezeka garden project has six members, five women and one man. The area of the garden is 5 000 square metres. SCAGA was the first garden project to be supported by Abalimi. It was started in 1997 in Macassar, Khayelitsha Township. It is sited on a 5 000 square metres area which was previously under power lines. SCAGA garden project has nine members who are women only.

Both Fezeka and SCAGA garden projects are divided into two sections. One section is for individual plots where the gardeners produce vegetables for their own consumption and sales. The other section is owned by all gardeners and is specifically for contract farming to Harvest of Hope, a branch of Abalimi which is responsible for marketing vegetables that are produced from the garden projects.

Overall goal of Abalimi community gardening programme.

The goal of the Abalimi community gardening programme is to address the problems of hunger, household food insecurity and poverty which are affecting the poor in the informal settlements of the Cape Flats. The objectives of the programme are to:

- ✓ develop skills through training; and
- ✓ support people and organisations who wish to practice organic horticulture and micro farming.

Target group of the programme.

According to Abalimi, its target population is the poor, unemployed semi-literate or illiterate and disadvantaged families living in the informal settlements known as townships which are located in the Northeast of Cape Town. Most of these people live in shacks and matchbox houses, are Xhosa speaking (originally from the Eastern Cape), depend on social grants as a source of income, and are women-headed families. Abalimi emphasises that in addition to all these characteristics, it targets people who seek solutions to poverty and inequality in their own personal lives. The areas in the Cape Flats that are targeted by the programme include Khayelitsha, Nyanga, Gugulethu, Philippi, and Crossroads. The target areas of the programme are indicated by the circled area on the map in Figure 1.

and Khayelitsha garden centres where gardeners buy inputs at a lower cost. The garden centres also provide Abalimi members with advice and agriculture information.

Training the gardeners.

Training is also a major intervention of Abalimi. It trains gardeners each year through a four-day basic organic vegetable growing course. Abalimi's two garden centres serve as training venues and demonstration gardens where gardeners learn how to promote appropriate organic gardening. The training course enables the participants to start their own food gardens. Certificates are offered after completion of the training course. The four-day courses are followed up with additional on-site training and support by the programme extension field officers. Besides the basic training course, Abalimi facilitates the participation of willing gardeners in accredited advanced courses like AgriPlanner and Master Farmer which are offered by the South African Institute of Entrepreneurs.

Fixing and maintaining infrastructure.

Abalimi also supports the community gardeners with maintenance and fixing of infrastructure such as fences, storerooms, and boreholes.

Programme theory

A programme theory is a set of assumptions about how the programme relates to the social benefits it is expected to produce and the strategy and tactics the programme have adopted to achieve its goals and objectives (Rossi, Lipsey, & Freeman, 2004). Programme theories differ in their complexity. According to Donaldson (2007) the simplest form of a programme theory is called a parsimonious programme theory, which focus on the "main active ingredients" that

are presumed to lead to the desired outcomes of the programme. The “main active ingredients” of the Abalimi community gardening programme are shown on the programme theory in Figure 2.

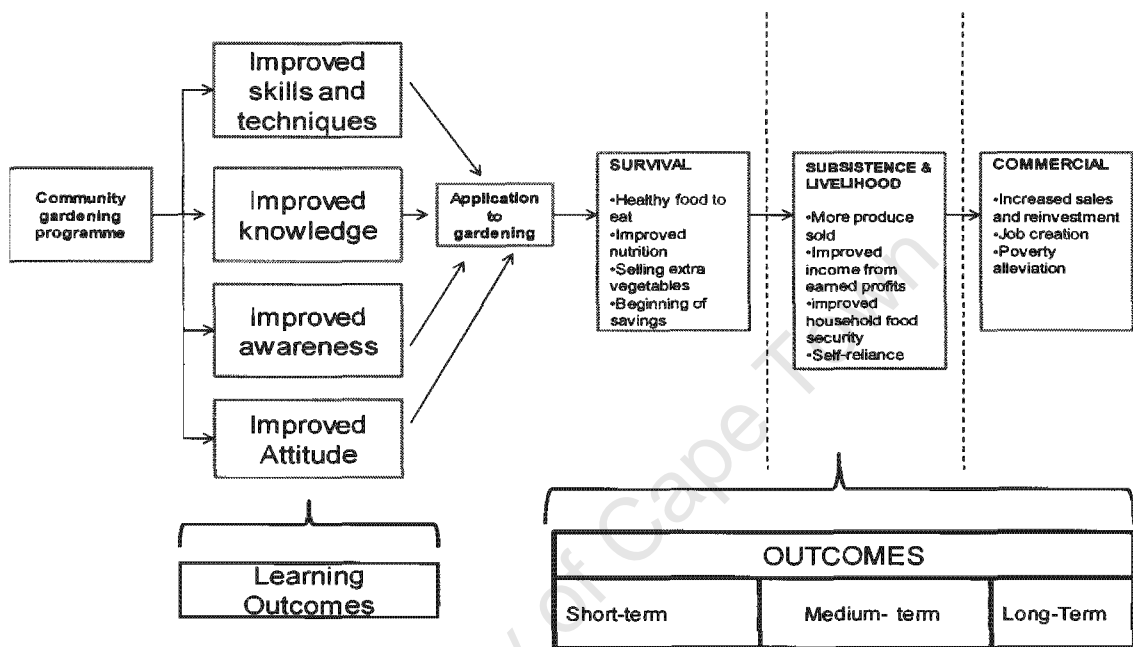


Figure 2. Programme theory for Abalimi community gardening programme

The descriptive assumption or the underlying logic of the programme is that the intervention through its activities, will lead to improved skills, techniques, knowledge, awareness, and attitude of the gardeners. These are applied to gardening in order to in turn lead to short, medium and long-term outcomes. In the short-term, the gardeners produce vegetables in their garden projects which result in improved nutrition, healthy food to eat, sales of extra produce to earn extra cash and savings are started (survival phase). In the medium term, more vegetables are produced thereby enabling improved household food security, self-reliance and

income generation (subsistence and livelihood phase). The long term-outcome is where the gardeners sell all their produce and, sales and reinvestment increase (commercial phase). The ultimate outcome is poverty alleviation. This constitutes the causal theory underlying the intervention or in evaluation terms, the cause and effect sequence (Rossi et al., 2004).

Plausibility of the programme theory

Donaldson (2007) argues that there is need to examine the plausibility of the links in the programme theory of any programme through reviewing prior research and relevant evaluations. A plausible programme theory is useful for understanding how a programme can intervene in an accurately diagnosed social problem. To test the plausibility of a programme theory, one can compare it to the findings from research and practice, or examine evaluations of programmes based on similar concepts and evaluations of very similar programmes (Rossi et al., 2004). Relevant literature was used to test whether Abalimi community gardening programme theory is plausible or not. The literature review is discussed under different headings.

Is there poverty and malnutrition in South African urban informal settlements?

As stated before, informal settlements refer to townships. A number of studies have found that poverty and malnutrition are still prevalent in most developing countries. The global hunger index, a tool for regularly tracking the state of global hunger and malnutrition reported that Sub-Saharan Africa (SSA) and South Asia has high levels of hunger and malnutrition and progress towards food insecurity reduction have been low since 1990 (Von Grebmer, Fritschel, Nestorova, Olofinbiyi, Pandya-Lorch, & Yohannes, 2008). According to the Food and

Agricultural Organisation (2005) the number of malnourished people in SSA grew from 170.4 million 10 years ago to 203.5 million in 2000-2002. Apparently most affected people are female-headed households and children (Labadarios, 2005; Motlounge & Mears, 2002; Von Grebmer et al., 2008).

A study by Rutengwe (2004) indicated that households in South African informal settlements are facing major problems of chronic food insecurity, malnutrition, and income poverty. Mubangizi (2008) also confirms that half of South African people are poor and there are vast and growing levels of poverty in the country. Despite the fact that South Africa is categorized as a middle-income country, it is an extremely unequal society where there is a disparity between the poor and the rich. The main cause of poverty in South Africa is the high unemployment rates and the rural urban migration which has grown rapidly in the past 20 years (Motlounge & Mears, 2002). This has led to rapid population growth in the South Africa cities. Studies carried out in the Vaal Triangle informal settlements (Oldewage-Theron, Dicks, & Napier, 2006) and Khayelitsha in the Cape Flats (Reuther & Dewar, 2005) have confirmed that poverty, malnutrition, and household food insecurity are the major observed problems in these communities. Approximately half of the Khayelitsha residents live in poverty. In addition, varying degrees of poverty and starvation have been reported as major problems in the Cape flats by Bourne (2007).

However, Oldewage-Theron et al. (2006) argue that the prevalence of malnutrition in South Africa is not clearly defined because of the absence of a national nutrition surveillance programme. Due to the lack of a national system to track malnutrition, the only data that is available on malnutrition issues still consist of single fragmented surveys that were undertaken among isolated groups.

This section supports the claim that poverty and malnutrition are prevalent in South African cities and informal settlements.

Why garden projects?

Different communities develop garden projects in order to provide solutions to different problems and for different purposes. Many garden projects have been developed as a response to issues such as poverty, social exclusion, environmental degradation, and lack of local recreation facilities (Holland, 2004). Ferris et al. (2001) note that community gardens are an international phenomenon and are widely recognized as a way of improving local food supplies.

According to Saldivar-Tanaka and Krasny (2004) earlier community gardening movements focused primarily on food production whereas the more recent community gardening movements incorporate aspects of community development and open space in addition to agriculture. As noted by Moller (2005) there are a number of motivations for gardening and some of them include the following:

- ✓ to utilise idle natural resources and avoid waste;
- ✓ to alleviate poverty and help low-income people to survive and save money; and
- ✓ for a healthy living through production of fresh, nutritious and quality produce that is good for one's health and fitness.

In South Africa, urban agriculture has been promoted in the post-apartheid era as a strategy for poverty alleviation (Thornton, 2008). A performance assessment of the Abalimi gardening programme that was carried out by Karaan and Mohamed (1998) and a study on SCAGA community garden by Reuther and Dewar (2005),

showed that a number of programme participants started gardening as a survival strategy to supplement real income, to achieve food security, to save on food budgets, and to generate income. In 2007, Bourne studied three Abalimi supported garden projects, namely Fezeka in Gugulethu (under investigation in this study), Masibambane in Philippi, and Masithandane in Gugulethu. Respondents from Bourne's study indicated that extreme poverty and starvation were the main push factors that led them to join the community gardening programme.

Although garden projects are developed for different purposes depending on the community's local needs, the common reasons for their establishment are poverty alleviation, community development, and provision of recreational facilities. The Abalimi community gardening programme anticipates and targets outcomes such as poverty alleviation, and reduction of malnutrition and household food insecurity. Poverty alleviation includes other outcomes such as income generation, self-help job creation, and self-reliance. The major outcomes and achievements from community gardens will be discussed in the next section.

Do garden projects lead to the alleviation of poverty and malnutrition?

Potential exists for garden projects to help Southern African cities to reduce poverty and malnutrition (Drescher, 2001). Community garden projects reduce poverty by creating jobs and small-scale businesses (Saldivar-Tanaka et al., 2004). It also helps low-income consumers to supplement their diets with home-grown produce (Kantor, 2001). According to Von Grebmer et al. (2008) there is need for undertaking of fast-impact food production programmes, like garden projects as action against hunger and poverty. By growing their own food, gardeners can considerably reduce their food bills and gain access to food that has high micronutrients and protein (Saldivar-Tanaka et al., 2004). Garden projects are a way for gardeners to improve their household access to fresh and

nutritious produce (Kantor, 2001). Although garden produce alone cannot reduce hunger, the consumption of vegetables can contribute towards reduction of nutrient deficiencies associated with malnutrition (Oldewage et al., 2006).

