The copyright of this thesis vests in the author. No quotation from it or information derived from it is to be published without full acknowledgement of the source. The thesis is to be used for private study or non-commercial research purposes only.

Published by the University of Cape Town (UCT) in terms of the non-exclusive license granted to UCT by the author.
URBAN AGRICULTURE, SOCIAL ENTERPRISE & AGENCY:
AN EXPLORATORY STUDY OF ORGANIC BOX SCHEMES IN CAPE TOWN, SOUTH AFRICA

Amy Thom (THMAMY002)

A thesis submitted in partial fulfillment of the requirements
for the degree of Master of Philosophy in Justice & Transformation

Faculty of the Humanities
University of Cape Town
South Africa

COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work(s) of other people has been attributed, cited and referenced.

05 November 2012

Signature: ___________________________ Date: __________________
ACKNOWLEDGEMENTS

Many thanks to Ethical Co-op, Harvest of Hope and Wild Organic Foods and all of their customers for participating in this study. It was a pleasure interacting with you, and I hope the findings here will contribute in some way to developing your respective enterprises.

A special thank you to Evona and Benji, who invited me into their gardens and shared with me their personal stories. Working with you was truly one of the richest learning experiences I have ever had. I wish you and your families all the best for the future.

I am grateful to Dr. Beatrice Conradie for her supervision. Your input and insights continually helped to shape the direction of my research, and this study was made stronger as a result of your many contributions.

I likewise express my gratitude to the University of Cape Town, the Centre for Social Science Research and the Allemall Foundation for their generous financial support as I pursued this degree.

Most of all, thank you to the friends in Cape Town who have become my family in Africa, and to those friends and family members in other parts of the world who shared this journey from afar. Your enthusiastic cheerleading and unwavering support gave me the courage I needed to achieve this goal.

This dissertation is dedicated to the memory of my grandfather, David Thom, who passed away during the course of my programme. I will always be proud to be your ‘adventurous’ granddaughter.

Amy E. Thom
URBAN AGRICULTURE, SOCIAL ENTERPRISE & AGENCY:
AN EXPLORATORY STUDY OF ORGANIC BOX SCHEMES IN CAPE TOWN, SOUTH AFRICA

AMY THOM
MPhil (Candidate) Justice & Transformation
Depts of Politics & Economics, Faculty of Humanities
University of Cape Town

ABSTRACT

If agency is a characteristic of social justice in South Africa, then development efforts must be aimed at both economic growth and improving poor people’s agency through skills-building, income opportunities and creating links from the margins to the formal economy. Urban agriculture holds the potential to address these goals through social enterprise, but success depends upon identifying a context-appropriate market for products with adequate consumer demand. Organic box schemes, e.g. fresh organic produce packed into a box or bag and purchased by a consumer on a regular basis, could present a viable way to expand urban agriculture’s socioeconomic impact by engaging low-income farmers in marginalized urban communities to grow food crops and then providing them with a suitable local market for their produce.

Focused on Cape Town, this study employed a mixed-methods action research approach to explore market-related factors that determine a scheme’s financial success and agency-related issues that influence a social enterprise box scheme’s impact on farmers. A qualitative comparison of three different box scheme models in the current market was conducted. A survey of 354 box scheme consumers provided quantitative and qualitative data to investigate dimensions of consumer demand and satisfaction. Data from this survey were also used to compare the different schemes’ ability to compete with one another. A simple quantitative price review compared the product across schemes and across three major grocery retailers. Lastly, an administered questionnaire provided the foundation for two descriptive case studies of practicing urban farmers. Overall results were then used to describe an ‘ideal’ social enterprise box scheme.

Results indicate that a social enterprise model is able to compete with other models in acquiring consumers and delivering product satisfaction. However, this model fared worst in the price comparison; the scheme will need to address this issue to remain competitive. Box schemes capture a significant portion of subscribers’ expenditure on fresh produce, as well as on total groceries, and this holds over consumers’ tenure with the scheme. This finding suggests that there is a viable market for box schemes in Cape Town. Consumers’ primary purchasing motivations are centered around boxes being organic and being connected to a social programme; these characteristics appear to be important in targeting this consumer base. Overall, consumers are happy with their boxes but variety is a sticking point on which even the most satisfied consumers place a premium, regardless of scheme. This is an area schemes must address, especially as consumer expectations increase over time. The farmers’ case studies demonstrate that a social enterprise box scheme can make a positive impact on poor producers’ agency, but there is room to expand this impact through consumer-producer interaction and work-learning programmes.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS  ii  
ABSTRACT  iv  
LIST OF TABLES  viii  
LIST OF FIGURES & PHOTOS  ix  
LIST OF ACRONYMS  x  

<table>
<thead>
<tr>
<th>CHAPTER 1</th>
<th>INTRODUCTION</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Context of the study</td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td>Research questions &amp; objectives</td>
<td>2</td>
</tr>
<tr>
<td>1.3</td>
<td>Delimitation</td>
<td>3</td>
</tr>
<tr>
<td>1.4</td>
<td>Underlying assumptions</td>
<td>3</td>
</tr>
<tr>
<td>1.5</td>
<td>Definitions of terms</td>
<td>4</td>
</tr>
<tr>
<td>1.6</td>
<td>Significance</td>
<td>4</td>
</tr>
<tr>
<td>1.7</td>
<td>Organization</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 2</th>
<th>LITERATURE REVIEW</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>2.2</td>
<td>Social justice, agency &amp; development in South Africa</td>
<td>7</td>
</tr>
<tr>
<td>2.2.1</td>
<td>Social marginalization &amp; agency</td>
<td>7</td>
</tr>
<tr>
<td>2.2.2</td>
<td>Formalising socioeconomic rights</td>
<td>7</td>
</tr>
<tr>
<td>2.2.3</td>
<td>Socioeconomic development in South Africa</td>
<td>9</td>
</tr>
<tr>
<td>2.3</td>
<td>The role of social enterprise</td>
<td>11</td>
</tr>
<tr>
<td>2.3.1</td>
<td>Overview of the model</td>
<td>11</td>
</tr>
<tr>
<td>2.3.2</td>
<td>Social enterprise, intermediaries &amp; agency</td>
<td>12</td>
</tr>
<tr>
<td>2.3.3</td>
<td>Social enterprise in South Africa</td>
<td>13</td>
</tr>
<tr>
<td>2.4</td>
<td>Urban agriculture &amp; organic box schemes</td>
<td>14</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Relevance of urban agriculture</td>
<td>14</td>
</tr>
<tr>
<td>2.4.2</td>
<td>Urban agriculture &amp; socioeconomic development</td>
<td>15</td>
</tr>
<tr>
<td>2.4.3</td>
<td>Box schemes as urban agriculture enterprise</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CHAPTER 3</th>
<th>METHODOLOGY</th>
<th>20</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Introduction</td>
<td>20</td>
</tr>
<tr>
<td>3.2</td>
<td>Research design</td>
<td>20</td>
</tr>
<tr>
<td>3.3</td>
<td>Action research approach</td>
<td>21</td>
</tr>
<tr>
<td>3.4</td>
<td>Selection of participants</td>
<td>22</td>
</tr>
<tr>
<td>3.5</td>
<td>Box schemes</td>
<td>23</td>
</tr>
<tr>
<td>3.6</td>
<td>Consumers</td>
<td>24</td>
</tr>
<tr>
<td>3.7</td>
<td>Producers</td>
<td>25</td>
</tr>
<tr>
<td>3.8</td>
<td>Data collection</td>
<td>26</td>
</tr>
<tr>
<td>3.9</td>
<td>Data analysis</td>
<td>27</td>
</tr>
<tr>
<td>3.10</td>
<td>Limitations</td>
<td>28</td>
</tr>
</tbody>
</table>
CHAPTER 4 RESULTS

4.1 Box scheme business models 30
4.2 Price comparison of product 32
4.3 Box scheme consumer demand 37
4.4 Producers’ strengths & constraints 41
   4.4.1 Farmers’ introductions 41
   4.4.2 Personal characteristics 42
   4.4.3 Support services & skills building 43
   4.4.4 Dependency 45
   4.4.5 External constraints 47
   4.4.6 Summary 49
4.5 The ‘ideal’ box scheme 52
   4.5.1 Determining box contents 52
      4.5.1.1 Consumer motivations 52
      4.5.1.2 Dimensions of consumer satisfaction 53
      4.5.1.3 Consumers’ fresh produce purchasing habits 56
      4.5.1.4 Consumers’ recommendations for improved boxes 57
   4.5.2 The box scheme development model 58
   4.5.3 Characteristics of the ‘ideal’ box scheme 62
      4.5.3.1 Market & business competency 62
      4.5.3.2 Consumer convenience 63
      4.5.3.3 Packaging 63
      4.5.3.4 Consumer education 64
      4.5.3.5 Expanding producers’ agency 65
   4.5.4 Potential challenges to implementation 67

CHAPTER 5 CONCLUSION 69

5.1 Summary of the study 69
5.2 Implications 70
5.3 Significance 71
5.4 Recommendations for future research 71

REFERENCES 72

APPENDICES
Consent Form 82
Farmer Questionnaire 84
Farmers’ Case Studies 95
Consumer Survey 102
Consumer Survey Data on disc
LIST OF TABLES

Table 1  Comparison of box scheme and retail prices by scheme and by retail supermarket
Table 2  Consumer profile by box scheme
Table 3  Cost of box as share of expenditure on fresh produce (pooled sample)
Table 4  Self-reported satisfaction by box scheme and by satisfaction criteria
Table 5  Willingness to pay (wtp) more for improved quality and variety by level of overall satisfaction
Table 6  Regular fresh produce purchases in addition to the box as proportion of total responses
Table 7  Enterprise issues and strategies by box scheme development model classification
Table 8  Summary of characteristics set forth for the ‘ideal’ box scheme
LIST OF FIGURES & PHOTOS

Figure 1  Box scheme development model
Figure 2  Wild Organic Foods’ product offering (July 2012)
Figure 3  Ethical Co-op’s product offering (August 2012)
Figure 4  Harvest of Hope’s product offering (July 2012)
Figure 5  Evona’s garden at Levana Primary School, Lavender Hill (October 2012)
Figure 6  Benji’s ‘Green Point’ garden in Town Two, Khayelitsha (July 2012)
Figure 7  Seedlings for sale in Evona’s garden (October 2012)
Figure 8  Benji’s new garden project in Nkanini, Khayelitsha (October 2012)
Figure 9  Producers’ agency as ‘intermediated’ by social enterprise in relation to socioeconomic development
Figure 10  Self-reported satisfaction by satisfaction criteria for the pooled sample
# LIST OF ACRONYMS

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DoA</td>
<td>Department of Agriculture (Republic of South Africa)</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>ICESCR</td>
<td>International Covenant on Economic, Social and Cultural Rights</td>
</tr>
<tr>
<td>NDP</td>
<td>National Development Plan (Republic of South Africa)</td>
</tr>
<tr>
<td>NPC</td>
<td>National Planning Commission (Republic of South Africa)</td>
</tr>
<tr>
<td>NPO</td>
<td>Nonprofit Organisation</td>
</tr>
<tr>
<td>RSA</td>
<td>Republic of South Africa</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
</tr>
<tr>
<td>UNDHR</td>
<td>United Nations Declaration of Human Rights</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
</tbody>
</table>
CHAPTER 1
INTRODUCTION

1.1 CONTEXT OF THE STUDY

South Africa’s development in the post-apartheid era is challenged by “an economy in which social exclusion and poverty continue to interact in a mutually self-sustaining fashion” (Adato et al., 2006, p227). Nearly two decades after the end of apartheid, social marginalization persists along racial lines. Millions of non-white South Africans suffer educational and skills deficits, chronic unemployment and spatial segregation, all of which have kept them at the margins of society and the economy (Seekings & Nattrass, 2006; Chagunda & Taylor, 2012). This set of circumstances has a devastating impact on poor people’s life choices and opportunities; as a result, many South Africans are severely constrained in their ability to make changes in their social, financial or political realities. In this context, poverty is not merely a condition of material lack; rather, it is evidence of a wider sociopolitical problem that negatively impacts the choices available to poor people and their ability to pursue them (Brand et al., 2012; du Toit, 2008; du Toit, 2012). In other words, poverty in South Africa is characterised by a lack of agency.