Although Oldewage et al. (2006) and Reuther and Dewar (2005) argue that gardening projects cannot be the sole solution to hunger and poverty, they agree that garden projects should be considered as one of the many possible ways to alleviate hunger and poverty. This same idea was supported by Nell, Wessels, Mokoka, and Machedi (2000) who noted that food garden projects are only one of the many interventions for dealing with poverty and malnutrition. According to Reuther and Dewar, the fact that a significant number of garden projects have been established on the Cape Flats indicates that some of the people in those poor communities do consider them to be worthwhile. This is mainly because they are gaining both direct and indirect benefits from these gardens.

In the light of the evidence in related literature, most garden projects are developed to respond to poverty and malnutrition. As a result, what Abalimi is doing can be viewed as a valid and reasonable action. If garden projects managed to alleviate poverty and respond to conditions of hunger and poverty among the poor communities in Germany, Britain and Kenya (Drescher, 2001; Mubangizi, 2008; Smit & Bailkey, 2006), then they can also manage to alleviate poverty and malnutrition in South African cities given the necessary support such as provided to gardeners by Abalimi.

Besides poverty alleviation and reduction of malnutrition, there are other outcomes that result from community gardens. According to Assadourian (2003) even the smallest garden can have a powerful effect on people, communities and the environment. Some of these outcomes include:

- ✓ reduced vulnerability (Department of International Development (DFID), 1999);

- ✓ enhancement of environmental awareness and appreciation (Lautenschlager & Smith, 2007);
- ✓ preservation and conservation of nature (Saldivar-Tanaka et al., 2004);
- ✓ beautification of the neighbourhoods (Nell et al., 2000) and greening the urban environment (Bourne, 2007);
- ✓ social responsibility (Assadourian, 2003); and
- ✓ enhancement of community social capital (Kingsley & Townsend, 2006; Smit & Bailkey, 2006).

Implementation issues of community gardening programmes

On another note, for community gardening programmes to achieve their intended outcomes, a number of studies have recommended that they should be supported through incentives such as free inputs and credit (Moller, 2005; Von Grebmer et al., 2008). Also for community gardens to inform development, progress and outcomes of sustainability, they have to meet the requirements of Local Agenda 21 (LA21), which was established as a blueprint for sustainability by the Earth Summit. The Earth Summit of 1992, with its Agenda 21 and LA 21 has a set of policies that aims to create the means to facilitate local sustainability which is important for communities and community development (Holland, 2004).

Stocker and Barnett (1998) developed a sustainability model for community gardening programmes. The model is characterised by promotion of physical and ecological sustainability by growing food, social sustainability by community interaction, and economic sustainability by the use of gardens for training, research and skills development. If this model is linked to the LA 21 requirements, this may contribute to the understanding of local sustainability of community gardening programmes (Holland, 2004; Ferris et al., 2001).

Models that suggest outcomes from gardening projects

There are a number of useful models that suggest outcomes from community development programmes such as garden projects. These are:

Sustainable livelihoods framework.

To assess the outcomes of programmes, some scholars use the sustainable livelihoods framework. According to DFID (1999) some of the expected livelihood outcomes include more income, increased well being, reduced vulnerability, improved food security, and more sustainable use of the environment. However, there are problems with the sustainable livelihood outcome measures. Some of them are:

- ✓ livelihood outcomes are not necessarily coherent, and are certainly incommensurable and difficult to translate into monitorable indicators. For example, it is hard to weigh up the relative value of increased well-being as opposed to increased income.
- ✓ there may also be conflict between livelihood outcomes. An obvious example is when increased income for particular groups is achieved through practices that are detrimental to the natural resource base or else different members prioritize different livelihood objectives – some seek to reduce vulnerability, while others seek to maximize income streams (DFID, 1999).

Community social capital model.

Another way of looking at the outcomes of community garden projects is from the community social capital point of view. Social capital is defined as features of social organizations, such as networks, norms and trust that facilitate actions of cooperation for mutual benefit (Kingsley & Townsend, 2006). The growing urban

social connectedness and generation of social capital through building and manipulation of social networks and interaction have been greatly attributed to garden projects since they offer opportunities to build social capital (Kingsley & Townsend, 2006; Smit & Bailkey, 2006). This is because garden projects offer opportunities where people can gather, network, and identify together as residents of a neighbourhood. Besides, gardens serve as inexpensive places to gather and socialise.

According to Smit and Bailkey (2006) for community-based urban agricultural activities to be beneficial to the communities, they should provide seven dimensions of community capital. These include:

- ✓ human capital (the health, education, and skills of the individuals involved);
- ✓ social capital (the strength of groups, networks, the common vision among their members, and the creation of bridging networks across different groups);
- ✓ political capital (the dynamics of group organisation and leadership, and relations with government and supporting agencies);
- ✓ cultural capital (the values and heritage of the community, and their celebration);
- ✓ economic capital (the investments, savings, contracts, and grants);
- ✓ built capital (the physical settings - land, housing, other buildings, and infrastructure); and
- ✓ natural capital (the local air, land, water, biodiversity, and scenery).

These dimensions are useful for the programme planning and evaluation, and at the same time, essential to identify each of these dimensions when conceiving, designing, and implementing community building projects like garden projects

(Smit & Bailkey, 2006). Establishing indicators for each of the seven dimensions can define the outcomes of the garden projects.

The community partnership development model.

The community partnership development model states that garden projects affect and link up directly with four major essential issues and cornerstones of community development; health, education and training, economic development and, job creation (Nell et al., 2000; Drescher, 2001). In addition, the establishment of garden projects requires the availability of natural and financial resources. In poor communities, support through development aid from other institutions, government departments, and municipalities might be necessary. The community partnership development model was used as a theoretical framework for this study. It is shown in Figure 3.

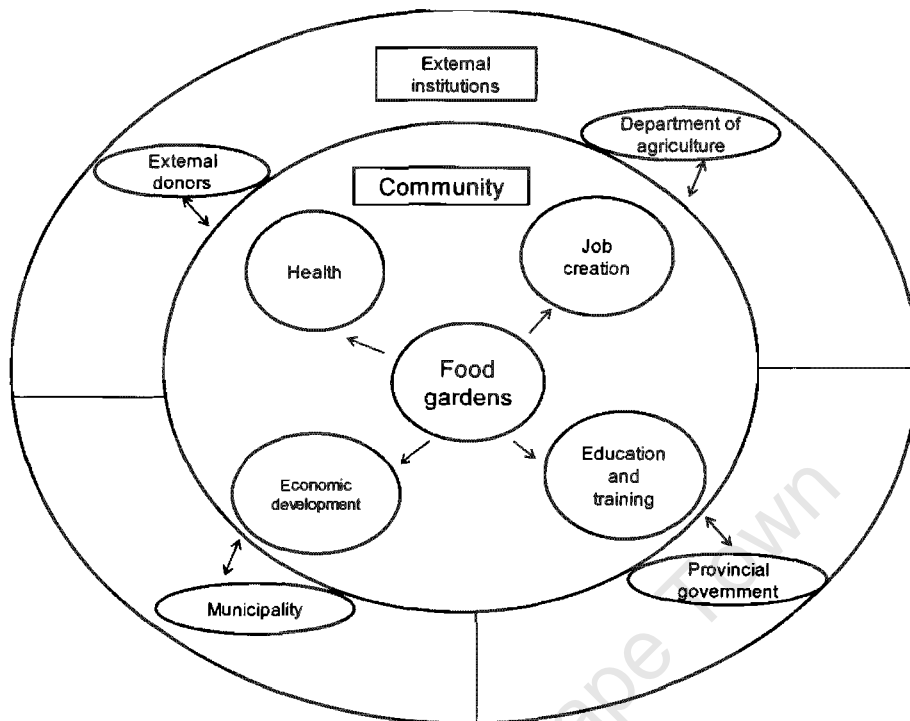


Figure 3. The community partnership development model. Adapted from "A creative multidisciplinary approach towards the development of food gardening," by W. Nell, B. Wessels, J. Mokoka, & S. Machedi, 2000. *Development Southern Africa*, 17(5), 807-819.

Food garden projects can achieve community development through their direct effects on health, job creation, economic development, and education and training. As stated earlier, garden projects enhance physical activity, and at the same time promoting healthy living by providing fresh produce which is good for one's health and fitness (Moller, 2005; Twiss, Dickinson, Duma, Kleinman, Paulsen, & Rilveria, 2003). Advantages of these projects are that the gardeners can sell their surplus produce directly to people in the neighbourhood without looking for markets elsewhere. In addition, they assist those with financial limitations and inconvenient transport systems to access the gardens for food (Twiss et al., 2003). This creates interdependence within communities and as a result community ties are strengthened. Besides, some gardeners support the

less privileged in their communities, local schools and day care centres by donating food produced from their gardens, thus being responsible for their own community's development and promoting education (Assadourian, 2003). Economically, garden projects create jobs, encourage and promote training, entrepreneurship, and self-reliance, therefore empowering the gardeners (Smit & Bailkey, 2006).

Type of evaluation

Among the models discussed in the previous section, the community partnership development model was used to assess the outcomes of the garden projects. This is mainly because this model is the best existing model that was found to fit well with the projects being evaluated as depicted by the programme theory. The model explains how garden projects affect aspects of community development and shows the most important outcomes of food gardens which are relevant to the programme under investigation in this study.

Specifically, the study carried out a process evaluation to ascertain how well the Abalimi community gardening programme is operating in Fezeka and SCAGA garden projects. According to Rossi et al. (2004) process evaluation involves the assessments of programme performance in terms of service utilisation, service delivery and programme organisation. These three components allow a programme to be evaluated in terms of:

- ✓ Service utilisation (coverage): Who uses the programme? Are they the intended beneficiaries?
- ✓ Service delivery (process): How is the programme implemented? What are the programme activities?
- ✓ Support /organisational functions (resources): How is the programme resourced?

The scope of this study is limited only to the coverage and process components. Process evaluation serves the purpose of enhancing programme accountability by documenting programme activities and efforts, providing objective evidence that a programme is being delivered as planned, and helping senior management and policy analysts to make informed decisions about programme process and policy direction (Love, 2004). According to the World Health Organisation (WHO) (2000) the main reasons for process evaluation are:

- ✓ Accountability: Is the programme achieving what it is expected to achieve?
- ✓ Programme development and improvement: How can the programme be improved?
- ✓ Provision of assistance to others to set up similar services: How can the programme be expanded to other areas or the services be replicated in other areas?

Process evaluation is an important evaluation in its own right, but can also serve as an important complement for outcome evaluation (Patton, 1997). This is the approach that was used in this study. As argued by Rossi et al. (2004) information about programme outcomes is incomplete and ambiguous without the knowledge of programme activities and implementation. Thus process and outcome evaluation complement each other. Therefore in addition to the process evaluation, this study carried out a preliminary evaluation of proximal or short-term outcomes of two garden projects supported by the community gardening programme. While process evaluation is about the implementation, outcome evaluation is about the benefits/ effects (intended or not) of the programme (Bliss & Emshoff, 2002). Outcome evaluation asks whether the desired outcomes were attained and whether these changes included unintended side effects (Rossi et al., 2004). This study was not concerned only with the implementation of the garden projects, but also their outcomes, hence the combined process and outcome evaluation.

The evaluation served a formative purpose. It assisted in the assessment of community gardening efforts for the purpose of improving, enhancing and informing future practice of the garden projects (Patton, 1997; Nan, 2003).

Evaluation questions

To achieve the relevant results of this study, the following evaluation questions were used as a framework for the evaluation. The research questions for the gardening projects were guided by available programme documents, a literature review on community gardens, and evaluation of other related programmes. The evaluation questions are listed on Table 1.

Table 1

Evaluation questions

Evaluation Aspect	Evaluation questions
Service utilisation (coverage)	-Do the garden projects attract the intended beneficiaries?
Service delivery (process)	<ul style="list-style-type: none"> - Are services offered by Abalimi perceived as adequate by Fezeka and SCAGA gardeners? - Are the activities of Fezeka and SCAGA gardeners adequate for achieving the outcomes of the programme? - What is working and not working as expected in the implementation of the garden projects?
Programme outcomes (impact)	- What are the achievements of the garden projects from the gardeners' perspective?

These evaluation questions are expected to provide a firm and full basis for the process and short-term outcome evaluation of the two garden projects, thereby adding value to the programme improvement and development.

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CHAPTER TWO

METHOD

A qualitative approach to data collection was undertaken to address the evaluation questions outlined earlier in the study.

Data sources/providers

Five data sources/providers were relied upon in this study. These were programme records, all Fezeka and SCAGA gardeners, extension field officers, Abalimi management, and a garden centre field worker. Table 2 shows these data providers.

Table 2

A summary of the data providers

Data provider	Category	Number interviewed
Gardeners	Fezeka garden	6
	SCAGA garden	9
Extension field officers	Fezeka garden	1
	SCAGA garden	1
Management	Resource mobilisation manager	1
	Operations manager	1
	Harvest of Hope manager	1
Garden centre field worker	Nyanga garden centre	1

The gardeners were the major data providers since much information about the programme was required from their experiences and perceptions about the garden projects. The selection of Fezeka and SCAGA community gardens for the study was based on their level of success. According to Abalimi, these two garden projects were among the successful garden projects that are supported by Abalimi. Although no attempts were made beforehand to check on their success status, and whether they are indeed at the level they are claimed to be, the study itself shed some light on this in the later chapters.

Six and nine gardeners drawn for the study were from Fezeka and SCAGA gardens respectively. The majority of them were women (14 women and one man). Most of the Fezeka gardeners were directly involved in the formation of their garden projects and have been gardening for ten years or more. They have much knowledge about the projects from when they started until now. However, most SCAGA gardeners joined the project years after its formation.

Besides the gardeners, Abalimi management and staff also played an important role as data providers. The resource mobilisation manager of the programme was directly involved in this study and was the main contact person who granted permission for the study to be done. The management was helpful in the development of the programme theory and provision of access to programme facilities, records, and resources. The operations manager, Harvest of Hope manager, two extension field officers, and one garden centre field worker were also consulted about their respective roles and how they deliver services to Fezeka and SCAGA gardeners.

Programme records like the Abalimi website, bi-annual newsletters, gardeners' register and informal reports held at the Abalimi office were used to provide data on the programme's background information, its support services, its beneficiaries, programme implementation, and service delivery. The records

were carefully examined and analysed in order to provide a range of data for review, analysis, and evaluation of the programme. The gardeners' register assisted with information about the participants that are supported by Abalimi. One advantage of using programme records for evaluation is that the data is readily available, thereby eliminating the need for new data collection efforts (Hatry, 2004).

Data collection procedure

Besides the use of programme records, three other data collection methods were used in this study: participant observation, interviews, and focus group discussions.

Participant observation

Participant observation is defined as a process whereby a researcher establishes a long-term relationship with individuals and groups in their natural setting, for the purposes of developing and understanding of those individuals and groups (Dawson, 2006). It is useful for gaining an understanding of the physical, social, cultural, and economic contexts in which the study participants live; the relationships among and between people, contexts, ideas, norms and events. It focuses on people's behaviour and activities - what they do, how they do it, how often, and with whom (Mack, Woodsong, MacQueen, Guest, & Namey, 2005).

The main positive aspects of participant observation are:

- ✓ it is least likely to lead researchers to impose their own reality on the social world;
- ✓ it seeks to understand action: as to how and why practices and relations change; and

- ✓ observers record their own experiences in order to understand the context and universe which their researched subjects occupy (Patton, 1997; Mack et al., 2005).

To understand the activities that the gardeners actually do in the garden projects and to observe the use of the garden by various groups, the researcher observed and participated in the gardeners' activities. The researcher visited the garden projects often and engaged in gardening activities together with the gardeners, interacted with them, and at the same time observed their activities from an insider perspective. Notes were taken on what was seen and observed from the garden projects and from the informal conversations and interaction with the gardeners. Not only were the activities of the gardeners observed, but also their appearance, verbal behaviour and interactions, physical behaviour, gestures and movement of people in and out of the gardens.

Participant observation was chosen for this study because it provided an understanding of the garden project context that can only come from personal experience. Besides, it facilitated and developed positive relationships between the researcher and the gardeners, management, and staff whose assistance and approval was needed for the success of the study. Above all, there is no substitute for participating and witnessing human interaction to get an insight from a personal point of view.

However, there are disadvantages of using participant observation as a data collection method. The main disadvantages are that it is time consuming and it may be difficult to write down everything that is important while you are participating and observing (Mack et al., 2005). As a result, more attention was paid in this study in order to carefully balance participation and observation at the same time.

Face-to-face interviews

Face-to-face interview is an in-depth conversation technique that is designed to elicit a vivid picture of the participant's perspective on the research topic. During the interview, a programme participant is considered as the expert and the researcher is considered the student (Mack et al., 2005). In this study, the community gardeners, management and the extension field officers were interviewed to get an in-depth understanding of the garden projects. A set of structured and semi-structured questions were used to facilitate the interviews.

All 15 gardeners from the two gardens (9 SCAGA gardeners and 6 Fezeka gardeners) were interviewed to elicit their views on the activities they do in the garden projects. Interviews were helpful in facilitating dialogue, which was essential in order to get the perceptions and views of the gardeners on how the projects benefit them, what is working and not working, if their needs are satisfied, and how the garden projects can be improved. This helped to explore more of the gardeners' views and perceptions about garden project activities and outcomes. Questions that were asked covered how the gardeners relate to their service providers, their demographics, perspectives, experiences, challenges, successes, and failures with regard to garden projects. The same set of questions was used for each respondent. Although the interviews were guided by structured questions, other important relevant information that arose during the interviews was also recorded. An interpreter was employed to facilitate the interviews with the gardeners at SCAGA garden project since most of them were illiterate or semi-illiterate and they could not understand and speak English. No interpreter was employed at Fezeka garden project since all the gardeners understood and speak English fluently.

The interviews with the gardeners were held in their respective gardens. The interviews typically lasted 25 to 30 minutes with each respondent. The researcher

visited each garden project to interview its gardeners. This provided the most convenient and conducive environment for the gardeners who needed not to travel in order to do the interview. The interview schedule was completed by the researcher as the respondents were giving answers to the questions throughout the interview sessions.

The interview schedule was pre-tested before the actual interview in order to check, find, and correct some errors that could have occurred during construction. This helped to enhance and rectify the questions so that they could suit the respondents they were directed to. Any ambiguity in the questions was therefore rectified during pre-testing.

The management (resource mobilisation manager, Harvest of Hope manager, and operations manager) was visited at their administrative offices to interview them. The interview with the programme management helped to confirm, clarify, and authenticate the information from the programme records. The interviews contributed to the development of the programme theory and helped to understand the challenges and key success factors to the implementation of the garden projects.

Interviews were chosen for this study because they yield the highest response rate than other forms of data collection and enable easy administration since participants will be in one place (Newcomer & Triplett, 2004). Interviews have a number of advantages:

- ✓ they allow the interviewer to clarify unclear questions and answers to and from the respondents;
- ✓ the interviewer may seek follow-up information by probing and get in-depth information; and

- ✓ this is the best option to use in areas where the respondents have a high level of illiteracy just like in this study where most of the gardeners were illiterate and needed elaboration and clarity.

Some of the disadvantages of interviews include high costs, high time consumption and high probability of the interviewer influencing the responses (van Vuuren & Maree, 2002; Leedy & Ormrod, 2005). However, given the low literacy level of the participants, interviews were appropriate for providing relevant information that was being sought by the study as they allowed the researcher to provide clarity and elaboration to the participants.

Focus groups

Focus groups are defined as small group discussions with programme recipients. They focus on the thoughts and opinions of the programme recipients regarding their experiences with the programme (Bliss & Emshoff, 2002). They help researchers to learn the social norms of a community or subgroup, as well as the range of perspectives that exist within that community or subgroup (Mack et al., 2005).

In this study, focus group discussions were used as a follow-up to the interviews to verify and elaborate the responses from the individual gardeners. Two focus groups were conducted, one focus group session per garden project. Five gardeners from each garden participated in each focus group discussion. This was mainly determined by the availability of the gardeners. However, a typical number of six to ten participants in a focus group have been suggested by Goldenkoff (2004) and Gibbs (1997). Other scholars like Dawson (2006) suggest a focus group of nine to eleven. These numbers were not possible in the study due to the limited number of the gardeners.

In order to conduct the focus group discussions, a focus group guide was used. As stated earlier, since the focus groups were used as a follow-up to the individual interviews, the focus group guide consisted of the main ideas and issues that were raised from the individual interviews. A checklist that was used in the interviews was also used for the focus groups so that the gardeners can assess the performance of the projects together. Feedback on the main issues from the focus group discussions and checklist was then used to highlight the most important points, which were reported as the view of the entire group and a combined perspective of the gardeners.

The focus group discussions helped the researcher to get the general ideas and perceptions of the gardeners about the garden projects. They also allowed the gardeners to share what they think are the challenges and key success factors to the implementation of the garden projects. The focus group was also used to determine the needs of the community gardeners as a group and what they think should be done to improve their projects in order to meet their needs. All the questions that were asked were open-ended and the responses were written down as each question was being answered by the group. In order to gain access to the gardeners for the focus group meetings, consultation with their leaders was done beforehand. The meetings took approximately 30 to 45 minutes for each project group.

The main reason why focus groups were chosen for this study is the fact that they are effective at eliciting detailed, introspective responses on the gardeners' thoughts, perceptions, actions, behavior, and motivations which are essential for qualitative data collection. According to Goldenkoff (2004) focus groups are excellent tools for fine-tuning or expanding existing programmes, specifically by increasing client satisfaction, adapting programmes to better meet the needs of the clients, and developing progress reports on the conduct of the programme. In addition, focus groups yield a large amount of information over a period of time.

Focus groups produced rich information in addition to what interviews gathered. The richness of focus group data emerged from the group dynamic and diversity. Because not all the gardeners had the same views and experiences, many different viewpoints were expressed.

Checklist

A checklist was provided to the gardeners to rate the performance of the Abalimi community gardening programme in terms of its service provision and impact to the community. The checklist was developed to assess if facilities, resources and services provided to the gardeners from the two garden projects match with their perceived intended outcomes of the community gardening programme. The checklist required the beneficiaries to rate the programme based on their views and perceptions about it. The rating used a scale of 1 to 3. Best performance was represented by 3, average performance was represented by 2 and 1 was for bad performance. The performance was rated on the following criteria;

- ✓ Training - Is the programme providing useful and beneficial training to Fezeka and SCAGA gardeners?
- ✓ Advice - Are the gardeners provided with the necessary gardening advice whenever they need it?
- ✓ Encouragement - Are the gardeners receiving any motivation and encouragement from the programme service providers and from their peers who are in the programme?
- ✓ Inspection and follow ups - Are the Fezeka and SCAGA gardens frequently inspected to check if they conform to what the gardeners were trained to do, and are there any follow-up training provided?