Development efforts in South Africa, therefore, must be aimed not only at economic growth, but also at improving poor people’s agency through real skills-building, developing income-earning opportunities and creating links from the margins to the formal economy (Brand et al., 2012; du Toit, 2008; Nussbaum, 2003). The current South African government recently released its National Development Plan entitled ‘Vision 2030’ (2011) whose goals include reducing poverty and inequality and growing a more inclusive economy. This kind of development can be met not only through public programmes but also through the private sector – provided that enterprise growth occurs with attention to social as well as economic goals.

Through its positive links to food security, income poverty, ecological conservation and socioeconomic development (Battersby-Lennard, 2011; Foeken, 2006; Hovorka et al., 2009; May & Rogerson, 1995; UNDP, 1996) urban agriculture holds the potential to address these development goals by creating enterprise and employment opportunities. However, such opportunities can only be sustainably developed by first identifying a viable, context-appropriate market for urban agriculture products for which real demand exists (Dorward et al., 2003; Dubbeling et al., 2010).

A growing trend towards consumer preference for local, organic produce in industrialised countries in the North has only recently emerged in the global South (Bienabe et al., 2011). Broadly defined as “a composition of [pre]dominantly fresh organic produce, designed and packed into a box or bag by a farm or trading company, subscribed to by the end-customer on a regular basis, and delivered to a place the consumer has agreed on” (Haldy, 2004a, p4), a box scheme represents an urban agriculture enterprise opportunity that could capitalize on this emerging niche market for organic products. In South Africa’s development context, box schemes operated via a social enterprise business model could present a
viable way to expand urban agriculture’s impact by engaging low-income farmers in marginalized urban communities to grow food crops and providing them with a suitable local market for their produce (Florchinger et al., 2007; Hoekstra & Small, 2010).

1.2 RESEARCH QUESTIONS & OBJECTIVES

Research on organic box schemes is limited to developed country settings, with most studies conducted in the U.S., Europe, Asia and Australia (Brown et al., 2009; Haldy, 2004a/b; Torjusen et al., 2008). Results on consumer profiles and motivations, as well as opportunities and limitations related to box scheme enterprise development, generalize only in relation to the global North. In Africa, very little is known about the market for box schemes – or for that matter, the market for any urban agriculture products – and whether they represent a viable socioeconomic development strategy.

If urban agriculture enterprise development has social and economic aims, one must understand the market-related factors that determine financial success, as well as the livelihoods factors that influence social impact; without this context-specific knowledge, development programmes may be poorly targeted and public spending wasted. While a few studies have been undertaken on box schemes in South Africa (de Satge & William, 2008; de Satge, 2011; Kirkland, 2008; RUAF, 2010), research has been primarily restricted to qualitative description, without attention to enterprise models or issues of supply and demand. This study aims to address the gap in the literature by presenting a pilot investigation into box schemes in Cape Town, with consideration given to enterprise models, consumer demand, product development and low-income producers’ agency.

Exploring the viability of box schemes as sustainable urban agriculture social enterprise requires that appropriate aspects of the business model be identified, consumer demand be understood and quantified, supply conditions be described and issues that impact on poor farmers’ agency be articulated. The research questions this study seeks to answer are:

- Can a social enterprise model compete with other box scheme business models, and what are the enterprise characteristics that may contribute to this model’s success?
- Who are box scheme consumers in Cape Town and how does the box fit into household food expenditure?
- What might an ‘ideal’ box look like?
- What are some of the successes and constraints on low-income urban farmers’ agency?

The answers to these questions will help establish whether there is sufficient demand for organic produce boxes in Cape Town and how this market could be grown to expand the associated socioeconomic benefits. They will also provide some preliminary insight into planning criteria for urban agriculture development programmes, as well as social enterprise’s potential role in improving poor urban farmers’ agency.
In order to address these questions, the study has the following research objectives:

- Outlining some of the different models of box schemes in the current market and comparing their ability to compete against one another;
- Discovering the dimensions of box scheme consumer demand and satisfaction;
- Comparing the product across schemes and across retailers; and
- Uncovering some of the factors that influence urban farmers’ achievements and failures.

1.3 DELIMITATION

The study focuses on exploring research objectives within the context of post-apartheid, urban South Africa in general and Cape Town in particular. This focus delimited the location of the study and selection of participants to urban and peri-urban areas of metropolitan Cape Town. The study’s comparison of box scheme models and evaluation of a social enterprise’s ability to compete in the market delimited the selection of schemes to at least one for-profit and at least one social enterprise model. The selection of participating schemes was further delimited by the need for an adequate consumer survey sample size of at least 300 respondents, so schemes were also chosen based on their overall number of consumers. The objective of exploring box scheme consumer demand in Cape Town delimited the selection of consumer survey participants to people who currently purchase from a box scheme. The investigation of poor producers’ agency in connection with box scheme social enterprise delimited the selection of farmer questionnaire participants to non-white people living and actively farming in marginalized, low-income communities in Cape Town. In consideration of the researcher’s Masters programme guidelines, the study’s time frame was necessarily delimited to a nine-month period from February to October 2012.

1.4 UNDERLYING ASSUMPTIONS

The study assumed that the consumer sample represents the entire box scheme consumer population in Cape Town; that consumers responded honestly and accurately to the survey instrument; and that the survey was an effective instrument in capturing appropriate responses about consumer behavior and attitudes.

The study further assumed that the participating farmers are typical of marginalized South Africans in general, and of poor urban farmers in particular; that the farmers understood the questions being asked of them and responded honestly in regards to their lives, experiences and attitudes; and that the interpretation of this data accurately reflected the farmers’ perceptions and experiences.

Finally, the study assumed that the pricing data from individual retail stores surveyed is representative of overall city-wide prices for each retail chain.
1.5 DEFINITIONS OF TERMS

For purposes of this study, the following concepts are set forth here, with more in-depth discussion to follow in Chapter 2:

Social justice is understood as the expressed and formal protection, promotion and adjudication of inherent social, cultural and economic human rights which belong to every individual and group (Michelman, 1969; United Nations, 1948/1966/1986/1997; Republic of South Africa, 1996; Sengupta, 2004; Yigen, 2000).

Agency can be defined as the human ability to take action and exert change in one’s life, within the structured context of relevant social, economic and political realities (Nussbaum, 2003; Giddens, 1976; Sen, 1999/2000).

A social enterprise business model pursues financial gain alongside a social mission, marketing products or services that address a social need in some way, using sound business principles and reinvesting profits to expand its mission (Deraedt, 2009; Johnson, 2000; Urban, 2008; Weerawardena & Mort, 2006).

Urban agriculture is “the cultivation, processing, marketing and distribution of food crops and products in an urban environment and for the benefit of urban residents” (City of Cape Town, 2007, p3).

A box scheme is a specific production-market value chain which is usually “a composition of [pre]dominantly fresh organic produce, designed and packed into a box or bag by a farm or trading company, subscribed to by the end-customer on a regular basis, and delivered to a place the consumer has agreed on” (Haldy, 2004a, p4).

1.6 SIGNIFICANCE

As noted earlier, current literature on box schemes focuses almost exclusively on industrialised countries in the North; little research exists on box schemes in developing countries. In South Africa, the small number of qualitative studies has employed mainly livelihoods analyses, largely ignoring quantitative exploration of relevant economic factors and failing to simultaneously incorporate input from all stakeholders involved, e.g. consumers, producers and enterprises. To the best of the author’s knowledge, no study on box schemes has been conducted with a mixed-methods, action research approach. This is a gap in the literature that should be addressed as there is a need for data about the market for organic box schemes, especially considering that urban agriculture enterprise is being promoted for social and economic development. This study is investigatory in nature and therefore not generalizable; however, results will inform government, nonprofit and private sector actors who are interested in pursuing box schemes for development purposes.
1.7 ORGANIZATION

Following Chapter 1’s introduction of the topic and identification of the study’s objectives, a literature review is presented in Chapter 2 which lays out the study’s theoretical framework and discusses relevant research. Next, Chapter 3 presents the methodology of the study, articulating the research design, selection of participants and techniques of data analysis. Results are then presented in Chapter 4, which is broken into subsections. Lastly, findings are discussed in terms of their potential implications in Chapter 5, which concludes the thesis.
CHAPTER 2
LITERATURE REVIEW

2.1  INTRODUCTION

Nearly twenty years after its dismantling, the legacy of apartheid continues to shape the structure and character of South Africa’s economy and society. Decades of formally racialised policies of social exclusion have resulted in a deeply polarised country hallmarked by chronic poverty and among the highest levels of income inequality in the world (Seekings & Nattrass, 2006). Life opportunities for millions of people still remain heavily skewed along racial lines. Philip (2009) identifies three key aspects of this legacy: a centralised, monopolistic economy in which assets and capital are unevenly distributed; a racialised spatial inequality where townships segregate groups and place people far from economic opportunities; and a persistent inequity in education and skills attainment.

Some have suggested that apartheid’s legacy represents “an economy in which social exclusion and poverty continue to interact in a mutually self-sustaining fashion” (Adato et al., 2006, p227), relegating so many non-white South Africans to the margins of social and economic life. Township communities endure extremely poor living conditions when held up against the relative luxury of South Africa’s middle and upper classes. Situated on the outer fringes of urban areas, township life means long, expensive commutes to access services or employment, as well as limited contact with other, e.g. higher-income, communities (NPC, 2011).

Unequal access to education means that many South Africans lack even the basic literacy and numeracy skills necessary to obtain a job (von Broembsen, 2012), a fact which is further complicated by failures in the labour market and consequent high levels of unemployment (Chagunda & Taylor, 2012). This translates to disadvantaged people’s inability to access the formal market economy as income-earning producers and restricts their economic participation to consumption activities on the margins (Hobson, 2011; von Broembsen, 2010).

The key factors discussed above – among many others beyond the limited focus of this review – contribute to the persistent marginalisation of large numbers of the South African population, limiting people’s potential for a decent life and constraining their ability to take advantage of the few opportunities they do have. This marginalisation of South Africa’s poor, and poor people in most developing countries, is highly exclusive (Adato et al., 2006; Bolwig et al., 2010; Petersen, 2010) in that it prevents “individuals or groups from participating fully in social, political and economic life” (du Toit, 2008, p138-9), barring their access to livelihoods (Castells, 2000) and greatly undermining their agency.
2.2 SOCIAL JUSTICE, AGENCY & DEVELOPMENT IN SOUTH AFRICA

2.2.1 Social marginalisation & agency

The concept of agency can be broadly understood in terms of one’s ability to exercise choice. This all-encompassing definition follows from Sen’s theory of social justice in development, which set forth ‘capability’ as the freedom with which people are able – or unable – to realise fundamental political, social and economic entitlements (Sen, 1999), including free and satisfying social affiliation and control over one’s political and material environments (Nussbaum, 2003). Sen orientated his argument around Giddens’ (1979) idea of people as agents of instrumental change, in their own lives and in society at large, and he highlighted the interrelationship between freedom, rights and equality when considering how best to pursue social justice (Sen, 1999). Agency, therefore, is the capability to freely and equitably exert change in one’s life, within the context of one’s social, economic and political reality. Conversely, the marginalising lack of agency experienced by the chronically poor can be understood as ‘relational capability deprivation,’ or the way in which people are deprived of agency not only by their circumstances (such as hunger or joblessness) but also by their position in relationships of social, economic and political power (Sen, 2000).