- ✓ Working relations - Are there conducive and friendly working relations between the programme management and staff, and the Fezeka and SCAGA gardeners?
- ✓ Provision of seed and manure - Are the gardeners supplied with adequate seed and manure, which are the main inputs needed for gardening?
- ✓ Positive community building - Is the programme impacting the community in a positive way?
- ✓ Profits from Harvest of Hope - Are the gardeners getting a fair share of the profits from the sale of their produce made by Harvest of Hope?
- ✓ Sufficient food for consumption - Are the services provided by the programme enabling the gardeners to produce sufficient food for their own family consumption?
- ✓ Sufficient produce for sales - Are the services provided by the programme enabling the gardeners to produce sufficient vegetables for sale?

The data collection methods that were used in this study allowed flexibility in conducting data gathering, research analysis, and interpretation of the collected information. In addition, the use of a range of data collection methods strengthened the evaluation process and enhanced the data analysis since the gathered information was based on more than one source.

Data analysis

The qualitative data was analysed thematically. A data analysis process proposed by Leedy and Ormrod (2005) was used as a guideline for data analysis. Figure 4 shows the data analysis process.

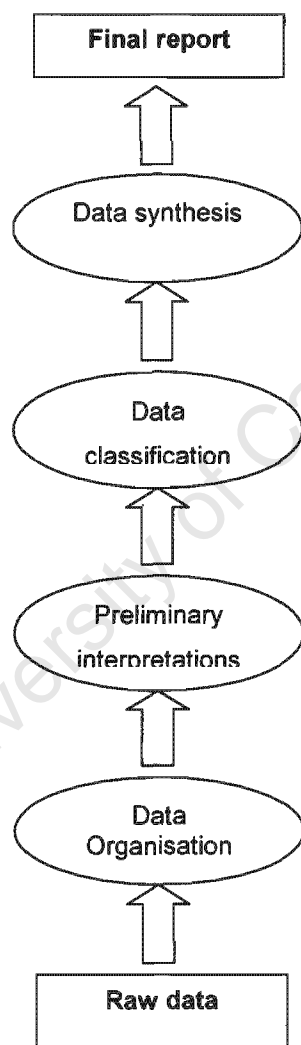


Figure 4. Qualitative data analysis process. Adapted from “Practical research: planning and design”, by P. D. Leedy and J. E. Ormrod, 2005, Upper Saddle River: Pearson.

After each data collection session, the collected data was entered and saved in a database then stored accordingly. After the data collection process, there was need for thorough assessment of the data to check for mistakes, repetitions and missing information. Thereafter the data was cleaned and necessary corrections were made. After data cleaning, the researcher thoroughly checked the data to get an overall sense of the data and wrote down preliminary interpretation from it. Related information from the data was then grouped into same categories and themes in order to find meanings from the data. Rather than using preconceived themes or categories, the data was classified from themes that emerged from the data itself as supported by Taylor-Powell and Renner (2003). On-going synthesis of the categorised data was done to construct relevant tables and figures that were used to attach meaning and significance to the interpretation of the results which was presented in the next chapter.

The perceptions of the various gardeners were recorded and presented in chapters 3 and 4 in the form of selected quotations. Quotations were chosen because they most concisely reflected the generic and common perceptions aired by many gardeners throughout the interviews and focus group discussions.

Ethical considerations

In order to secure the consent of the selected gardeners, the researcher explained all important details of the study, including its aim and purpose. By explaining these details, the gardeners were able to understand the importance of their role and contribution towards the study. Participation in the interviews was entirely voluntary and gardeners were free to quit at any stage. The gardeners were required to sign a consent form prior to the interview as a confirmation that they are freely participating in the interviews and focus groups to contribute towards this study. Written consent was obtained from the programme management to use the programme for the purposes of the study. As

per written agreement, a final report of the study was submitted to the programme management.

Since the study required the participation of human respondents, certain ethical issues were addressed. The consideration of these ethical issues was necessary for the purpose of ensuring privacy as well as the safety of the gardeners. To ensure strict confidentiality of participant information and anonymity, no names of people were recorded on the interview schedules or final report. A number was assigned to each gardener for identification purposes. In addition, only grouped data was reported and no references were made to specific individuals. Therefore, no information in the study can be traced back to particular individuals. All the responses were used for academic purposes only and only relevant details that helped to answer the evaluation questions were included.

CHAPTER THREE

RESULTS

The results of this evaluation are presented in terms of:

- ✓ Service utilisation (coverage)
- ✓ Service delivery (process)
- ✓ Outcomes (impact)

As indicated in the previous chapter, the data was obtained from the following groups of respondents-

- ✓ All Fezeka and SCAGA gardeners
- ✓ Fezeka and SCAGA extension field officers
- ✓ The Nyanga garden centre field worker
- ✓ The resource mobilisation manager
- ✓ The operations manager
- ✓ The Harvest of Hope manager

In addition, programme records were obtained from the Abalimi offices. Focus group discussions and participant observation were also used.

Service utilisation (coverage)

Do the garden projects attract the intended beneficiaries?

Table 3 shows the demographics of all the gardeners in Fezeka and SCAGA garden projects, who were the main data providers in this study. These demographics provide an insight of the type of beneficiaries which the Abalimi community gardening programme is attracting, and their characteristics.

Table 3

Demographics of Fezeka and SCAGA community gardeners

Demographics by:	Variable categories	Number of gardeners	Percentage of gardeners
Gender	Male	1	7
	Female	14	93
Age	44-60	6	40
	61-80	8	53
	81+	1	7
Household head	Yes	12	80
	No	3	20
Off-garden income	None	5	33
	Pension	9	60
	Grant	1	7
Education level attained	Grade 3-7	10	67
	Grade 8-matric	4	27
	College	1	7
Number of dependents	3 and below	4	27
	4- 6	8	53
	7and above	3	20
Employment	Unemployed	15	100
	Employed	0	0

The profile indicates that most of the Fezeka and SCAGA gardeners are predominantly unemployed women who are illiterate or semi-illiterate, household heads and older than 61 years. Most of these gardeners once worked full-time in formal and informal sector jobs in their lives. After they reached a pension-collecting age, they stopped their jobs and joined gardening.

To substantiate on the demographics shown above, an assessment of the demographics of all the gardeners from different projects that receive support from Abalimi was done. Abalimi launched a registration drive in late 2007 in order to have demographic characteristics of all its beneficiaries. From this initiative, it was established that there are 1 976 gardeners comprising of 736 men and 1 240 women who are supported by Abalimi. Further details of their age and employment status were not documented. Only 256 gardeners had their ages recorded. Among these 256 gardeners the age groups were as follows;

Table 4

Demographics of the documented 256 Abalimi beneficiaries

Demographics by:	Variable categories	Number of 256 Abalimi beneficiaries	Percentage of 256 Abalimi beneficiaries
Age	30 and below	6	2
	31-60	157	61
		93	37

A comparison of the demographics of Fezeka and SCAGA gardeners with 256 documented Abalimi beneficiaries shows that Abalimi attracts mainly adults above 40 years and a high number of retired people.

Service delivery (process)

Are services offered by Abalimi perceived as adequate by Fezeka and SCAGA gardeners?

The following services were / are offered to Fezeka and SCAGA gardeners. These are offered in the following categories:

Training

(1) Basic gardening training

Basic gardening training is one of the major services provided by Abalimi to the gardeners. All gardeners who were interviewed confirmed that they received a 4-day basic gardening training on how to practice organic farming before they started gardening. However, from all the gardeners who receive the basic training, only 2 out of 15 gardeners did an accredited advanced course in gardening, which is an additional course that Abalimi facilitates to its willing members in collaboration with the South African Institute of Entrepreneurs.

(2) The business plan and packing shed training

The operations manager, extension field officers and the respective gardeners indicated that since March 2009, Abalimi beneficiaries were undergoing training on the business plan called From Seed to the Table (FStT). This is intended to enable the gardeners to be involved and participate in the whole supply chain and business processes from vegetable production to the marketing of the produce when the vegetables reach the final consumer. They are also taught about what Harvest of Hope is and how it works. Project leaders from each community garden are taught about the business plan and they are expected to in turn, teach and demonstrate what they learnt to their garden project members. When all the gardeners were asked if they were aware of the business plan and

how it works, they acknowledged that they have heard about it but 12 out of 15 indicated they do not have any understanding of what it is and how it works. As one woman said in a focus group:

“Yes, we attend the business plan meetings but most of us cannot comprehend anything due to old age...”

Another related initiative still underway focuses on teaching and demonstrating to the gardeners how to pack and weigh vegetables in preparation for the market in the packing shed. So far, only 3 out of 15 Fezeka and SCAGA gardeners have attended it.

Provision of subsidised inputs

The resource mobilisation manager explained how Abalimi supply subsidised inputs to its community gardening programme beneficiaries. Since its formation, Abalimi supported gardeners through the provision of free inputs in the form of seedlings, organic fertiliser, manure, and gardening tools. However, since 2008 all garden projects including Fezeka and SCAGA are required to pay for all the inputs supplied to them by Harvest of Hope for the contracted plots. An exception is manure, which is very expensive. Abalimi pays 50 percent of the cost of manure and the gardeners pay 50 percent. However, in some cases Fezeka gardeners have purchased their own manure directly from the suppliers. The gardeners buy their own inputs for their individual plots from the Abalimi garden centres at a lower price since discount is offered to Abalimi members.

In contrast, the Department of Agriculture provided all the start up capital, inputs, boreholes, and infrastructure. It still provides free seeds, manure, and gardening tools to the gardeners irregularly.

Extension services

Evidence from the interviews and participant observation showed that Abalimi extension field officers assist the gardeners with follow-up training, gardening advice, and guidance. Extension field officers also provide guidelines that specify the number of plants to grow per each square metre for each vegetable and the number of weeks each vegetable take to be ready for harvest. On each plot, a tag which shows the number of the plot, the size of plot, name of vegetable planted on the plot, planting date, and the number of plants per each square metre in the plot is placed to guide the gardeners. Figure 5 shows a sample of the guidelines provided on each vegetable plot to the gardeners. In this example the tag was placed on a purple cabbage plot.



Figure 5 Tag used to guide gardeners

Marketing the produce

Another major role undertaken by Abalimi is marketing the produce from the garden projects. From the interviews and focus group discussions the gardeners acknowledged that Harvest of Hope is playing a major role in marketing their produce which was at one time rotting in the gardens because of lack of buyers and a market. The following statements captured the sentiment:

“Harvest of Hope is doing a wonderful job of selling our vegetables”

“Our vegetables were rotting in the garden with no one to sell to, people in the community came to buy once in a while and they only bought one or two bunches but now Harvest of Hope is selling the vegetables for us”

“We did not have any transport to carry our vegetables to the market, but Harvest of Hope is providing the transport and selling the vegetables for us”

Harvest of Hope collects the vegetables from different garden projects including Fezeka and SCAGA. The vegetables are taken to the packing shed where they are cleaned, bundled, and packed into boxes. Afterwards, the boxes are taken to private schools around Cape Town where they are sold. The gardeners are then allocated their incomes from the sales profits after all running and input costs are deducted.

Fixing and maintenance of infrastructure

The minor services provided to Fezeka and SCAGA gardeners is the fixing and maintenance of infrastructure like boreholes and fencing which is provided at a cost to the gardeners. For example, Fezeka garden project has experienced a number of borehole breakdowns in the past and at one time it was fixed at a cost of more than R5 000.

Are the activities of Fezeka and SCAGA gardeners adequate for achieving the outcomes of the programme?

There are two main aspects of the Fezeka and SCAGA garden projects a Harvest of Hope contracted plot which is communally owned, and individual allotment plots which are individually owned. In addition to these two sections, SCAGA garden project has a herb garden. Figure 6 and 7 show parts of the two garden projects where the gardeners carry out their activities.



Figure 6 SCAGA garden project



Figure 7 Fezeka garden project

As shown in Figures 6 and 7, a variety of vegetables are grown in the gardens. From the interviews with individual gardeners and participant observation, it was confirmed that there is a distinction between vegetables produced for the market and those for the gardeners' own consumption. They grow popular vegetables like cabbage, spinach, carrots, and onions in their individual plots whereas in the contracted Harvest of Hope plot they grow vegetables like rocket, celery, pepper lettuce, kale, eggplant, cauliflower, brinjal, and herbs specifically for the target market. Herbs and more than 30 varieties of vegetables are grown depending on the season. Every week, a certain vegetable is planted according to the planting schedule. Appendix 2 shows the planting and harvesting calendar for Harvest of Hope contracted plots for the whole year.

Table 5 shows the weekly schedule that is used by the gardeners in the garden projects.

Table 5

Weekly schedule for the gardeners

Day	Activities
Monday	Planting Watering and Weeding
Tuesday	Harvesting Watering and Weeding
Wednesday	Soil preparation Watering and Weeding
Thursday	Seeding Soil preparation Watering and Weeding
Friday	Planting Watering and Weeding
Saturday	Planting Watering and Weeding

The gardeners have a busy weekly schedule. The majority of them work in the garden for five days per week, usually from Monday to Friday. A few of them even work on Saturdays. Watering and weeding are done on a daily basis taking into consideration that the garden plots are big. Each day has a specific task in addition to watering and weeding. As part of the process of participant observation, it was observed that Mondays and Tuesdays are mainly dedicated to harvesting in preparation for the market on Tuesday mornings. On Mondays the gardeners harvest vegetables like carrots which are not easily perishable to reduce the work load on Tuesday mornings when they are supposed to harvest other vegetables before 9am. Wednesdays, Thursdays and Fridays are mainly for watering, weeding, land preparation, seeding, and planting.

Participant observation showed that the gardeners' time is spent mainly on the Harvest of Hope contracted plot carrying out the activities mentioned above. In the Fezeka garden they work as a group on the Harvest of Hope plot. In SCAGA garden, the Harvest of Hope plot was divided amongst the gardeners so that each individual takes responsibility for certain plots and makes sure all the necessary work is done. The SCAGA gardeners reported that this is done to promote equal share of efforts and for accountability purposes. The gardeners work in their individual plots in their own spare time.

What is working and not working as expected in the implementation of the garden projects?

The gardeners from the two garden projects and the Abalimi management were asked to indicate their perceptions on what is working and not working as expected in the implementation of the garden projects. The following results were obtained from the interviews and focus group discussions.

What is working as expected from the gardeners' perspective?

The gardeners acknowledge that the provision of training by Abalimi is going well and they are satisfied with the training they received. All respondents indicated that because of the training, they are now able to produce food in their own plots to fend for their families, and have better food in their homes. They confirmed that this is the main reason why the gardeners like the garden projects.

Twelve out of 15 gardeners indicated that the extension field officers and garden centre field workers have been working well and consistently providing valuable services. They are satisfied with the services provided by the extension field officers and the garden centre field workers. The extension field officers visit the gardens once a week and they are the main contact people who work directly

with the gardeners in the garden projects. Any problems that the gardeners face is reported to the extension field officers who in turn report to the Abalimi management.

All the gardeners acknowledged that without Harvest of Hope, it was difficult for them to sell their produce. The fact that Harvest of Hope is selling their produce which was initially rotting in the gardens due to lack of customers, and they earn little money from it, is another reason why the gardeners appreciate the role of the garden projects.

The gardeners also expressed appreciation for the quick response that they receive from management whenever there is need for fixing and maintenance of infrastructure. A good example which was given is the quick response from management when a borehole or water pump is not working.

What is working as expected from management's perspective?

The resource mobilisation manager believes that the garden projects have produced the expected outcomes of the Abalimi community gardening programme, mainly reduction of hunger and development of self-reliant people. He explained that he has witnessed a change in most of the gardeners from being hunger-stricken and poor to being independent food growers. He reiterated that the primary aim of the programme is for the targeted population to have household food security, reduce hunger and malnutrition. In his opinion, these outcomes have been attained in these two garden projects. The views of the gardeners support this sentiment.

According to the resource mobilisation manager, unlike in agribusiness where the focus is commercialisation of projects, Abalimi's community gardening programme's aim to attain a livelihood for the beneficiaries has been achieved. The programme has managed to move the garden projects from survival, then to

subsistence and livelihood phase without jumping into commercial phase (producing for 100 percent sales) which is not the emphasis of the programme. The programme emphasises on developing the garden projects to move from survival, then to subsistence and livelihood phase step by step in order to eradicate hunger and food insecurity before reaching the commercial phase. In his opinion, in the commercial phase the main aim of the programme which is poverty alleviation dissipates since the gardeners will be selling 100 percent of the produce and this deprives them of consumption of their produce for their own benefit. Although the programme assists the gardeners in marketing, the commercial phase is secondary after the primary three phases are attained.

What is not working as expected from the gardeners' perspective?

From the individual interviews, 8 of the 15 gardeners indicated that they were not satisfied with some of the services provided by Harvest of Hope although they appreciate the fact that it is doing a great job of selling their produce. The main areas of dissatisfaction were low returns earned from Harvest of Hope sales, the formulation of the income invoices issued to the gardeners after sales of produce, and inappropriateness of the seedlings. These issues are explained as follows:

Harvest of Hope is responsible for the collection of vegetables from the Abalimi garden projects to the packing shed. It also hires people who wash, pack and market the vegetables in Cape Town private schools. The total money obtained from the sales of the produce is divided equally among Harvest of Hope and the gardeners. For example, for each large box of vegetables sold by Harvest of Hope for R95, R47.50 goes to Harvest of Hope and R47.50 is shared among all the gardeners who contributed their produce. From that R47.50 that the gardeners share further costs of inputs provided by Harvest of Hope are deducted (mostly seedlings and manure). The main concern of the gardeners is the fact that these deductions are leaving them with very little to share among

themselves at the end of the year. For example, for the whole month they sell vegetables to Harvest of Hope for four weeks (once per week) and after the input costs are deducted, they can get R350 or less per month. For 12 months this will amount to R4 200 which will be divided among 5 or more gardeners at the end of the year. Before sharing that income equally amongst themselves they first have to buy things required in the garden, pay rent, electricity and water bills. At the end of the year, they have little money or nothing to share. The timing of this small distribution of earnings would be planned to coincide with the end of the year, the intention being to help relieve some of the extra expenses, often associated with travelling and entertainment costs incurred at Christmas time. However, these earnings are making little difference to their livelihood and poverty. As a result, the gardeners highlighted that they do not like the low returns obtained after all the hard work.

Ten out of fifteen gardeners highlighted that they do not understand the way their income invoices are formulated. They indicated that this way of invoicing is not clear and comprehensible and it lacks transparency. Table 6 shows a sample of the monthly invoice.

Table 6

Sample of income invoice

PAYEE: TT Garden		Acc Name:	
		Bank:	
		Account No:	
MONTH: August 2009		ASP	
EFT DATE: 18.10.09		EFT REQUISITION	
AMOUNT: R790.20			
Description	Amount	Account Number	Supplier Code
Vegetable selling to HOH for	R1 790. 20	3000526	(TT005)
Input costs	-R1000.00	2000536	
Deposit re-imbursed		10005236	
Comments:			
REQUESTED BY:		AUTHORISED BY MANAGEMENT:	
AUTHORISED BY BOARD:			

From the invoice it is evident that the gardeners cannot get a detailed description of the dates that the transaction takes place, quantities of vegetables which were sold from their garden, quantities of inputs supplied to the garden, and the costs of each input supplied.

From the focus groups and participant observation, another major concern among the gardeners is about the inappropriateness of some of the seedlings

that they are supplied with. They are sometimes given seedlings for vegetables they are not familiar with and they do not prefer to eat. They understand that these types of vegetables are for commercial purposes specifically grown for the market. However, after all the efforts, some of these vegetables are not requested for sale by Harvest of Hope even if they are ready for harvest. Examples include eggplant and kale. When these vegetables are ready for sale, the gardeners expect them to be marketed every week but they realised that Harvest of Hope does not take the vegetables for sale often until they even rot on the plots. As a result, this would be a waste on the part of the gardeners since:

- ✓ they do not eat such vegetables because they are not familiar;
- ✓ they cannot sell the vegetables to local people since they also do not eat them;
- ✓ the costs of the seedlings will still be deducted from their income; and
- ✓ all their efforts will be in vain.

As a result, this is a loss to the gardeners since they just pull out the vegetables and throw them away or make compost to provide space for other vegetables.

A major important service that is not provided by Abalimi to the gardeners is the provision of organic pesticides to prevent moles and snails from destroying the vegetables. From the interviews, the gardeners indicated that since they practise organic gardening, they are not allowed to use any artificial pesticides, yet they are not supplied with the organic pesticides or taught how to make them. The only suggested way of dealing with snails is handpicking. This problem is affecting both gardens and it compromises the quality of the vegetables. Additionally, it discourages the production of mostly affected vegetables like potatoes.

What is not working as expected from management's perspective?

The resource mobilisation manager acknowledged that a lot of garden projects have lost a number of gardeners who have dropped out. This was supported by programme records and the evidence from interviews. Some garden projects started with 30 members but now have only nine or less members. The programme records showed that there are two garden projects with only one member and three garden projects with only two members. The problem with high levels of drop outs is the fact that they do not only affect the production levels and sales in the gardens, but they also waste the programme's resources and efforts. This means that the knowledge, skills, and awareness gained will not be effectively used since the recipients drop out of gardening. This implies that Abalimi has to continuously train people who are not in actual fact benefiting its community gardening programme.

The resource mobilisation manager highlighted that the main problem is that the gardeners do not understand the phases they are supposed to go through in order to maximise their benefits from the community gardening programme and achieve the intended outcomes. Some of them are focusing on the commercial phase prematurely without attaining subsistence and livelihood phases. As the gardeners become much concerned about getting money, they deprive themselves of the benefits from the necessary phases of subsistence and livelihood. As a result, the short and medium term outcomes of the programme might not be realised as they should. In his opinion, it is necessary for the gardeners to go through the first three phases step by step before achieving the commercial phase for effective attainment of the programme's goals.

Outcomes

What are the achievements of the garden projects from the gardeners' perspective?

This section draws on the perceptions and experiences of the gardeners to understand the major outcomes that have emerged as a result of participating in garden project activities.

In general, the same responses were obtained from both the interviews and the focus groups. In order of importance, the following emerged:

The main achievement of the garden projects was combating hunger and enabling the gardeners to put food on their tables. Twelve out of 15 gardeners indicated that their main reason for joining the garden projects was the fact that they wanted to reduce hunger in their families and the garden projects have managed to achieve this. A statement by one woman confirmed this:

“The main reason why most of us joined gardening was because we were hungry and had no food in our homes, but now we are happy because we can put food on our tables”.

Most of them admitted that before joining the garden projects, hunger was their main problem and they could not afford to put food on the table on a daily basis. This changed when they joined the projects, now they have household food security and have managed to reduce hunger in their households. This same reason stood out in the focus group discussions and it explains why the beneficiaries are still participating in garden projects. The ability to put food on their tables is a particular incentive where people are jobless and have no income.

Some gardeners, especially those with big families, perceived that gardening has led to valuable household savings on food. The gardeners believe that growing vegetables saves money. One gardener said:

“... I no longer go to Fruit and Veg City to buy carrots, spinach, cabbage and onions because I have them in my garden. When I do not have enough in my garden, I exchange with my colleagues, I give them what I have and they give me what they have”.