From this perspective, the poverty in which so many South Africans live is not merely a condition of economic or material lack – it is a visible signpost of a wider social problem with structural and political dimensions that negatively impact the choices available to people, as well as their ability to pursue them (Brand et al., 2012; du Toit, 2008/2012; Giddens, 1979). Poverty in this context is characterised by a lack of agency. Poverty alleviation and development efforts with a concern for social justice must therefore focus not merely on economic growth but also on increasing people’s real socioeconomic agency (Brand et al., 2012; Chagunda & Taylor, 2012; du Toit, 2008; Nussbaum, 2003). Given the key aspects of chronic poverty outlined previously, increasing agency among South Africa’s poor likely means improving access to education and skills attainment, creating opportunities for people to earn cash income and providing appropriate and equitable links to the formal market economy, all with careful attention to the social, political and economic power relations and structures at play.

2.2.2 Formalising socioeconomic rights

The interrelated notions of agency and social justice are closely linked to the concept of human rights (Petersen, 2010; Sengupta, 2004; Yigen, 2000) which sees justice as more than just an altruistic, morals-based ‘fairness’ by which society ‘should’ operate. Rather, justice is equated with a series of inherent rights belonging to every individual and group that must be expressly and formally protected, promoted and adjudicated by government. Over the past half century, the rights-based approach to social justice has been progressively formalised first through a number of international declarations and covenants, and then in national constitutions and development plans.
In response to the atrocities of the second world war, the United Nations (UN) Universal Declaration of Human Rights (UDHR) set forth a series of fundamental economic, social and cultural rights including the right to work, to free choice of employment as well as protection from unemployment, to social security, to an adequate standard of living, to education and an entitlement to all such rights and freedoms without discrimination (UN, 1948). Following the UDHR came a number of further reinforcing, and in some cases more binding, rights-related instruments. Of note are:

- the 1966 UN International Covenant on Economic, Social and Cultural Rights (ICESCR), which intended to enhance global and local social justice and was later elaborated in the Limburg Principles on the Implementation of the ICESCR (UN, 1986) and the Maastricht Guidelines on Violations of Economic, Social and Cultural Rights (UN, 1997)
- the UN’s 1968 Proclamation of Teheran, which came out of the International Conference on Human Rights and called for effective policies of social and economic development;
- the 1993 Vienna Declaration and Programme of Action, borne of the World Conference on Human Rights which “affirmed that extreme poverty and social exclusion constitute a violation of human dignity” (Yigen, 2000, p15); and
- the 1995 Copenhagen Declaration, in which participants in the World Summit for Social Development made a commitment to actively pursue policies and strategies for the elimination of poverty (UN, 1998).

What is important to note here is these instruments’ progression towards specifically identifying poverty as an issue of human rights and social justice. Furthermore, these documents moved from a progressively acknowledged need for action to a commitment to action. The consensus was that socioeconomic human rights are fundamental to social justice, and as ‘positive’ rights, require action in order to realise them (van der Walt, 2004; Yigen, 2000). As a result, many international development agencies and national governments agreed to enact policies that would address socioeconomic rights in order to eradicate poverty.

South Africa’s new Constitution was adopted in 1996. It has been hailed as one of the most progressive constitutions in the world for its commitment to social justice through the inclusion of social, economic and cultural rights. The preamble of the Constitution states that it was enacted to improve the quality of life for all South Africans and to liberate the potential of each person by upholding equality and advancing rights and freedoms. The Constitution’s Bill of Rights includes the right to food, water, housing, education, social security, safety, health care and the free choice of occupation (RSA, 1996).

South Africa’s Constitution was built, in part, upon the foundation laid by the instruments listed above; as such, the state was obliged not only to respect and protect the rights set out in the Bill of Rights but also to “promote and fulfil” them (RSA, 1996). This means that the state “must take appropriate legislative, administrative, budgetary, judicial and other measures towards the full realisation of the rights” and where applicable must also “ensure that the conditions exist for the individual to realise the right themselves” (Yigen, 2000, p23-4) e.g. exert their own agency. The South African government’s role
in upholding social justice is therefore an active one – to plan strategies and enact policies specifically aimed at addressing citizens’ rights, including socioeconomics rights (UN, 1997; van der Walt, 2004).¹

2.2.3 Socioeconomic development in South Africa

In approaching socioeconomic development within this overarching framework of social justice, rights and agency, the South African government’s National Planning Committee (NPC) is currently focused on addressing poverty, inequality and unemployment. In 2011, the NPC released a National Development Plan (NDP) entitled ‘Vision 2030,’ which outlines a number of strategies and goals to be achieved in the next two decades. These include:

- Creating sustainable livelihoods in a more inclusively growing economy;
- Building the skills base by improving education and vocational training; and
- Addressing spatial inequality through improvements to public transport and urban environments and directing economic activity towards townships (NPC, 2011).

Vision 2030 “writes a new story” for South Africa, in which the country’s “energies are focused both on attacking poverty and on expanding a robust, entrepreneurial and innovative economy” (NPC, 2011, p4). As Minister Trevor Manuel says in the Foreword to the NDP,

“At the core of this plan is a focus on capabilities; the capabilities of people and of our country and of creating the opportunities for both. The capabilities that each person needs ... must include education and skills, decent accommodation, nutrition, safe communities, social security, transport and job opportunities” (NPC, 2011).

Manuel’s statement connects the NDP to improving people’s agency and articulates the Commission’s acceptance of the need to address the full spectrum of socioeconomic rights. Vision 2030 aims to ensure simultaneously that all people have what they need to improve their lives and that government creates the inclusive economic conditions necessary for job creation and enterprise growth.

In recent decades, the concept of social justice discussed here and the goals of development efforts have evolved alongside one another, from “merely reducing income-poverty to diminishing deprivation and enhancing wellbeing, and from increasing employment to sustaining livelihood” (Chambers, 1995, p199). It is now widely accepted that policy and development approaches are most effective when they address not only the economic but also the dynamic social, cultural, political and institutional contexts in which poor people live (Bolwig et al., 2010; Kanji et al., 2005; Riisgaard et al., 2010). A top-down market-based

¹ It should be noted that the enforceability of socioeconomic rights is a contentious and problematic issue for states, and South Africa is no exception. The cases of Joseph v The City of Johannesburg and City of Johannesburg v Mazibuko are just two examples that illustrate the challenges South Africa faces in terms of the justiciability, financial implications and politics of implementing socioeconomic rights.
approach quantifies peoples’ economic activities based on their participation as producers and/or consumers (de Wildt et al., 2006), whereas a bottom-up livelihoods approach contextualises peoples’ multidimensional roles and provides descriptive insight into the complexity of their lives (DFID, 1999). Combining a livelihoods approach with a market-based approach offers a model for planning and analysis that merges the qualitative advantages of the former with the quantitative advantages of the latter.

The logic behind the complementarity of the two approaches is that people’s livelihoods and the markets upon which they depend are closely intertwined; the value in merging them into one model lies in the way each fills the conceptual and practical gaps of the other (Albu, 2008; Dorward, 2001; Dorward et al., 2002; Kanji et al., 2005). A purely livelihoods-based approach lacks in-depth attention to markets, and especially to the issue of market demand; given that people leverage their assets to generate outputs in the form of either labour or products, if there is inadequate demand then interventions may be poorly aimed and opportunities for spontaneous growth dynamics missed (Albu, 2008). Therefore, attention must be given to the importance of understanding market forces in people’s livelihoods.

Conversely, a market-based approach lacks attention to the social dimensions of people’s lives, prioritizing income, access and economics over other equally salient factors, such as household gender roles, social networks and nonmonetary relationships of exchange. Economic agency and social agency intimately inform one another (Albu, 2008), so an effective approach to planning and analysis must take this into consideration. Additionally, understanding how and why market participation takes place locally, what mitigating social factors come into play and what happens to people without any market access are all questions that an economic approach cannot answer without simultaneous livelihoods analysis (Albu, 2008).

Therefore, a unified ‘livelihoods-and-markets’ approach unpacks the links between markets and their related social, human, physical, natural and financial assets (Owusu-Gyamfi, 2009), which helps develop a layered understanding that is lacking when one approach is chosen over the other. It provides a qualitative and quantitative lens to inform cross-sectoral knowledge bases and addresses the multiple dimensions of people’s lives, with the aim of guiding more effectively-targeted interventions.
2.3 THE ROLE OF SOCIAL ENTERPRISE

The social enterprise concept has emerged within the context of increasing pressure on governments for failures in social service delivery, particularly in developing countries where social needs are great (Davids, 2010; Johnson, 2000; Molefe, 2011). As a result, nonprofit organisations (NPOs) have had to provide services for ever-larger numbers of people despite dramatic decreases in, and greater competition for, funding (Johnson, 2000; Weerawarden & Mort, 2005; Urban, 2008). All of this has predicated a move towards private sector entrepreneurial activity that addresses the social needs gaps left by government and civil society failures, providing “a means of counteracting imbalances in the economic and financial system[s]” (Fonteneau & Develtere, 2009, p22). In this sense, social enterprise is a way to reenvision social welfare by creating new approaches to solving social problems, building collaborative partnerships between public, private and nonprofit sectors, and capitalising on market opportunities with a focus on pressing social concerns (Giddens, 1998; Johnson, 2000).

2.3.1 Overview of the model

A social enterprise is a commercial venture with dual objectives: 1) amelioration of a social problem alongside 2) generation of economic profit to sustain the enterprise. It is a business model that explicitly aims to produce both social capital and financial gain. A social enterprise markets products or services that directly and innovatively address a social need in some way, using sound business principles and reinvesting profits to expand its mission (Deraedt, 2009; Johnson, 2000; Urban, 2008; Weerawardena and Mort, 2006). This balance between social and economic goals enables an enterprise to make a positive contribution to development while generating enough income to sustain itself and extend its activities. Social impact is the measure of success in this enterprise model; as such, “long-term social return on investment” (Urban, 2008, p350) is the gauge by which the enterprise’s value is assessed. A social enterprise can focus on any social issue and may take many different forms, such as small-scale commercial ventures, cooperatives, NPOs or closed corporations (Urban, 2008).

Social enterprise presents a unique model for simultaneously promoting social and economic development. Some of the advantages are:

- Innovation in the form of a product or service for which there is a clear social need (Weerawardena & Mort, 2006);
- Solidarity in the collective nature of the enterprise’s mission, and in some cases access to a volunteer resource base (Fonteneau & Develtere, 2009);
- Potential to connect a socially disadvantaged workforce to skills and income otherwise unattainable in a structurally unequal labour market (Daya, 2012; von Broembsen, 2010 & 2012);
- A triple bottom line of profit, social impact and sustainability (Harding, 2006) combined with a pragmatic focus on long-term value creation and high levels of risk management (Weerawardena & Mort, 2006).
But the social enterprise model is not without problematising challenges. Key to a social enterprise’s success, as with most any commercial enterprise, is its organizational capacity. Solid business planning and training are indispensable (Sharir & Lerner, 2006; Urban, 2008; Weerawardena & Mort, 2006) because the economic market rewards performance and efficiency over altruism. Along the same line, competition with private sector products and services in terms of price, quality, economies of scale, and market research and development is also a challenge (Fonteneau & Develtere, 2009; Urban, 2008; Weerawardena & Mort, 2006). Given social enterprise’s relatively recent emergence, there is a lack of regulatory mechanisms or institutional support, as well as access to capital (Johnson, 2000; Molefe, 2011; Sharir & Lerner, 2006), all of which can make establishing a social enterprise administratively difficult and dependent on external funding. Finally, measuring social impact and social value creation can be conceptually and practically difficult (Amm, 2009; Watters et al., 2012).

### 2.3.2 Social enterprise, intermediaries & agency

In their analysis of poverty reduction through economic integration, Bolwig et al. (2010, p174) state, “...inclusion for small producers require[s] interventions at sites located beyond their areas of operation, often drawing on external resources and networks”. In the context of this study, a social enterprise acts as one such external resource, namely an intermediary which manages business administration and logistics and connects producers to consumers.

There are a number of reasons why an intermediary is important and appropriate for socioeconomic development that aims to increase poor producers’ agency. In situations characterised by chronic poverty and inequality, as in South Africa, deep disparities in education and job training mean that many poor people lack the basic skills necessary for employment, let alone operating a formal business (von Broembsen, 2010). Many such producers may be “functionally illiterate, have a poor command of English, have no formal sector experience and limited numeracy, and would be unable to manage the complex communications and networking necessary to sell products in the formal economy” (von Broembsen, 2012, p2). An intermediary can fill the gap in skills which producers lack and which are required to manage a business enterprise (Hoekstra & Small, 2010). In doing so, it can contribute to building producers’ agency by providing skills training and personal development in conjunction with production activities.

An intermediary also provides access to formal markets external to poor producers’ communities. For these producers, local customers are also poor and buy in small quantities; profits are small and competition is high. External markets offer the opportunity to set higher prices for a larger volume of products, which translates to higher profits (Philip, 2003; von Broembsen, 2010). However, access to markets is mediated by the social systems in which they exist (Daniels & Jeans, 2009); in South Africa, spatial and economic inequalities mean that poor producers often participate only on the fringes of markets. Social enterprise intermediaries can therefore provide a link between low-income producers...
and higher-income consumers, connecting poor people to the wider formal economy and providing them with cash income (Fonteneau & Develtere, 2009; von Broembsen, 2012).

A recent case study of one social enterprise in Cape Town confirmed that the intermediary’s role in connecting producers to external markets made a significant contribution to producers’ agency in terms of both financial and human capital (Kirkland, 2008). Another study indicated that social enterprises are not only able to create jobs for the unemployed, but in doing so, are also able to generate other positive quality of life returns (Amm, 2009). Such research demonstrates that a social enterprise acting as market intermediary can produce meaningful change in poor producers’ agency, providing opportunities otherwise unavailable to them and building social and economic assets that increase their capabilities.

Still, it should be noted that power relations are highly salient to the role an intermediary plays in poor producers’ lives (Daya, 2012; du Toit, 2008; von Broembsen, 2012). Attention must be given to the terms with which producers engage with intermediaries if real and sustainable improvements to agency are to be achieved. Moreover, a social enterprise intermediary must pay careful attention to constructing a specific, clearly articulated mission that incorporates beneficiaries’ expressed needs and wants and considers how the mission’s success will be measured (Amm, 2009; Kirkland, 2008).

2.3.3 Social enterprise in South Africa

Social enterprise is a relatively new concept in South Africa, only emerging in economic development discourse in the past decade. In recent years, though, social enterprise has begun to gain more institutional currency through the creation of the University of Johannesburg’s Centre for Social Entrepreneurship, the formation of the African Social Enterprise Network and South Africa hosting the Social Enterprise World Forum (Molefe, 2011). However, there is no legislative framework to regulate social enterprise in South Africa, and the lack of a specifically designated legal form presents issues for taxation and funding, particularly where corporate social investment or BEE programmes apply (Molefe, 2011; Watters et al., 2012). The issue of funding may be especially problematic for social enterprises because on a wider level entrepreneurial start-ups in South Africa have been shown to be determined by access to formal bank finance (Naudé et al., 2008). If these challenges can be addressed, South Africa’s evolving social enterprise sector could be well-positioned to address the gap of government service delivery failures and NPOs’ shrinking budgets by taking advantage of market opportunities with a socially responsive business model.
2.4 URBAN AGRICULTURE & ORGANIC BOX SCHEMES

2.4.1 Relevance of urban agriculture

Over the past four decades, urban agriculture has been positively linked – to varying degrees – with improvements in food security, income poverty, social marginalisation, economic development and environmental conservation. Broadly defined as “the cultivation, processing, marketing and distribution of food crops and products in an urban environment and for the benefit of urban residents” (City of Cape Town, 2007, p3), urban agriculture potentially addresses many key socioeconomic issues that cities face.

Urban agriculture improves and conserves city environments by recycling organic wastes, building soil quality and ‘greening’ urban landscapes (May & Rogerson, 1995). Lower costs for food production and transport reduce energy outputs, and the repositioning of global producer-consumer relations in the local community presents cities with opportunities for economic growth through urban agriculture enterprise (Brown et al., 2009; Hinrichs, 2000). In this way, urban agriculture can contribute to the establishment of a local food system. Taken further, it may promote economic development primarily by creating small urban farming business focused on growing and selling food, but also via ancillary enterprise opportunities such as food transport or delivery services, and production of compost, seedlings and value-added products like chutneys or dried herbs (Walker, 2011).

Where social issues are concerned, it has been demonstrated that community- and household-level urban agriculture projects reduce hunger and malnutrition by providing the urban poor with greater access to healthier foods (UNDP, 1996). This in turn reduces household expenditures on food – which often make up the largest portion of urban household budgets, especially for low-income residents (Ruel and Garrett, 2004) – and frees up scarce cash resources for other needs (Foeken, 2006). Given that city dwellers are highly dependent on cash income for household expenses, urban agriculture’s positive contribution to resource allocation is meaningful, especially where high levels of unemployment and rising food prices are complicating factors (Battersby-Lennard, 2011). Urban agriculture may further contribute to poverty reduction strategies by providing low-income farmers with income generation and employment prospects related to small-scale food production (Hovorka et al., 2009).

Beyond its impact on physical and financial well-being, the practice of urban agriculture may also be a source of empowerment, leadership development and social cohesion in the community (Dunn, 2010). Particularly in situations where historical inequalities persist, urban agriculture has been recognized as having a role in redressing societal imbalances related to gender, race and poverty (Battersby-Lennard et al., 2009; Phiri, 2008) not only through community capacity-building, but through increased public attention to fundamental issues of social equity and redistribution such as land reform, the need for formal engagement with the informal economy and institutional support of historically oppressed communities.
Despite its positive prospects, there are a number of factors that constrain urban agriculture’s success. Broadly, the lack of a sustained, supportive and enabling policy environment from state and municipal governments inhibits programme planning and complicates implementation (Battersby-Lennard et al., 2009; Phiri, 2008; RUAF, 2010; Slater, 2001). Many urban agriculture projects struggle with issues of participants’ commitment, often as a result of the amount of manual labour involved and the length of time required to see results when competing household needs demand income in the short term (Haysom, 2010; Phiri, 2008; Walker, 2011). On a micro level, urban farmers face several key obstacles:

- lack of secure access to land with tenure and to affordable water resources;
- inadequate access to markets and a general lack of knowledge about market entry points and product demand;
- lack of finance for initial equipment investment and ongoing inputs;
- lack of long-term support and training in technical and basic business skills; and
- vulnerability of gardens to theft, trampling, fire and floods (Battersby-Lennard et al. 2011; de Satge & William, 2008; Hovorka et al., 2009; Haysom, 2010; May & Rogerson, 1995; Phiri, 2008; RUAF, 2010).

2.4.2 Urban agriculture & socioeconomic development

When urban agriculture is undertaken in a development context, its demonstrated benefits and opportunities can be leveraged to maximize its socioeconomic impact for cities and their inhabitants. However, the success of development-orientated urban agriculture programmes is largely dependent upon planning for sustainability from the outset. The concept of sustainable development requires attention to the interconnectedness of the social, ecological and economic systems in which we live (Barbier, 1987), the idea being that humanity depends upon the environment to live, society exists within the environment and the economy is a product of society (Hopwood et al., 2005). Therefore, sustainable approaches to poverty alleviation should aim to simultaneously promote economic growth, social equity and resource conservation through participatory, adaptive and capacity-strengthening processes (UNDP, 2003). At the municipal level, sustainable development requires new entrepreneurial initiatives focused on investing in the local environment, employing people while improving their resource bases, and strengthening responsive local institutions (Marsden & Smith, 2005).

It has been demonstrated that the practice of urban agriculture addresses key social and environmental issues; what is less well-established is its economic feasibility. Many development strategies fail to give adequate attention to the real opportunities and constraints posed by the role of market forces in poverty alleviation (Dorward et al., 2003). Therefore, central to sustainably expanding urban agriculture’s impact is identifying and growing a viable, context-appropriate market for urban agriculture products. This means that there must be a clear understanding of local market supply and demand and how products move “from seed to table” in order to create meaningful, durable and mutually-beneficial linkages between urban farmers and urban consumers (Dubbeling et al., 2010, p3). Over the past twenty
years, there has been a growing consumer trend in industrialised countries towards local, organic produce but this niche market has only recently begun to develop in the global South (Haldy, 2004b; Bienabe et al., 2011). The emergence of this trend in South Africa represents an opportunity on which urban agriculture enterprises can capitalise.

An organic box scheme is a form of direct agricultural market typically characterized by short links between food production and its proximal consumption through the sale of locally-grown organic produce directly to consumers on a subscription basis (Haldy, 2004a). In the context of development-orientated urban agriculture, box schemes operated via a social enterprise business model could represent a viable way to expand urban agriculture’s socioeconomic impact by engaging low-income farmers in marginalised urban communities to grow food crops and providing them with a suitable local market for their agricultural products.

2.4.3 Box schemes as urban agriculture enterprise

In this research, organic box schemes refer to a specific production-market value chain in which a variety of fresh vegetables, fruits and herbs are sold direct to the public through an organised intermediary. Boxes are typically packaged in wooden or plastic crates, or alternatively paper or plastic bags, which are delivered to distribution points for customer pick-up on a weekly basis. A box scheme is a simple direct marketing concept that involves a modest range of produce and a minimum of post-harvest packaging. This lends itself to resource-scarce but organised and market-orientated farmers (Florchinger et al., 2007), helping them capture a greater portion of their food products’ value (Dubbeling et al., 2010).

Given the spatial and logistical constraints on growing large volumes of food in an urban setting, selling to traditional retail markets is unrealistic for many urban farmers. This makes box schemes a suitably-sized vehicle for marketing the amount of produce farmers are capable of growing. Another meaningful advantage for farmers, especially during their early stages of participation, is box schemes’ flexibility in dealing with crop failures, proper timing of harvests and sorting out issues of quality (Hoekstra & Small, 2010). Since the composition of most boxes varies with each delivery, customers are generally prepared to accept that the product they receive may change from week to week. In this way farmers are better able to fine-tune production skills without negatively impacting consumer satisfaction.

Box schemes also offer farmers a sense of security in participation as a result of the low levels of risk, regularity of cash income and relative protection against price fluctuations and seasonality (Bolwig et al., 2010; Hoekstra & Small, 2010). Access to alternative markets is also a distinct advantage in that consumers who prioritise local, organic produce tend to be more affluent and therefore willing to pay a higher premium for these products than those consumers in farmers’ immediate communities (Bolwig et al., 2010; Brown et al., 2009). For disadvantaged urban farmers, box schemes potentially represent steady cash income, employment and skills-building opportunities and valuable market access otherwise unavailable to them, all within a context-appropriate product that they are capable of producing.
For consumers, box schemes provide fresh, organic produce at more affordable prices than those generally found in retail markets. Emerging niche organic markets usually mean limited retail availability and higher retail prices for consumers who prefer organic foods (Haldy, 2004a), so organic box schemes can offer increased access to a less expensive product. Where concerns about the origins of food and ecologically responsible food choices are relevant, box schemes are buying choices that offer consumers a sense of commitment and contribution to their local community and environment (Hinrichs, 2000). This preference towards locality is anticipated to continue growing, as rising oil prices mean higher long-distance transport costs and higher food prices (Dubbeling et al., 2010). Consumers are increasingly willing to choose food products that are produced locally in alternative markets, both out of an individual commitment to personal health and the environment, and because of competitive prices for equivalent or superior quality products than those available in retail establishments. The community dimension of box schemes is also salient in consumers’ motivations as they develop a connection to other actors in the local food system (Torjusen et al., 2008), often a welcome contrast to the impersonality of retail supermarkets.

For city planners and development practitioners, box schemes form part of a local food system and offer many of the ecological benefits typically associated with urban agriculture: improvements to urban landscapes and biodiversity; reduction of cities’ carbon footprints; and recycling of organic wastes where composting and greywater usage are practiced. Box schemes present cities with an opportunity to develop small business enterprises that can create jobs for the unemployed through growing food crops, the logistics of packing and distribution and other food production activities, such as bottling preserves or raising chickens for eggs to sell alongside produce in boxes.