This is in line with Thornton's study (2008) which explored the value of home gardening in small towns in the Eastern Cape Province of South Africa. That study showed that gardening saved up to R200 per month per household. The Fezeka and SCAGA gardeners confirmed the same notion that since they do not have to buy vegetables as part of their groceries, they are saving a substantial amount, although they could not tell the exact amount. In another study in New York, Saldivar-Tanaka and Krasny (2004) found that gardening enabled the community gardeners to considerably lower their food bills.

The gardeners acknowledged that they have learnt to eat healthily from the Abalimi community gardening programme. From the interviews and observations, the gardeners placed great value on eating vegetables as part of every meal for healthy purposes. Their concept is “every plant in the garden is edible”. They even eat “weeds” such as imfino which is believed to be nutritious and is also sold by Harvest of Hope to their customers. Gardeners above 60 years confidently attribute their long life to healthy eating and taking vegetables in every meal.

The other motivation for participating in the garden projects is income generation. The gardeners are now capable of earning a little income from the sales of vegetables from their individual plots. From the interviews, the gardeners indicated that on average each gardener gets approximately between R15 to R45

per week for selling vegetables from their individual plots. Although the beneficiaries are not satisfied with the little income they receive from Harvest of Hope, they said sales from their own individual plots makes a difference in their lives. One gardener reiterated:

“We are making very little money from this garden especially from Harvest of Hope, but I get a better income from my own plot and it makes a difference”

Gardening has also created opportunities for unemployed people in the community to occupy themselves and do something productive. The majority of the gardeners confirmed that since they were all unemployed, they had nothing else to do so they practised gardening to occupy themselves. Among a series of comments made by the gardeners on why they like gardening and continue to participate in the garden projects over several years, one gardener said:

“It is because I am not working so I thought it is better to come and do something productive and to occupy myself in the garden than sitting at home doing nothing.”

Checklist as an instrument for evaluating the community gardening programme

The Fezeka and SCAGA gardeners were requested to rate the performance of Abalimi community gardening programme on ten aspects on a checklist using a scale of 1 to 3, with 3 representing best performance, 2 for average performance and 1 for poor performance. The performance was rated on the following criteria and the results are based on ratings from the two focus group discussions:

Table 7

Consensus ratings by gardeners on ten aspects of a checklist for evaluating the programme

Evaluation aspects	Focus group	
	1	2
1. Training	3	2
2. Advice	3	2
3. Encouragement	3	3
4. Inspection and follow-ups	2	2
5. Work relations	3	2
6. Provision of seed and manure	2	2
7. Community building	3	2
8. Sales profits from Harvest of Hope	2	1
9. Sufficient food for consumption	3	3
10. Sufficient produce for sales	3	3

The ratings for both focus groups on all the ten aspects of the checklist shown in Table 7 were then used to formulate the general consensus of the implications of these ratings from the gardeners' point of view. This shows the general views of where the gardeners need the Abalimi community gardening programme to improve and where they are satisfied. Table 8 shows the implications of the gardeners' ratings to the Abalimi community gardening programme with regard to the ten aspects of the checklist.

Table 8

Implications of the ratings by the gardeners to the programme

Criteria	Performance rating	Implications to programme
1. Training	best-average	can still improve
2. Advice	best-average	can still improve
3. Encouragement	best	satisfied
4. Inspection and follow-ups	average	can still improve
5. Work relations	best-average	can still improve
6. Provision of seed and manure	average	can still improve
7. Community building	best	satisfied
8. Sales profits from Harvest of Hope	average-poor	must improve
9. Sufficient food for consumption	best	satisfied
10. Sufficient produce for sales	best	satisfied

Table 8 shows areas where the gardeners are satisfied and where they are not. The Abalimi community gardening programme therefore needs to make improvements in aspects where the ratings were best-average, average and average-poor. The gardeners were satisfied in aspects rated best.

In conclusion, in terms of benefits perceived by the gardeners, one can say that the programme has enabled the gardeners to combat hunger, improve household savings on food, eat healthy and to earn little income. However, major concerns of the gardeners were about less income from Harvest of Hope, formulation of the invoice and appropriateness of seedlings.

CHAPTER FOUR

DISCUSSION

The discussion follows the same format as the results section- i.e. the evaluation questions structure the chapter.

Service utilisation (coverage)

Do the garden projects attract the intended beneficiaries?

The demographics of the Fezeka and SCAGA gardeners presented in this study showed that the garden projects are attracting their intended beneficiaries. The profiles of the gardeners match the intended target beneficiaries of the Abalimi community gardening programme. This is supported by the results from the interviews and focus groups.

In their American study, Saldivar-Tanaka and Krasny (2004) found that it was not clear why women were more active as gardeners than men. In this study, upon inquiry from the gardeners, it was established that women dominate in gardening because most of them are household heads with a responsibility to fend for their families.

Another observation is the garden projects tend mostly to attract people of retired age. Evidence from both Fezeka and SCAGA garden projects showed that the youngest gardener was 44 years and the oldest was 86 years old. The major concern with these two garden projects is their potential to become neglected due to an inability to attract new gardeners to replace those who are leaving as a result of loss of interest or old age. The domination of the garden projects by people who are above 60 years threatens the continuity of the garden projects.

To ensure that the garden projects are sustainable, younger people need to be motivated to participate in the projects (Palitza, 2009). The gardeners in this study thought that one of the reasons for the unpopularity of this kind of activity for younger people is the little money that can be earned. The inability to generate sufficient income for the gardeners makes the garden projects to be of very little appeal for the youth.

This scenario was also found by Moller (2005), who studied gardening in the Eastern Cape. In his study, the average age of gardeners was 67 years with the oldest respondent being 93 years old and the majority of them were old-age pensioners. The results of his study showed that adults want to grow their own food but younger people do not. He reported that there was widespread consensus among active gardeners that youth were disinterested in gardening. Moller's study concluded that South African youths are not interested in gardening, they value instant cash and they do not want dirty work. Besides, to work and live off the land is not something really worthwhile that the youth aspire to.

The scenario of garden projects being dominated by people of retired age is not only peculiar in South Africa. Even in countries such as the USA, studies on community gardening projects found that senior citizens are the most active gardeners, and also the most common garden members in New York (Saldivar-Tanaka & Krasny, 2004).

Service delivery (process)

Are services offered by Abalimi perceived as adequate by Fezeka and SCAGA gardeners?

Marketing of vegetables and input provision for Harvest of Hope contracted plots by Harvest of Hope takes place every week and the activities are consistent and according to the scheduled times. The gardeners acknowledged that they have not experienced any problems with Harvest of Hope pertaining transportation of the vegetables to the packing shed and marketing the produce. In terms of input provision, they receive seedlings on time at intervals.

Basic gardening training was provided to all gardeners. That training was highly regarded, appreciated, and has contributed significantly to the promotion of gardening among untrained people. From the interviews, most of the gardeners acknowledged that the training they received have enabled them to fend for themselves through vegetable production.

There seems to be a mismatch in terms of what the managers envisage the activities to be, and the experience of the gardeners. The operations manager for example, said that training gardeners on the business plan and packing shed activities is meant to equip the gardeners to be independent business people who know what to produce, how to produce, where to sell the produce, and how to sell. The gardeners however behaved in ways that suggested these plans and training aspects still fall short of the programme's targets. For example, participant observation showed that some of the gardeners:

- ✓ were not able to weigh the vegetables accurately using the scale;
- ✓ showed little or no awareness of the business plan, Harvest of Hope and its functions; and

- ✓ were not able to identify some of the vegetables in the garden. They had little information about some vegetables they grow and there were a number of vegetables which they failed to identify.

From these examples, regular and consistent gardening advice, training and extension were identified as critical needs.

Among the services provided by Abalimi to the gardeners, fixing and maintenance tend to be more expensive. There is a major concern that fixing of boreholes is too costly given the little income that the gardeners earn. Fixing boreholes is always going to be impossible for the gardeners themselves and a subsidy from Abalimi can make a difference.

Both Fezeka and SCAGA garden projects are served by one extension field officer each who visits the gardens once a week. The extension field officers also serve other gardens and they cannot afford to visit one garden too frequently. For example, the extension field officer who serves SCAGA has other 11 gardens to serve. She indicated that due to the work load, she mainly concentrates on new gardens that need more attention and assistance than the older ones such as SCAGA and Fezeka. As a result, these two garden projects receive less attention and are not frequently visited to attend to the needs of the gardeners. The gardeners end up using their own discretion without professional extension assistance.

Both garden projects are provided with the same services but there is a difference on the levels which they are operating. Since 2008 when the gardeners were expected to buy their own inputs, Fezeka gardeners have shown evidence of independence from Abalimi. They now afford to buy their own inputs, including manure which is the most expensive input. They can buy directly from input suppliers rather than relying on Abalimi to source the inputs for them. Although Fezeka gardeners are able to pay for all their input and running costs,

little money is left for them to take home. However, SCAGA gardeners are still very dependent on Abalimi for inputs and subsidies for manure. The gardeners acknowledged that they have financial constraints and they cannot afford to buy their own inputs. A study of the garden projects that were supported by Abalimi in 1998 by Karaan and Mohamed found that there was evidence of the gardeners' dependence on Abalimi for inputs such as seeds. It seems that since then, there has not been much change since the gardeners such as from SCAGA are still heavily dependent on Abalimi for inputs. However, this is not the case among the more prosperous gardeners outside the Abalimi community gardening programme who source inputs from elsewhere at much higher prices (Karaan & Mohamed, 1998).

Are the activities of Fezeka and SCAGA gardeners adequate for achieving the outcomes of the programme?

The gardeners are investing five full working days per week in the gardens. This seems to be sufficient to produce the desired outcomes from the Abalimi community gardening programme. Participation observation showed that the garden projects are well maintained, although Fezeka gardeners are now finding it difficult to do so because they are very few and majority of them are now old.

It seems interesting that the gardeners spend more time on Harvest of Hope contracted plots than their individual plots when they claim that they get better low income from their individual plots rather than Harvest of Hope contracted plots. In the light of this, the gardeners may consider spending more time in their individual plots than the Harvest of Hope contracted plots in order increase surplus vegetables to sell from their individual plots.

From participant observation, the gardeners use the weekly schedule as a guideline but are flexible to carry out some tasks without necessarily following the schedule. The reason is mainly because in Fezeka garden project, within a day the gardeners may not be able to complete a single task and have to leave it for the next day. A different scenario is experienced at SCAGA garden project because the gardeners carry out different gardening activities as per their own discretion and according to the available work at hand since they allocated the Harvest of Hope plots among themselves. In this scenario, it is difficult for everyone to perform the same task at the same time in a way to follow the work schedule. As a result lack of consistency in terms of implementation may not be avoided.

What is working and not working as expected in the implementation of the garden projects?

The scenario of inappropriateness of seedling provided to the gardeners points to the lack of proper communication between the beneficiaries and the management, and the top-down approach of decision making. Opportunities can be created for the management to listen systematically to the views of the gardeners and vice versa. In this regard, the gardeners expressed the need to consider their ideas of how to run the gardens, what to grow, which inputs they need, and who they want to be in charge rather than all these decisions to be taken on their behalf by the management as if they are only labourers. A bottom-up approach makes them to acknowledge that they are the major role players in their own garden projects and enables them to work together, make decisions, and take charge of their own gardens with the support and guidance of the management.

High levels of dropouts and low levels of participation threaten the continued existence and sustainability of the two garden projects. When Fezeka garden

project was started it had 30 members and currently it has only six members. When SCAGA garden project was started it had 25 members and now it has 9 members. Bourne (2007) in her study on three garden projects supported by Abalimi (including Fezeka) also mentioned the same problem. In her opinion, obviously people drop out when bored, tired, discontented, or when they get something more worthwhile to pursue. The interviews with the long serving members of the garden projects revealed that the main outstanding reason for dropouts was the fact that people join the garden projects expecting a monthly or wage-like income. When they realise that it is hard work and there are less financial returns, they leave. They confirmed the high numbers of people when the programme started and less number of people in the programme now. No further data about drop outs was available.