From a social development perspective, box schemes offer a unique opportunity to promote a sense of connection through the commonly-held medium of food. Purchasing and consuming food is an economic activity embedded in complex social and cultural values; as a type of direct agricultural market, box schemes require people to “congregate and associate” (Hinrichs, 2000, p298) and present opportunities for interaction and knowledge exchange around our shared identity as eaters. Where communication and participation between producers and consumers are active pursuits, box schemes have been shown to impact on household consumption habits; they have also been shown to influence consumers’ attitudes towards their community, promoting mutual understanding and social empathy for others in the food system (Torjusen et al., 2008). When this opportunity for fostering social connections is recognized – especially in contexts where social divisions are persistent and urban segregation inhibits contact – box schemes could be a vehicle for creating a more cohesive urban community. While this potential is not explored further in this study, it poses a compelling research question for development-orientated urban agriculture in South Africa.

Research on box schemes is largely limited to developed countries, with most studies conducted in the United States, Europe, Asia and Australia (Brown et al., 2009; Haldy, 2004a/b; Torjusen et al., 2008). Results on consumer profiles and motivations, as well as opportunities and limitations related to box scheme enterprise development, generalise only in relation to the global North, but they do offer insight into how box schemes develop as urban agriculture enterprise.
In his study on box schemes in Europe, Haldy (2004b) sets forth a ‘box scheme development model’ which describes five different types of schemes and the stages through which schemes progress over time. Haldy’s model is generally based on the demand-driven market life concept, which depicts a rising sales curve through introductory and growth periods, a gradual levelling off during an enterprise’s maturity stage, and eventually leading to a decline in sales as the market becomes more saturated with competitors and the nature of consumer demand changes (Kotler, 1997). In this model, Haldy (2004b) uses the market life concept to categorise five types of box schemes in the emerging organic produce market, each of which correlates with distinct stages of enterprise development. Figure 1 illustrates Haldy’s box scheme development model, where box standardisation moves towards customisation as consumers’ expectations rise with demand.

![Figure 1: Box scheme development model](Source: Haldy, 2004b)

Type 1 is a *one-box scheme* in which the niche market is just beginning to emerge; there are few customers, many of whom are attracted by the ‘novelty’ of the box scheme approach. Type 2 is a *multiple-box scheme* where demand for organic produce is increasing in the marketplace and existing consumers, now familiar with the scheme approach, begin to suggest ‘improvements’ to the scheme. Type 3 is an *adapted box scheme*, in which continually growing demand for organic produce means more competition in the marketplace and the development of non-standard box options adapted to consumers’ rising expectations.

This is followed by Type 4’s *individualised box scheme*, where schemes begin to increase the variety and type of products available (including higher-value, non-produce products) so customers can individualise
their boxes. This is also a response to the pressure of retail price competition in organic produce sales. Finally, Type 5 is an internet shop box scheme with a wide range of product offerings available via an online catalogue or ordering system, and where stable price competition with retailers means that schemes are competing mostly with one another. Type 5 emphasises customer convenience and choice above other considerations, but the growing number of options for box contents presents the risk that an enterprise may move away from its original focus on organic produce towards other product sales (Haldy, 2004b).

Haldy’s study (2004b) focused on box scheme development in four European countries, namely Germany, Denmark, the Netherlands and the United Kingdom, where the market for organic produce is much further evolved than that of South Africa. While the market life concept on which Haldy’s model is based predicts an eventual decline in sales as consumer demand changes, there is not necessarily any reason to think that the organic produce market in South Africa will do so any time soon. This market segment has been steadily growing in Northern countries for the past three decades (Sahota, 2007) without yet reaching a point of stagnation, let alone decline. Given that the organic produce market has only recently emerged in South Africa, and that its strong growth has been evidenced by increasing sales and consumer demand, one can reasonably expect that it will continue to expand for some time to come.

In an African context, we know very little about the market for box schemes or whether they represent a viable socioeconomic development strategy. A few studies have been undertaken on such schemes in South Africa, but research has generally been restricted to qualitative or comparative analysis of one or more aspects of a single scheme: scheme organisation, producers’ livelihoods, subsidies or the scheme-producer relationship (de Satge, 2011; de Satge & William, 2008; Kirkland, 2008). This research has confirmed a social enterprise box scheme’s positive impact on farmers’ agency, which enables this study to set forth a social enterprise model as appropriate for development-orientated urban agriculture. However, to date no research has quantitatively addressed box scheme consumer demand, made an analytical comparison of different enterprise models, or identified producers’ successes and constraints in the context of agency and social enterprise development. To address the gap in the literature, this study will use both quantitative and qualitative techniques in a mixed-methods approach to explore the potential of Cape Town’s organic box scheme market for socioeconomic development.
CHAPTER 3
METHODOLOGY

3.1 INTRODUCTION

The purpose of this study is to explore the viability of box schemes for socioeconomic development by quantifying consumer demand, comparing box scheme models and products, and investigating producers’ agency. The study’s methodology intended to produce results that would:

- Highlight dimensions of consumer demand for box schemes in Cape Town;
- Indicate whether a social enterprise box scheme can compete with other models;
- Suggest the composition of an ‘ideal’ box; and
- Offer insight about poor producers’ agency when engaged with an intermediary box scheme.

This chapter presents the study’s research design, approach, selection of participants, instrumentation, data collection, data analysis and limitations.

3.2 RESEARCH DESIGN

The study’s research design was viewed through a markets-and-livelihoods lens. As discussed in Chapter 2, development interventions aimed at poverty are most effective when they address not only the economic but also the social, political and institutional contexts in which poor people live (Bolwig et al., 2010; Kanji et al., 2005; Riisgaard et al., 2010). A purely market-based (quantitative) focus lacks attention to the social dimensions of people’s lives, prioritizing economics over other equally salient social and cultural factors. Conversely, a strictly livelihoods-based (qualitative) approach lacks in-depth attention to markets, and especially to the issue of market demand. The value in merging these perspectives in planning and analysis lies in the way each fills the other’s conceptual and practical gaps (Albu, 2008; Dorward, 2001; Dorward et al., 2002).

Exploring the viability of box schemes as sustainable social enterprise requires that demand be quantified and understood and supply conditions described. The research design therefore involves both quantitative and qualitative methods aimed at:

1. outlining some of the different models of box schemes in the current market and comparing their ability to compete against one another;
2. comparing the product across schemes and against retailers;
3. discovering the dimensions of consumer demand and satisfaction; and
4. uncovering some of the agency-related factors that influence urban farmers’ successes and failures.
In order to meet these aims, the research design comprises a description of each box scheme model and a comparative analysis of each model’s ability to deliver the product. A simple price comparison of participating schemes’ boxes against one another and against retail offerings follows. Next, a survey of current box scheme consumers solicits data about household produce expenditure, satisfaction with boxes, grocery shopping habits and recommendations for improved boxes. Finally, a cross-case analysis of practicing urban farmers discusses areas of agency from the producers’ and the researcher’s perspectives.

3.3 ACTION RESEARCH APPROACH

The study was guided by an action research approach, a method which explores and informs practice. Characterised by its applied nature, action research is aimed at changing or improving a real-world situation through researcher-stakeholder collaboration and a feedback loop of results to inform future practice (Dawson, 2006; Denscombe, 2003). Action research is experiential and involves engagement with practitioners and others involved with an activity to find out if, how and why the activity is effective, and to see what might be done to change or improve upon it (Wisker, 2008). Action research involves a cyclical process of practice, reflection and planning, observation and research (Dawson, 2006; Denscombe, 2003).

Action research typically employs mixed methods as a means of gathering data. Mixed-methods research emerged in the 1980s as a more pragmatic approach linked to solving real-world problems (Tashakkori & Teddlie, 2008). It relies on triangulation, where at least two to three quantitative and qualitative methods are used to draw findings from multiple sources, increasing validity, balancing the weaknesses of individual methods and pulling together different aspects of the research question (Wisker, 2008). According to David and Sutton, a mixed-methods approach is used to “provide breadth and depth to results” (2011, p295) enabling researchers “to build a broad research project that has multiple aspects, each of which is explored using an appropriate method” (2011, p297).

Action research presents clear advantages to researchers and participants. It lends itself to internal validity because it uses criteria and processes grounded in researcher and practitioner involvement. Because it is based in practice, it does not need to be ‘implemented’ elsewhere; therefore, its application can have a meaningful impact by directly improving activities or interventions (David & Sutton, 2011; Denscombe, 2003; Wisker, 2008). However, action research may also pose some disadvantages. Due to its small-scale focus on specific problems or interventions, it may not always be generalisable to other contexts. Ownership and presentation of the research could be problematic if stakeholders have conflicting interests, or if the results are unflattering for any of those involved. Finally, approaches employing triangulation may encounter difficulties when interpreting findings across different methods (David & Sutton, 2011; Denscombe, 2003; Wisker, 2008).
An action research approach is appropriate here because this study aims to investigate the real-world viability of box schemes as development-orientated enterprise. The study’s approach is both exploratory and descriptive: exploratory in that it aims to increase understanding of a little-researched area of urban agriculture enterprise development in South Africa (Ruane, 2005) and descriptive in that it defines and describes the ‘phenomena’ of box schemes in Cape Town (Schutt, 2004). This study seeks to investigate factors that contribute to the viability and sustainability of commercial box schemes in Cape Town. In the process, findings will be shared with stakeholders to improve existing social enterprise and inform programme planning and policymaking in urban agriculture and socioeconomic development.

Action research is characterised by stakeholders’ engagement with the researcher throughout the research process (Dawson, 2006). The study was facilitated by the active input and participation of box schemes’ management, consumers and urban farmers, in collaboration with the researcher’s experience and analysis. The process began with the researcher’s internship from August to November 2011 with Abalimi Bezekhaya, an urban agriculture-focused NPO that operates a box scheme. Over the same period, the researcher also had multiple interactions with Soil for Life, another NPO linked to urban agriculture enterprise. These experiences provided hands-on knowledge of urban agriculture social enterprise in practice and established relationships with the organisations’ management, staff and urban farmers. In early 2012, the researcher also developed relationships with two additional box schemes not operating within a social enterprise capacity. In March 2012, all schemes agreed to participate in the study.

### 3.4 SELECTION OF PARTICIPANTS

The study employed a nonrandom purposive sampling technique based on the researcher’s knowledge of, and in some cases existing relationships with, the various participants (Lunenburg & Irby, 2008). Given time and resource constraints, it was not possible to implement the study with sample sizes large enough to present an all-encompassing picture of the entire box scheme market in Cape Town (especially in light of the fact that there is no existing data in South Africa upon which to build). Instead, the study was designed as a pilot investigation into the opportunity that box schemes present for development-orientated urban agriculture. Therefore, the scope of the study was suitably limited to three box schemes, their current customers and two urban farmers.
3.5 BOX SCHEMES

Out of twelve box schemes identified in the Cape Town metropolitan area in February 2012, three were selected for this study. The schemes included met the criteria of having been an established business for at least three years, having a consistent weekly sales base of at least 100 customers, selling boxes composed of mostly organic products and operating with some kind of ecologically or socially ‘ethical’ mission. In pursuit of a straightforward comparison between development-orientated and for-profit enterprises, the schemes were chosen based on their explicit business models: one for-profit scheme (Wild Organic Foods), one co-operative scheme (Ethical Co-op) and one social enterprise scheme (Harvest of Hope). Each scheme’s management agreed to distribute a survey to all of its customers, to outline for the researcher the scheme’s business model and to answer any further questions that arose in the course of the study. In keeping with action research principles, the researcher agreed to share with each scheme the consumer survey results and analysis, data from the product price comparison, and any publications related to the study (Wisker, 2008).

No specific research instruments were employed to gather data about box scheme models. Topic areas for the scheme model comparison were compiled from a review of small business assessment tools and literature (Alaska Small Business Center, 2012; Carson, 1990; Peterson et al., 2010; Small Business Development Corp, 2012; Wiklund & Shepherd, 2005) and included mission, ownership structure, staff composition, start-up support, marketing, source of product, schedule of operations, capital expenses and financing. Meetings were arranged with each box schemes’ management, either over the phone or in person, to gather information around these topic areas. These early meetings lasted for about one hour. Follow-up inquiries arising from results were generally conducted over the phone or by email. Since data on box schemes came from directly from scheme management, it was deemed reliable for analysis.

There was no specific research instrument used to collect data for the product price comparison. Pricing data for boxes and retail produce was available to the general public and as such, it was also deemed suitably reliable for analysis.
3.6 CONSUMERS

Consumers were selected for the survey based on the criteria of being a current customer of one of the three box schemes participating in the study. The initial consumer sample was determined by the total estimated number of customers each box scheme reported. The survey produced a final sample size of 354 observations. Based on managements’ estimates, response rates of 45%, 84% and 33% were calculated for Harvest of Hope, Wild Organic Foods and Ethical Co-op respectively. There were an additional ten responses that reported participation in multiple box schemes and thirteen responses that did not identify their scheme. These two groups were combined to form a fourth category alongside the three identified schemes.

In exploring the dimensions of consumer demand for box schemes in Cape Town, the study employs a survey (see Appendices). The survey instrument was based on standard examples available on numerous market research websites and with guidance from the literature (Bradburn et al., 2004; David & Sutton, 2011; Denscombe, 2003). A preliminary draft was reviewed by a research economist to establish construct validity (Lunenburg & Irby, 2008). Changes were made based on this review, as well as input from box schemes’ management, and a final draft was then approved for the study. The survey was made available in an online format (www.surveymonkey.com) at the recommendation of box scheme managers for greater access to consumers, respondents’ convenience and in consideration of the logistical challenges of administering paper surveys at dozens of box distribution sites. Once up and running online, the survey was satisfactorily pilot-tested by several box scheme staff members, as well as by the researcher and the aforementioned economist. Only the pilot-test responses of staff members who also purchase from the box scheme were included in the final sample.

The consumer survey instrument contains fifteen multiple choice questions, seven open-ended questions and two questions involving Likert scale rankings. Respondents are asked about household demographics, income, expenditures on food, aspects of participation in the box scheme, food purchasing habits, satisfaction with the product and recommendations for improvements to the product or scheme. Sensitivity to income questions, and the low response rates typically associated with open-ended formulations, served as the motivation for using structured income intervals in some questions.

---

2 Harvest of Hope estimated it has 350 weekly customers, while Ethical Co-op and Wild Organic Foods each estimated 150 customers.

3.7 PRODUCERS

Farmers were deemed appropriate respondents if they were current Cape Town residents who are actively practicing food gardening in a marginalised low-income urban or peri-urban community, who sell at least some of their produce through an intermediary (e.g. a social enterprise), and who speak English well enough to communicate with the researcher about their gardening experiences. Two farmers were selected for the case study questionnaire based on these criteria. These farmers were also good candidates for the study because the researcher had already established relationships with them, a result of earlier interactions with the two urban agriculture NPOs mentioned previously.

In order to investigate urban farmers’ experiences as producers, the study employs a questionnaire (see Appendices), which provides the foundation for developing descriptive case studies (see Appendices). While preferable in terms of generalisability, administering the questionnaire to a large sample of farmers was not possible due to the study’s limited resources. It was therefore decided that the questionnaire would provide the data for two case studies. Knowledge of farmers’ limited literacy meant that the questionnaire would be most effective if administered by the researcher. Development of the questionnaire instrument was guided by themes identified in the literature on factors influencing urban farming (Chapter 2, section 2.4.1), as well as by the researcher’s prior experiences with urban agriculture organisations. A descriptive framework was embedded in the questionnaire, enabling the researcher to later conduct a descriptive cross-case analysis (Tellis, 1997; Yin, 2008).

A draft questionnaire was reviewed by an Afrikaans-speaking senior researcher, as well as by a Xhosa-speaking university administrator, both of whom have significant experience working with similar communities as those of the participating farmers. The questionnaire was revised based upon their feedback, and the final draft was reviewed and approved by the aforementioned senior researcher and by the university ethics committee in order to ensure construct validity (Lunenburg & Irby, 2008). The questionnaire was then pilot-tested in the field with two urban farmers.

The questionnaire instrument consists of 57 questions in total, divided into seven sections of blended fill-in, multiple-choice, scaling, ranking and open-ended questions. Scaling questions probing importance are based on a scale of 1 = not applicable, 2 = not important at all, 3 = only somewhat important and 4 = very important. Scaling questions probing agreement are based on a scale of 1 = disagree, 2 = no opinion and 3 = agree. Ranking questions ask respondents to either: choose all applicable answers and then indicate the most important of those, or to rank all answers from most important = 1 to least important = 6. The questionnaire asks farmers about their personal backgrounds; motivations for participating in urban agriculture; current gardening activities; their actual and perceived strengths and constraints in food gardening; the role of support services in their gardening experiences; access to markets for garden products; and their agreement with statements about issues of social justice.

The researcher administered the questionnaire to farmers over the course of multiple visits to their gardens, with each visit usually lasting one to two hours.
3.8 DATA COLLECTION

Permission to conduct research involving human subjects was obtained from the University of Cape Town Faculty of Humanities Ethics Committee, and an appropriate consent form (see Appendices) was drafted, reviewed and approved for use in conjunction with farmers’ case study questionnaire. The researcher and ethics committee determined that consent forms were not required for the consumer survey, as participation was anonymous and self-selecting, nor for the box scheme management meetings because only information about each enterprise was to be collected.

The consumer survey was implemented first and was made available to consumers for several weeks to capture the most responses possible. Each box scheme’s management distributed a link to the survey to their respective mailing lists with a brief introduction to the study and an invitation to participate. Customers were assured that the survey was anonymous and were advised that they could skip any questions they did not want to answer. Each scheme sent out at least one follow-up reminder to their customers about one to two weeks later. Data was collected from April to May 2012. At the end of this period, the survey link was closed. All responses were captured electronically via the host website and results were downloaded into Excel for analysis.

While the consumer survey was underway, the researcher began the process of administering the farmer questionnaire. The two farmers selected were invited to participate, and the researcher explained the study’s purpose and design. Consent forms were reviewed and signed; the researcher also agreed to provide farmers with copies of any photos taken as part of the study and to review with them any results that could impact on their personal development or the growth of their garden businesses. Due to the length of the questionnaire and the amount of time required to comfortably engage in ‘conversation’ rather than ‘research’ with participants, it was decided by all parties that the researcher would complete the questionnaire with farmers over multiple visits. Farmers received a small token of appreciation (choice of a UCT hat or scarf) for participating.

In the course of each visit to farmers’ garden sites, the researcher recorded responses and field notes on the questionnaire instrument. Data was collected from April to July 2012. In line with an action research approach, the researcher made additional visits to farmers in October 2012 to review the consumer survey results and to offer farmers an opportunity to provide feedback or make corrections to their case studies (Wisker, 2008). Farmers were also given copies of photos taken as part of the study.

Once consumer survey results were compiled and analysed, a meeting was held with each box scheme’s management between late July to early August 2012 to cover relevant aspects of the business model and to review with each scheme’s management (and any other staff they wished to have present) the results of the consumer survey related to their individual scheme, as well as across all three schemes. In keeping with action research principles, these meetings were a forum for box schemes to ask questions about the study’s findings and interpret how the results might be used to improve their enterprises in collaboration with the researcher (Denscombe, 2003). Up to final submission of the thesis, the
researcher maintained an ongoing dialogue with the schemes (mainly by phone or email) in order to ask and answer further questions as they arose and to continually solicit feedback and schemes’ interpretation of results.

Finally, to conduct the **price comparison** the researcher purchased (from Ethical Co-op and Wild Organic Foods) or was given (by Harvest of Hope) a box from each scheme over a two-week period from July to August 2012. Each box was photographed and the contents listed and weighed by type. This information was compiled into a simple table for each scheme that reflected box contents and box cost in total and per kilogram. The researcher then visited three of the top retail grocery stores identified in the customer survey (Woolworths, Pick n Pay and Food Lover’s Market) and compiled an itemized price list of all retail produce that was found in each box, as fully as possible based on retail produce availability. This information was similarly compiled into a table that reflected the comparable retail cost of each scheme’s box. The results of this simple comparison were later shared with each box scheme’s management via email.

### 3.9 DATA ANALYSIS

Data from the **consumer survey** were analysed by comparing the mean across schemes. Differences were considered significant if Chi$^2$ tests (for categorical variables) and t-tests (for continuous variables) produced significance levels of $p \leq 0.05$. Tests were conducted in Stata 9.

Categorical income data were converted to a continuous variable by taking midpoint estimates for each category. Since box schemes usually have a weekly delivery interval, box expenditure data were collected per week; however, since most households operate according to a monthly budget, it made sense to collect data on total grocery expenditure per month. (Inspection of the data reveals that most respondents coped well with this duality.) Weekly box expenditures were converted to a monthly figure by multiplying each observation by 4.2. To estimate expenditure on additional fresh produce purchased from supermarkets and farmers’ markets, a midpoint of the expenditure category was calculated. Expenditure on the box was added to estimated additional expenditure to calculate an estimated total monthly expenditure on fresh produce. The share of the box in total fresh produce expenditure and the share of the box in total grocery expenditure were also calculated. Missing observations reduced the sample sizes to $n = 309$ for ‘share of all fresh produce’ and $n=312$ for ‘share of groceries.’

Four dimensions of product satisfaction (price, quantity, quality, variety) were each measured on a five-point Likert scale, where 1 = strongly disagree and 5 = strongly agree. For each of these responses, the four individual measures of satisfaction were given a number value from 1 to 5 based on the Likert scale ranking, all of which were then added together into an index of overall satisfaction, ranking from 4 = least satisfied to 20 = most satisfied. This overall ‘satisfaction index’ was then compared to responses to questions probing willingness to pay for quality and variety.
The results of an open-ended question about consumer purchasing habits were counted by the number of mentions of specific items purchased, since individual responses identified multiple vegetables and fruits. Open-ended responses for consumer recommendations for improved boxes were qualitatively analysed and coded thematically into fifteen categories: customisation, box variety, quality, delivery to home/work, online ordering, packaging, convenient pickup, product information, fruit, price, size of box, other, incomplete and happy with box as is.

Qualitative analysis of farmer questionnaires was guided by the themes with which the instrument was constructed and those that emerged in cross-case analysis: individual characteristics and background, support services, technical skills, business skills, dependency on intermediaries and external factors that affect their capabilities as producers. Commonalities and differences between the two farmers’ responses within these themes were identified, and the researcher then described these aspects of the farmers’ experiences (within the overall context of agency and engagement with social enterprise) in narrative form.

Qualitative analysis was applied to the data gathered about the box scheme models to pinpoint enterprise strengths and weaknesses, which were linked where applicable to qualitative analyses of customers’ recommendations for improvement.

A simple price comparison of each box’s contents to each retailer’s offering was conducted by using the itemised list of retail prices to calculate the cost of an ‘imaginary’ retail box consisting of the same items as each scheme’s offering. These imaginary box prices were then compared against one another to determine which scheme offers the most competitive box in terms of its comparable retail product price.

3.10 LIMITATIONS

The overall scope of study was limited by the financial and temporal constraints of the researcher’s university programme. The lack of any other statistical data with which to compare the study’s results was a further external limitation.