The prominent featuring of snails and moles as a serious constraint indicates the need for extension services and the supply of preventative mechanisms. The suggested solution of handpicking snails may not be practical given the overwhelming number of snails in the gardens. As snails and moles are causing profound losses in production, their eradication would improve productivity (Karaan & Mohamed, 1998).

A number of elements were missing in the current invoice. A more elaborative but simple invoice can solve this concern. Changing the way the invoice is formulated can help the gardeners to understand how their income is calculated. This also advocates for more transparency and makes it easier for the gardeners to reconcile their records with what appears on the invoice. Table 9 shows a proposed invoice which includes the necessary details that the gardeners are advocating for.

Table 9

A proposed sample of the invoice

PAYEE: TT Garden					Acc Name: Bank: Account No:					
MONTH: August 2009										
EFT DATE: 18.10.09					EFT REQUISITION					
Outputs					Inputs					
Date	Vegetable	Weight (kg)	Price / (kg)	Amount	Date	Inputs supplied	No. of trays	Cost/ tray	Amount	
5/08	Spinach	10	R5	R50	27/08	Onions	2	R10	R20	
	Carrots	20	R10	R200		Spinach	2	R8	R16	
Total Amount of output				R250	Total Amount for inputs				R36	
Amount Due: R214										
Comments:										
REQUESTED BY:					AUTHORISED BY MANAGEMENT:					
AUTHORISED BY BOARD:										

In Table 9, the dates for all transactions that occurred within a month and the different inputs and their amounts are all clearly recorded. The gardeners can easily reconcile what is shown on the invoice with their own records for each specific date and this helps to curb the suspiciousness among the gardeners.

Outcomes

What are the achievements of the garden projects from the gardeners' perspective?

From the interviews and focus group discussions, it would appear that at least in the views of the gardeners, the following improvements in their lives occurred as a result of participation in the garden projects:

- ✓ they have managed to reduce hunger in their homes;
- ✓ they and their families eat more healthily (i.e. better nutrition);
- ✓ they save on household food purchases; and
- ✓ although too small, they earn some income.

The main achievement that has stimulated great motivation for gardening is the provision of food for the gardeners who emphasised that the main motivation which makes them to continue is the fact that they are feeding their families on a daily basis. Other benefits are necessary but secondary.

From the study, it was evident that the garden projects have not been able to attain job creation and constant income generation. The two garden projects are not profitable enterprises and are not vehicles for job creation and income generation. From this study, garden projects may not be regarded as income generating projects. They work very well in reducing hunger, promoting nutrition, healthy eating and household food security. If garden projects are initiated for income generation, too many expenses are involved and as a result less money will be left for the gardeners' personal use. In light of this, the programme theory may be unrealistic if the gardeners are expected to generate income and generate jobs from the garden projects. The gardeners may consider working in

the gardens for three mornings a week in order to produce food for themselves and use the other time to look for part-time work and earn some cash.

Similar studies by Bourne (2007) and Fleming (2003) on garden projects that are supported by Abalimi concluded that these projects do not create jobs and generate substantial income for their members. Karaan and Mohamed (1998) also argue that it is widely believed that small-scale gardening does not prove to be financially viable if all actual and real production expenses are taken into account. According to Reuther and Dewar (2005) several researchers have found that urban agriculture provide very low returns. Their economic analysis of SCAGA garden confirmed that at six years of existence, the garden's production and earnings fell far from expectations by 70 percent. In their opinion, due to the current poor economic performance of gardening, the potential of the gardeners to overcome household poverty was limited as no evidence was found of a single gardener in Khayelitsha who derive a full income that is sufficient for subsistence from gardening. Thornton's study (2008) of gardeners in the Eastern Cape also confirmed that they are receiving a measure of subsistence from their gardening activities but their activities are not reaching their full potential to create an income. Actually, the primary source of household income for these gardeners is the social grants (Thornton, 2008; Bourne, 2007). Even elsewhere, gardening has been traditionally used as a means for earning low income (Astbury, 2004).

In the light of the relevant literature, the two garden projects seem to have the same problems as encountered by other garden projects. From these studies, the results of this study fits in with the existing literature. This proves that the presented scenario is not peculiar to these garden projects only but to other existing garden projects.

In relation to the programme outcomes, the first two phases (survival and subsistence) are completely realistic and achievable. However, in terms of

current setup of the garden projects and the evidence at hand it is unrealistic and too ambitious to attain the livelihood and commercial phases. The Abalimi community gardening programme may consider concentrating on the first two phases; survival and subsistence. If the other later two phases are to be attained then there is need to rethink the programme over.

From observation, the programme theory may need to be reconsidered. In a simplified form, the programme theory of the programme is shown in Figure 8.

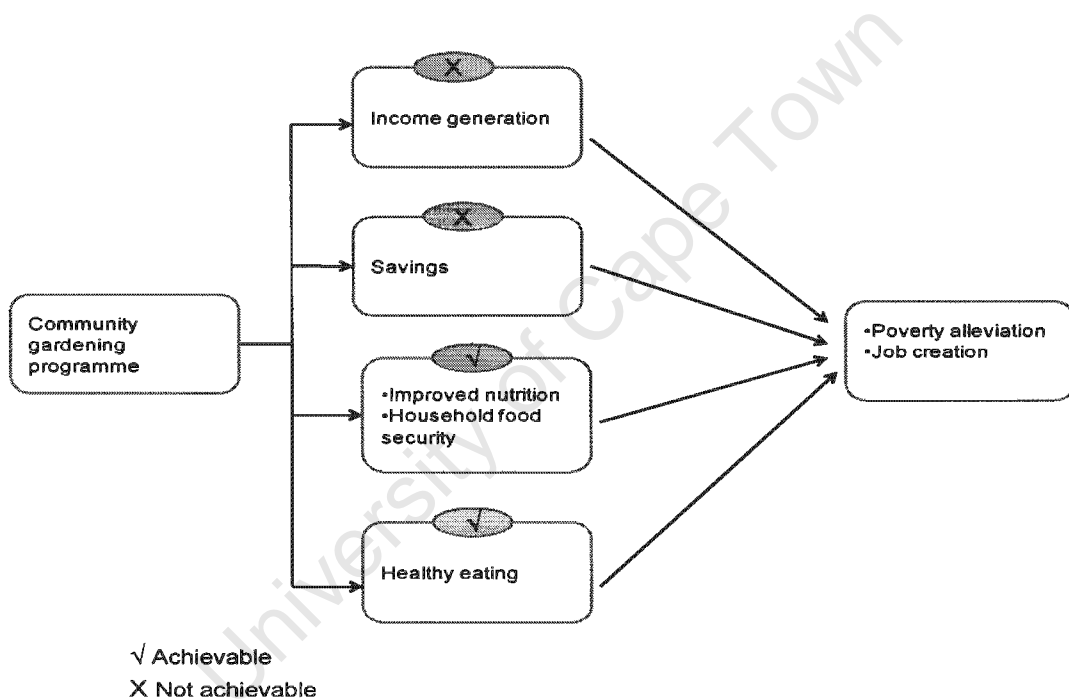


Figure 8. Simplified programme theory

From this programme theory, it is evident that it may not be realistic to expect poverty alleviation and job creation when there is little or no income that is generated. Without income, it is unlikely that the gardeners might save. Therefore, no income means no savings. At the same time, they cannot afford to employ other people in the gardens. Only improved nutrition, household food

security and healthy eating can be attained from the projects. In the light of the results presented in this study, Abalimi may therefore want to reconsider the programme theory.

Results of the study in terms of the community partnership development model

As indicated earlier in chapter one, the community partnership development model was suggested as a relevant model for garden projects. Therefore, the model (see Figure 3) was used to assess the outcomes of the garden projects to Fezeka and SCAGA gardeners and the partnership that exists between the garden projects and other external institutions. The results of the study were framed in terms of this model to provide a picture of how the projects have contributed to the development of the Fezeka and SCAGA gardeners. The projects were assessed on outcomes of health, education and training, economic development and job creation.

Health

The data from the interview indicated that the gardeners eat vegetables everyday as part of their daily meals. They are aware that vegetables are important for their health. Some indicated that they eat vegetables to remain active and healthy. Examples of vegetables which are eaten on a daily basis by the gardeners depending on the season include cabbage, carrot, onion, spinach, beetroot, turnip, tomato, imfino (type of an African weed), and broccoli. These vegetables are the most popular vegetables planted by people in the townships in South Africa and they are high in nutrition and fiber, low in fat and often a good source of vitamins and minerals (Nell et al., 2000).

Job creation

Gardening has become a source of employment to the unemployed gardeners. Most gardeners indicated that since they were unemployed, gardening has filled in the gap and they are now full-time gardeners. However the gardeners have not yet attained a stage where they can employ other people to work for them in the gardens.

Education and training

Abalimi community gardening programme received positive comments across the board from all the Fezeka and SCAGA gardeners for its 4-day basic training programme. Abalimi does not only train its members, it also trains members of the community. It also has the ability to encourage learning and growth among individuals and facilitate community education through its garden centres and training services. Through the community gardening programme, a number of beneficiaries have gained knowledge and skills in waste management, composting and organic gardening. On another note, the garden projects have assisted a number of local and international college and university research students such as Bourne (2007), Dunn (2008) and Kirkland (2008) who have done studies on different aspects of Abalimi garden projects including Fezeka and SCAGA.

Economic development

The fact that the gardeners are producing vegetables for a certain niche market and sector of the economy shows that the garden projects are in a way contributing to the economy as a whole in meeting the needs of organic vegetable consumers. However, the garden projects have not been successful in attaining poverty alleviation and economic sustainability for the respective gardeners.

Partnerships with external institutions

The garden projects receive support from a number of external institutions. The operations manager explained that Abalimi do not provide infrastructure and capital, in fact it assists the prospective gardeners through providing them with necessary information, advice and assistance on how to apply for land, capital and infrastructure from the Department of Agriculture, Department of Social Services, City of Cape Town, community heads and other stakeholders. Only after their applications are successful and proper infrastructure is put in place will the gardeners seek the support of Abalimi in terms of inputs, training and fixing of the infrastructure which are all provided at a cost, including the different joining fees to be part of Abalimi and Harvest of Hope members.

Through the interviews, the gardeners were asked about other organisations besides Abalimi that have supported them and the type of support they received from these organisations. They indicated that mostly the Department of Agriculture and the Department of Social Services and sometimes the City of Cape Town have assisted them by providing infrastructure such as fences, boreholes, irrigation pipes, storerooms, and green houses. The Department of Agriculture provided once-off capital to start up the garden projects. Even after infrastructure development, the Department of Agriculture still provides free inputs especially seedlings, manure, and garden tools to the gardeners. Representatives from the Department of Agriculture visit the gardens periodically to survey the progress of the gardeners and to enquire the needs of the gardeners. The question that arises is “what would have happened to the gardeners if there was no involvement of other institutions such as those discussed in this section?” This case points to the fact that the garden projects are not self-sufficient at all and they are dependent on external institutions for their continued existence.