The consumer survey sample carries the inherent flaw of not including responses from households which do not participate in box schemes; consequently the results cannot be used to project city-wide demand for urban agriculture products. Rather, the data serve to shed light on the current successes, failures and growth potential of existing box schemes in Cape Town, which is in line with the exploratory intent of the study. The use of an online survey instrument restricted respondents’ access to only those people who had access to the internet and who possessed the skills to navigate an online environment. This limitation may have offered some inadvertent benefits, however, in that respondents’ ability to take the survey in a place and time of their choosing may have contributed to their willingness to participate and/or level of openness in responses.
Farmers’ case studies cannot be generalised but rather highlight the need for contextualised examination of farmers’ capabilities. Farmers’ responses to the questionnaire may have been biased or distorted by differences of home language, culture, gender or socioeconomic status. This limitation was countered by well-established relationships between the researcher and the farmers, as well as the length of time invested in the questionnaire process. Farmers had difficulty ranking importance in some questions, and almost no quantitative data was gathered about garden production, income or expenses because farmers do not track most of these figures.

The need to collect data over time was a limitation on the product price comparison. A second price comparison will be conducted in November 2012 in a follow-up attempt to capture seasonal changes in produce prices; these results will also be shared with box schemes. In addition, prices were obtained from retail stores in one location in metropolitan Cape Town (southern peninsula) and therefore may not reflect price differentials in other areas of the city.
CHAPTER 4
RESULTS

The study’s results are laid out in the sections that follow. Sections 4.1 and 4.2 present qualitative descriptions of scheme models and a quantitative value comparison of the product across schemes and retailers. Section 4.3 sets forth a quantitative-qualitative analysis of consumer demand, and then a qualitative review of producers’ strengths and constraints is articulated in Section 4.4. Finally, Section 4.5 brings together all results through the construction of an ‘ideal’ box scheme.

4.1 BOX SCHEME BUSINESS MODELS

Wild Organic Foods is a registered close corporation and for-profit box scheme operating since 2003. Current management purchased the business in 2010. With an emphasis on “directly supporting local organic farmers” (www.wildorganics.co.za), Wild Organic Foods has a weekly base of about 150 customers who order customisable organic bags via email, for home or office delivery or pick-up at collection points. Wild Organic Foods broadly targets consumers who buy organic products, without a focus on any other specific characteristics, and they rely solely on word-of-mouth advertising.

Wild Organic Foods offers small, standard and double size bags, and optional products such as dairy, bread, eggs, meats and bottled goods can be added to bags or purchased in their ad-hoc retail shop. The staff process individually-emailed customer orders, translate those into supplier orders and then pick up produce from farmers. Bags are hand-packed in their retail location by all staff and either distributed to collection points or delivered to customers. In an effort to streamline the ordering process, the enterprise is currently working on a new website with ‘shopping cart’ capability so that customer and supplier ordering processes are entirely automated and integrated.

Wild Organic Foods is staffed by three full-time positions (procurement, accounts and customer liaison) as well as two part-time packers and two part-time delivery drivers. One of the enterprise’s owners has a university-level commerce degree and experience working in the corporate sector; she fills the procurement position. Little start-up support was needed since the current owners purchased the brand, an existing client base, a roster of suppliers and a functional administrative system. Brand recognition is a strong point for the scheme. Additional product offerings and options for customisation represent a potential advantage over a standardized box scheme, and the availability of a retail shop may be attractive to consumers (although the scheme intends to close it in the future). Wild Organic Foods’ owners’ for-profit motives and drive for efficiency may be consistent with a level of market knowledge and/or business management capability above that of other scheme models.

Wild Organic Foods says that 90% of its suppliers are certified organic by a local agency. Those that lack certification are visited by the scheme’s staff to confirm organic production techniques.
Ethical Co-op is a co-operative enterprise since 2005, with a current customer base of approximately 150 customers. It was originally established by ten members of whom only one remains; he currently acts as manager and primary decision-maker. Ethical Co-op’s mission is to support small local farmers, limit product packaging and offer only “ethical” products that are “organic in spirit”\(^5\) (www.ethical.org.za). Ethical Co-op targets consumers who want to buy organic and who are comfortable doing so online, and marketing is primarily through word of mouth, social media and a key advert with a local ‘green’ business.

Ethical Co-op’s website offers complete online ordering of organic boxes, both standard and custom size, with the option of adding a wide variety of other grocery and non-food products. Distribution is via weekly home or office delivery (using either the scheme’s vehicle or a local courier service) or by customer pick-up at collection points. Most of the scheme’s suppliers package their produce in advance and deliver it to the scheme’s warehouse, where all staff pack boxes each week.

Ethical Co-op was started among friends with a common desire for organic produce, using a small amount of capital sourced from each member. The scheme has grown slowly, mainly through original members’ extended networks. Ethical Co-op’s manager has IT training at university level, which is why the enterprise initially opted to make the scheme an internet-based service. Additional staff consists of a full-time customer liaison, a full-time buyer and six part-time warehouse workers. Ethical Co-op’s convenient online ordering and in-house website management are definite enterprise strengths; products being delivered to the scheme by suppliers could prove to be a logistical advantage. Ethical Co-op’s broad spectrum of fully customisable food and non-food product offerings may also be a clear advantage over other schemes, but its lack of business-trained or market-orientated staff could be a potential weakness.

Harvest of Hope is a social enterprise in operation since 2008 with a current base of approximately 350 customers. Harvest of Hope’s mission focuses on supporting livelihoods and alleviating poverty (www.harvestofhope.co.za). Its boxes contain organic\(^6\) produce grown in some 25 gardens in disadvantaged communities in the Cape Flats, supplemented by produce sourced from small-scale commercial organic farms in other areas of peri-urban Cape Town. Harvest of Hope offers two differently-sized box options distributed to collection points on a weekly basis to advance-subscription customers. Target consumers are explicitly middle-class, socially responsible and well-educated (in fact, many collection points are located at upmarket private schools and universities). Marketing is primarily

---

\(^5\) Ethical Co-op’s offerings are certified organic whenever possible, but they acknowledge that some of their smaller suppliers cannot afford the financial obstacle of certification even though they practice organic farming. For those suppliers, Ethical Co-op uses an internal agreement in place of formal certification.

\(^6\) Because the cost for organic certification is prohibitively expensive for Harvest of Hope’s low-income farmers, the produce sourced from these communities is offered as organic in practice and the scheme says that it monitors farmers’ growing techniques on a regular basis to insure that organic methods are being used.
through word-of-mouth and social media visibility, as well as through weekly tours of the gardens and other public relations activities.

Harvest of Hope is the business unit of Abalimi Bezekhaya (hereafter Abalimi), a registered NPO that provides urban agriculture training programmes for food security and income generation. The scheme creates job opportunities for farmers who successfully complete Abalimi’s programme and demonstrate the technical ability to grow produce at an acceptable volume and quality to suit the scheme’s needs. Harvest of Hope was initially developed with the paid guidance of a professional business consultancy that designed the programme and made recommendations for its implementation. Initial capital for the packing shed, vehicles, produce crates and a commercial scale was sourced from Abalimi’s extensive network of funders. Harvest of Hope is staffed by one full-time marketing position, the only staff member with a business background. The scheme is further supported by Abalimi’s field team manager, production coordinator and management board, as well as a team of part-time staff made up of about six to ten fieldworkers, packers and drivers, many of whom are connected to Abalimi’s community programmes in some way.

The logistics of Harvest of Hope’s schedule of operations are all handled by Abalimi’s staff, including coordinating farmers’ weekly pick lists, transporting produce to the packing shed, packing boxes and delivering them to collection points. At present, Abalimi is working towards training more farmers and increasing Harvest of Hope’s production capacity in order to grow the box scheme. Harvest of Hope’s social mission may be an advantage in attracting certain consumers, and its close ties to Abalimi provides visibility and a resource base of staff, volunteers and funding perhaps unavailable to other schemes. The question pursued in this study is whether Harvest of Hope manages to successfully compete with other enterprise models.

4.2 PRICE COMPARISON OF PRODUCT

While a single price comparison will not reflect seasonal price fluctuations, it does offer a snapshot of schemes’ ability to compete with one another and with retailers. In comparing product offerings, the contents of each scheme’s box (Figures 1, 2 and 3) were listed, weighed and a per-kilogram cost calculated. Prices for all items contained in the boxes were then compiled from the top three grocery retailers consumers reported frequenting most often: Pick n Pay, Woolworths and Food Lovers. This pricing information was then used to calculate the approximate retail cost for each scheme’s box. Table 1 summarizes this data.

---

7 For simplicity’s sake, the word ‘box’ is hereafter used to generically describe all three schemes’ products, even though Wild Organic Foods packages its produce in bags.
Figure 2: Wild Organic Foods’ product offering (July 2012)

Figure 3: Ethical Co-op’s product offering (August 2012)
Figure 4: Harvest of Hope’s product offering (July 2012)
Table 1: Comparison of box scheme and retail prices by scheme and by retail supermarket (prices as of July – August 2012)

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Supermarket Prices (R/kg)</th>
<th>Box Contents Weight by Scheme (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pick and Pay</td>
<td>Woolworths</td>
</tr>
<tr>
<td>Leeks</td>
<td>18.30</td>
<td>N/A</td>
</tr>
<tr>
<td>Guavas</td>
<td>4.99</td>
<td>9.99</td>
</tr>
<tr>
<td>Salad Lettuces (bag)</td>
<td>82.45</td>
<td>169.90</td>
</tr>
<tr>
<td>Coriander</td>
<td>26.63</td>
<td>21.24</td>
</tr>
<tr>
<td>Butternut</td>
<td>8.99</td>
<td>7.50</td>
</tr>
<tr>
<td>Turnips</td>
<td>12.25</td>
<td>N/A</td>
</tr>
<tr>
<td>Peas</td>
<td>143.92</td>
<td>135.64</td>
</tr>
<tr>
<td>Lettuce (head)</td>
<td>19.98</td>
<td>44.44</td>
</tr>
<tr>
<td>Potatoes</td>
<td>6.99</td>
<td>7.99</td>
</tr>
<tr>
<td>Bananas</td>
<td>5.99</td>
<td>13.99</td>
</tr>
<tr>
<td>Cabbage</td>
<td>3.34</td>
<td>5.29</td>
</tr>
<tr>
<td>Rocket</td>
<td>187.38</td>
<td>274.75</td>
</tr>
<tr>
<td>Cauliflower</td>
<td>8.99</td>
<td>56.63</td>
</tr>
<tr>
<td>Pears</td>
<td>12.99</td>
<td>15.99</td>
</tr>
<tr>
<td>Avocados</td>
<td>28.57</td>
<td>23.96</td>
</tr>
<tr>
<td>Sundried Tomatoes</td>
<td>329.29</td>
<td>228.43</td>
</tr>
<tr>
<td>Yellow Onions</td>
<td>7.49</td>
<td>8.99</td>
</tr>
<tr>
<td>Oranges</td>
<td>12.99</td>
<td>9.99</td>
</tr>
<tr>
<td>Apples</td>
<td>11.99</td>
<td>13.33</td>
</tr>
<tr>
<td>Pumpkin</td>
<td>6.99</td>
<td>N/A</td>
</tr>
<tr>
<td>Baby Carrots</td>
<td>37.98</td>
<td>42.83</td>
</tr>
</tbody>
</table>

Total Box Weight (kg) | 3.79 | 7.64 | 7.94 |

<table>
<thead>
<tr>
<th>Overall Price Comparison</th>
<th>R</th>
<th>R/kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheme</td>
<td>105</td>
<td>28</td>
</tr>
<tr>
<td>Scheme @ Pick and Pay</td>
<td>68</td>
<td>18</td>
</tr>
<tr>
<td>Scheme @ Woolworths</td>
<td>79</td>
<td>21</td>
</tr>
<tr>
<td>Scheme @ Food Lovers</td>
<td>63</td>
<td>17</td>
</tr>
</tbody>
</table>
Wild Organic Foods’ box offers the most variety, containing 12 different items compared to the other schemes’ boxes only containing 10 items. Ethical Co-op offers the least expensive box, both across schemes as well as across supermarkets. Harvest of Hope is the most expensive box per kilogram in comparison to the other two schemes. This is partly due to some of the items in their box being especially light (e.g. coriander and peas), and the scheme’s production staff say they are currently working on increasing vegetable size through soil improvement practices. However, the considerable price differential suggests a need for closer examination of Harvest of Hope’s pricing strategy, something their staff intends to address through weekly monitoring of box contents over a six-month period.