It was observed that both Abalimi and the Department of Agriculture are actively involved with the gardeners except in training, extension and marketing services where Abalimi is the sole provider. Both agents maintain a visible and consistent presence in both Fezeka and SCAGA garden projects and seem to play complimentary roles which overlap one another. A study by de Satge and William (2008) confirms the role of external institutions in the garden projects. In their study, participants in three projects including Fezeka and SCAGA were asked to rank the assistance they receive from different institutions. In some instances it seemed clear that institutional roles, functions and boundaries between Abalimi and external institutions had become blurred. Fezeka and SCAGA gardeners indicated the following percentages of assistance as received from different institutions:

Fezeka gardeners

Abalimi	Department of Agriculture	Department of Social services	City of Cape Town
20%	35%	20%	25%

SCAGA gardeners

Abalimi	Department of Agriculture	Department of Social services	City of Cape Town
50%	50%	-	-

Unintended benefits of the garden projects

Besides their intended benefits, it was found that the garden projects play a major role of providing pleasantly supportive social and recreational spaces for the gardeners. The gardens are a source of recreation, social networks, community involvement and charity work. They are a number of push factors that encourage the gardeners to get out of their houses and pull factors that draw them to the garden projects. The garden has been a place to go during the day, an activity outside the home to keep the older women who no longer have full time jobs busy. Some gardeners expressed that gardening gave them an opportunity to escape their problems and boredom at home and enjoy the company of other women. Some use the garden to escape from empty lonely homes. One woman who stays with her grandchildren said:

“My house is so overcrowded and noisy; I stay with nine people in a small house. Gardening helps me to get out of the house and have a peaceful and wonderful space away from home”.

The results from the study showed that the gardens are significant social spaces as supported by Smit and Bailkey (2006) and Astbury (2004) who argue that community based agriculture generates social capital. In actual fact, Bourne (2007) concluded that the primary driving forces behind the Abalimi supported garden projects is social. The gardeners generally agreed that the gardens have not been of much benefit in bringing in income, but they carried on because gardening enabled them to interact socially and have created a sense of belonging and satisfaction. The same sentiment was supported by Reuther and Dewar (2005) who found that in Khayelitsha there was evidence of social benefits materialising through garden projects. Even in United States of America, evidence from Latino garden projects showed that gardeners view gardens as

social and cultural gathering places than as agriculture production places (Saldivar-Tanaka & Krasny, 2004).

Gardening remains a popular physical activity which makes the gardeners to exercise. The gardeners indicated that gardening has provided continuous exercise and keeps them fit. They argued that physical labour keeps them strong and healthy as they aged. An 86-year old gardener said,

“I am so fit, active and healthy because I am always exercising in the garden. Everyday I woke up early to come to the garden except when I am not feeling well. I enjoy gardening because it keeps me active and fit”.

Organic methods of farming certainly have a wide variety of benefits to the environment. The land under which Fezeka and SCAGA garden projects were constructed was lying idle without productive use but now the land is productively used for the benefit of the community. Some other benefits include the improvement of soil fertility thereby improving the quality and quantity of the yield over time, the supporting of environmental sustainability and contribution to local stability.

At another level, gardening has enabled the gardeners to help and assist the needy and sick people in their community. They harvest vegetables once every week and donate them to the needy, sick, and HIV infected people in their communities. By sharing their produce with the needy and sick people around them, the gardeners impact lives positively. One gardener at Fezeka stated:

“...because of gardening, we are able to help the needy, sick, HIV infected and even children in crèches in our area. We harvest vegetables once a week and we help these people. We are doing something for our community through participation in gardening”

Abalimi has participated in building up communities in the Cape Flats. Some support groups in the community request Abalimi to provide training to their members. The communities in need of inputs and gardening information can obtain them at Abalimi garden centres which are also open to non-Abalimi members. Some people who are trained by Abalimi go back to Eastern Cape where they originally come from, do well in gardening and share their testimonies with Abalimi members. Both beneficiaries and non-beneficiaries from other gardens come for motivation to Abalimi garden projects where they can ask questions from their peers and learn from one another.

Both the intended and unintended outcomes put together, can be summed up using a table as follows:

Table 10

Combined outcomes from the program garden projects

Type of outcome	Examples from Fezeka and SCAGA garden projects
Social	<ul style="list-style-type: none"> -socialising with fellow gardeners -sense of belonging to garden projects -shared recreation and relaxation -donation of vegetables to the needy and sick in communities -assisting non members with training, inputs, and motivation
Economic	<ul style="list-style-type: none"> -development of skills and knowledge related to gardening -low- income generation -improved household food security
Environmental	<ul style="list-style-type: none"> -improved attractiveness of physical environment -awareness of land utilization, waste management, composting and organic gardening
Health	<ul style="list-style-type: none"> -improved nutrition -healthy food to eat -physical exercising by gardening

Limitations of the study

Given the time constraints and the limited time frame in writing the thesis, this study focused on two garden projects only. In addition, not all programme data was accessed. For example, copies of internal evaluations of Abalimi were not available because of confidentiality and ethical issues of the organisation.

The data was limited since the interviews and focus group discussions were carried out with few gardeners who are still in the garden projects. No further data on those who dropped out of the garden projects was available.

The study relied on programme records which were poorly organised and had data inaccuracies and discrepancies. Although the best was made out of this data, it took effort and time to understand and reconcile the discrepancies.

Contribution of the evaluation

As stated in chapter one, the results of this evaluation served a formative purpose, specifically to enhance and improve the garden projects. The recommendations drawn from this study could be helpful to Abalimi management and gardeners by providing ways of how the garden projects can be improved in order to achieve its intended outcomes and satisfy the needs of its beneficiaries. Less research have been done on garden projects in Africa as compared to Europe and America. In this regard, the study contributed to the existing body of knowledge on garden projects in South Africa and other African countries. This study is among the few studies which have studied community gardening. Therefore, relevant literature on garden projects drawn from this study can be used by other interested scholars and researchers.

Conclusion

This study exposed the role of garden projects to communities in the Cape Flats. The gardeners acknowledged and appreciated a number of aspects in the Abalimi community gardening programme including the four-day training course. They also raised some concerns about the implementation of the garden projects in terms of the need for organic pesticides, bottom-up approach in decision making and a detailed and simple income invoice. Continuous training, extension services and follow-up issues were found to be critical needs in the garden projects due to new initiatives which are being introduced.

The findings show that the garden projects have been instrumental in reducing hunger, promoting healthy eating and nutrition. The results showed that it is achievable to initiate garden projects in order to reduce hunger and improve nutrition. However, income generation and poverty alleviation seems not to be achievable in the context of garden projects. It is evident that due to irregular and lack of income generating opportunities, participation in gardening requires that members support themselves by drawing on externally derived income.

Besides the intended outcomes, a number of positive unintended outcomes were derived from the garden projects. The generation of social capital emanated as the main outstanding unintended outcome and was supported by relevant literature.

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Appendices

Appendix 1: Interview schedule

University of Cape Town

University of Cape Town



School of Management Studies

Studying the Abalimi community garden projects

I aim to investigate the activities of the Abalimi garden projects, and the results they have achieved. With the final output from the study, a Master's thesis will be developed and submitted at the end of the academic year 2009.

The questionnaire is expected to take approximately 15 to 20 minutes.

Informed consent

Participation of gardeners in this survey is completely voluntary. Participants are assured that all their information will be strictly confidential and anonymous. No references will be made to specific individuals. All the responses will be used for academic purposes only. All questions are answered to your satisfaction. Your honesty and cooperation is greatly appreciated. I would be grateful for your favourable contribution towards the success of this study.

Signatures

The participant has been informed of the nature of research and its purpose. He/she has been given time to ask any questions which have been answered to the best of the researcher's ability.

Researcher's signature

Date

I have been informed about the study and I understand its process and possible benefits. I agree to take part in this research as a participant. I know that I am free to withdraw this consent and quit this project at any time, and my withdrawal will not cause me any penalty or loss of benefits.

Participant's signature

Date

Section A: Background information

- 1. When did you join the garden project? -----
- 2. Why did you join the garden project? -----

- 3. How many were you when you started the garden project, and how many are left now? -----
- 4. What do you think were the main reason for dropping out? -----

- 5. How many do you know who dropped out and
 - 1. Started their own garden project-----
 - 2. Stopped gardening-----
 - 3. Left because they got another job-----
- 6. How many started together with you and are still in the garden project? -----
- 7. Why are you still in the garden project? Give reasons-----

- 8. Why do you think women dominate in the garden project? -----

Section B: Service delivery

- 9. Which of the following services did you receive or are you still receiving from Abalimi?
 - 1. Training
 - 4 day training course-----
 - Follow up training from extension field officers-----
 - Workshops-----
 - Any accredited advanced course-----
 - 2. Inputs
 - Seeds-----
 - Fertiliser-----

-Garden tools-----

-Gardening clothing-----

3. Infrastructure

- Fencing-----

- Borehole drilling-----

-Irrigation tapes-----

-Storerooms-----

-Other (specify) -----

-Fixing and maintenance-----

10. What other organisations or government departments have supported you? Indicate the type of support

1. -----

2. -----

3. -----

11. Are you satisfied with the services that you are receiving from the following? Illustrate

Management-----

Extension field officers-----

Garden centres-----

Harvest of Hope-----

12. Are there any services that were added or dropped since you started?

1. Added services-----

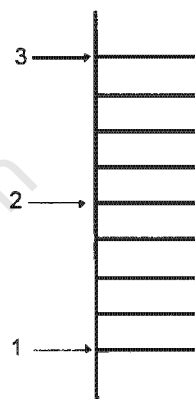
2. Dropped services-----

13. Which do you prefer, selling via Harvest of Hope or selling on your own directly to the community? Justify

14. Rate Abalimi's performance using the ladder provided; 3 for best performance, 2 for average performance, and 1 for bad performance on the following

3 2 1

1. Training
2. Advice
3. Encouragement
4. Inspection
5. Work relations
6. Provision of seed and fertiliser
7. Building the community
8. Sales profits from Harvest of Hope
9. Sufficient food
10. Sufficient sales



Section C: Production

15. Which of the following do you produce, consume and sell throughout the year? Indicate by tick

Vegetable	Produce	Consume	Sell
Spinach			
Cabbages			
Lettuce			
Egg plant			
Potatoes			
Sweet potatoes			
Butternuts			

Onions-Shallots			
-Leek			
-King			
Tomatoes			
Maize			
Pepper			
Carrots			
Cauliflower			
Broccoli			
Baby marrows			
Pumpkins			
Parsley			
Beans			
Chomuleo			
Peas			
Other (specify)			

16. On average, how many days do you work in the garden per week? -----

17. On average, how much do you spend per month on

1. Seeds? -----

2. Manure? -----

18. On average, how much money do you get from sales per week? -----

Section D: Successes, challenges and improvements

19. Do you think you are successful in gardening?

Yes

No

20. What makes you think you are successful? -----

21. Are you making profits from the garden project?

Yes

No

22. What do you use the money that you get from sales for?

Save

Reinvest

Household purchases

Other (Specify)

23. What do you like about the project? -----

24. What do you dislike about the project? -----

25. What problems are you facing in the project? -----

26. How can the garden project be improved for your benefit? -----

27. Without support from Abalimi and other organisations, can your business be sustainable?

Yes

No

Section E: Benefits from gardening

28. Do you benefit from gardening?

Yes

No

29. Do you have enough vegetables to eat from the garden?

Yes

No

30. Has gardening reduced hunger in your home? (Justify) Yes
 No

31. Has gardening improved/enhanced your health? How? Yes
 No

32. Do your children like eating vegetables? Yes

33. Which vegetables did you have for supper last night? -----

34. What are the advantages and disadvantages of gardening?

Advantages	Disadvantages

Section F: Demographics

35. Are you the household head? Yes
 No

36. How many dependants do you have? -----

37. Are you formally employed?

Yes

No

38. How old are you? Indicate the years -----

39. Which other sources of income do you have besides gardening?

Social grants

Remittances

Pension fund

40. What is the highest level of formal education that you attained?

Matric

College

University

Thank you for your cooperation. Your assistance is greatly appreciated!!!

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