Another possible explanation for this difference in schemes’ prices could be that Ethical Co-op and Wild Organic Foods offering higher-value products alongside produce may increase overall sales enough to allow more competitive box prices. Harvest of Hope offers only produce; since it relies solely on those sales, it must price its product higher to generate profits. This theory was anecdotally supported by input from Wild Organic Foods, who said “The bag itself needs to be value for money – its part of our publicized strategy ... If you are going to play with your margins you need to do that on non-bag items.”

Wild Organic Foods is the only scheme that matches or beats retail prices, coming in at an average of 12% lower across all three supermarkets. This may be indicative of the scheme giving greater attention to profit margins and market research than do the other two schemes. This is confirmed by feedback from Wild Organic Foods’ management, who say they “watch margins on each product line on a weekly basis” and “keep an eye on competitors’ prices.” On the other hand, Ethical Co-op is only able to beat Woolworths’ prices; on average the scheme is 14% more expensive than the other two retailers. Harvest of Hope fares the worst in this respect, with a box price some 25 – 39% more than its comparable supermarket offerings. Again, this result begs the question of why Harvest of Hope’s box is so much more expensive and calls for further investigation of the scheme’s pricing strategy.

When box prices are compared across retailers, Woolworths is consistently the most expensive supermarket, with prices up to 23% more than the other two markets. Pick n Pay appears to compete closely with Food Lovers, whose prices are about 6% lower for Harvest of Hope’s and Ethical Co-op’s boxes; however, Pick n Pay beats Food Lovers by 13% for Wild Organic Foods’ box.

A key factor to consider is that while all three box schemes’ produce is organic, the retail prices compiled here are for conventional produce because the selection of organic items on offer in the supermarkets surveyed was almost nil. At the time this pricing data was gathered, only organic salad lettuces were available at Food Lovers and Woolworths, while Pick n Pay offered no organic options for the box contents listed. This places consumers in a quandary when making buying choices: do they choose conventional items in the supermarket because that is all that is on offer, when in actuality their preference is to purchase organic? This question is explored later in Section 4.6.

---

8 Email communication with Harvest of Hope (23 October 2012)
9 & 10 Email communication with Wild Organic Foods (22 October 2012)
11 Ethical’s Co-op’s box price at Woolworths was calculated without leeks or pumpkin since those items were not available in the store. Ethical Co-op did not offer any feedback about the results of the price comparison.
4.3 BOX SCHEME CONSUMER DEMAND

In this section, consumers are compared across schemes, particularly with respect to expenditure on the box and to the importance of the box in overall grocery spending. Table 2 provides data to answer the question of whether box schemes capture a significant portion of household expenditure on fresh produce. When assessing the importance of box schemes, one cannot rely on aggregate statistics of the volume of produce sold through such schemes because no representative data exists. But if one rather asks what proportion of a household’s grocery budget or expenditure on fresh produce goes towards a box scheme, one can then get a picture of how important these schemes are for subscribers.

Respondents’ average household size varies significantly across schemes ($F_{3, 350} = 2.64, p = 0.049$), from 2.61 persons per household for Wild Organic Foods to 3.03 for Harvest of Hope. Harvest of Hope is the outlier; if it is dropped, household size is no longer statistically significantly different across the schemes ($F_{2, 195} = 0.46, p = 0.634$). The difference in household size is likely explained by the difference in distribution strategy followed by the different schemes. With their emphasis on online ordering, Wild Organic Foods and Ethical Co-op say they cater more to young professionals, who tend to be single or childless couples, while Harvest of Hope attracts a larger proportion of young families because it uses schools as its main distribution points.
## Table 2: Consumer profile by box scheme

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Ethical Co-op</th>
<th>Harvest of Hope</th>
<th>Wild Organic Foods</th>
<th>Multiple / Unidentified</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Observations</td>
<td>49</td>
<td>156</td>
<td>126</td>
<td>23</td>
<td>F(3, 350)=2.64, p = 0.049</td>
</tr>
<tr>
<td>Household Size</td>
<td>2.63</td>
<td>3.03</td>
<td>2.61</td>
<td>2.87</td>
<td>F(3, 350)=2.64, p = 0.049</td>
</tr>
<tr>
<td>Income Distribution (R/month)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5,000 – 10,000</td>
<td>30</td>
<td>7</td>
<td>10</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>10,000 – 15,000</td>
<td>14</td>
<td>12</td>
<td>17</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15,000 – 20,000</td>
<td>30</td>
<td>22</td>
<td>17</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20,000 – 30,000</td>
<td>14</td>
<td>16</td>
<td>21</td>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30,000 – 40,000</td>
<td>11</td>
<td>39</td>
<td>33</td>
<td>19</td>
<td>chi^2(15)=31.94</td>
</tr>
<tr>
<td>&gt; 40,000</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>p = 0.007</td>
</tr>
<tr>
<td>Total Grocery Expenditure (R/month)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1,000</td>
<td>0</td>
<td>9</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>1,000 – 2,000</td>
<td>29</td>
<td>22</td>
<td>24</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>2,000 – 3,000</td>
<td>31</td>
<td>22</td>
<td>39</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>3,000 – 4,000</td>
<td>25</td>
<td>22</td>
<td>18</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>5,000 – 7,000</td>
<td>15</td>
<td>17</td>
<td>13</td>
<td>22</td>
<td>chi^2(15)=24.34</td>
</tr>
<tr>
<td>&gt; 7,000</td>
<td>0</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>p = 0.060</td>
</tr>
<tr>
<td>Retail Market Fresh Produce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expenditure (R/month)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 – 100</td>
<td>43</td>
<td>55</td>
<td>58</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>100 – 250</td>
<td>30</td>
<td>32</td>
<td>31</td>
<td>41</td>
<td></td>
</tr>
<tr>
<td>250 – 500</td>
<td>26</td>
<td>11</td>
<td>9</td>
<td>18</td>
<td>chi^2(9)=12.22</td>
</tr>
<tr>
<td>&gt; 250</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>p = 0.201</td>
</tr>
<tr>
<td>Total Fresh Produce Expenditure</td>
<td>1368</td>
<td>978</td>
<td>1334</td>
<td>1450</td>
<td>F(3,350)=10.90, p = 0.000</td>
</tr>
<tr>
<td>Cost of Box (R/month)</td>
<td>628</td>
<td>375</td>
<td>721</td>
<td>737</td>
<td>F(3,314)=35.42, p = 0.000</td>
</tr>
<tr>
<td>Box as % of Total Groceries</td>
<td>25</td>
<td>16</td>
<td>29</td>
<td>26</td>
<td>F(3,308)=17.32, p = 0.000</td>
</tr>
<tr>
<td>Box as % of Total Fresh Produce</td>
<td>46</td>
<td>43</td>
<td>58</td>
<td>52</td>
<td>F(3,305)=22.01, p = 0.000</td>
</tr>
</tbody>
</table>
Income distribution varies significantly across schemes ($\chi^2_{15} = 31.94, p = 0.007$), with Ethical Co-op attracting a significantly larger proportion of subscribers from the bracket R5,000 to R10,000 per month than the other schemes. An ANOVA test across the remaining schemes shows no significant difference in income distribution amongst Harvest of Hope, Wild Organic Foods and the unidentified category ($\chi^2_{10} = 8.7432$, $p = 0.557$). Differences in income distribution do not translate directly into differences in the distribution of total grocery expenditure at the 5% level ($\chi^2_{15} = 24.34, p = 0.060$). For example, Ethical Co-op, which included the largest proportion of subscribers from the lowest income bracket, has no subscribers in the lowest grocery expenditure bracket. As with household size, Harvest of Hope is the outlier when it comes to grocery expenditure. Surprisingly, on monthly grocery expenditure Harvest of Hope has both the highest proportion of subscribers in the lowest grocery expenditure bracket, and the highest proportion of subscribers in the highest expenditure bracket. It is assumed that household size explains the distribution at the high end of grocery expenditure. An ANOVA test conducted over the remaining three schemes reveal no significant difference in grocery expenditure when Harvest of Hope is dropped ($\chi^2_{10} = 7.74, p = 0.654$).

Neither grocery expenditure pattern nor income distribution matter for expenditure on fresh produce purchased from outlets other than the box schemes ($\chi^2_{9} = 12.22, p = 0.201$). Since the difference in expenditure on other fresh produce is not statistically significant across schemes, one cannot say anything definitive about substitution between the box and other sources of produce. However, this is not to say that there is no difference in expenditure on the box itself. Average expenditure varies from R375 per month for Harvest of Hope to R737 per month for subscribers to unidentified schemes, a difference which is highly statistically significant ($F_{3,314} = 35.42, p = 0.000$). If Harvest of Hope expands its modest range of product offerings, it may be better able to capture a larger share of consumer expenditure.

Box schemes capture a significant portion of subscribers’ expenditure on fresh produce, as well as on total groceries. The cost of the box as a percentage of expenditure on all fresh produce varies significantly across schemes ($F_{3,305} = 22.01, p = 0.000$) from 43% for Harvest of Hope to 58% for Wild Organic Foods. Harvest of Hope is the outlier; excluding it produces an ANOVA result which shows that the box as share of expenditure on all fresh produce is no longer significantly different across schemes ($F_{2,169} = 0.29, p = 0.752$). The cost of the box as a percentage of all grocery expenditure follows the same pattern, ranging from 16% for Harvest of Hope to 29% for Wild Organic Foods. The difference is statistically significant ($F_{3,308} = 17.32, p = 0.000$). The ability of the box to capture a substantial portion of consumer grocery expenditure is one of the most important results of the survey presented here. Even a social enterprise model offering a modest range of produce is able to capture almost half of its subscribers’ fresh produce expenditure; by adding variety to the product, this model’s share could potentially be raised to almost 60% of fresh produce expenditure.

To investigate what in general determines box schemes’ ability to capture a share of expenditure on fresh produce, data have been pooled for all three schemes. It is hypothesised that income, level of expenditure on groceries and tenure are the main determinants of the share of fresh produce expenditure a household is willing to commit to a box scheme. Of these three factors, the effect of tenure is simplest to predict: as people become more familiar with a scheme they will rely on it more, buying more from the scheme and less from supermarkets (assuming continued participation in the scheme over time is indicative of their needs being satisfactorily met). Richer people arguably have more expensive tastes, which mean that they will buy more luxuries and less fresh produce,
but it does not necessarily follow that the rich would prefer to buy their fresh produce from
supermarkets or from box schemes. If one finds a negative relationship with income or total grocery
expenditure, it suggests that box schemes are less able to provide exotic fresh produce than other
outlets. For the purpose of the experiment, low, medium and high income, total grocery expenditure
and tenure categories were constructed. Results are set out in Table 3.

Table 3: Cost of box as share of expenditure on fresh produce (pooled sample)

<table>
<thead>
<tr>
<th>Consumer Attribute</th>
<th>Low¹</th>
<th>Medium²</th>
<th>High³</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income</td>
<td>54%</td>
<td>51%</td>
<td>45%</td>
<td>F₂, 233=4.56</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>p = 0.011</td>
</tr>
<tr>
<td>Grocery Expenditure</td>
<td>54%</td>
<td>49%</td>
<td>44%</td>
<td>F₂, 301=6.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>p = 0.001</td>
</tr>
<tr>
<td>Tenure</td>
<td>49%</td>
<td>50%</td>
<td>50%</td>
<td>F₂, 306=0.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>p = 0.820</td>
</tr>
</tbody>
</table>

¹ Low: income = < R15,000/month; grocery expenses = <R2,000/month; tenure = < 6 months
² Med: income = R15,000 - R30,000/month; grocery expenses R2,000 - R4,000/month; tenure = 6–24 months
³ High: Income = > R30,000/month; grocery expenses => R4,000/month; tenure => 24 months

The income dynamic is as hypothesised. Members of the low income or grocery expenditure group
(income <R15,000 per month, groceries <R2,000) get more than half of their fresh produce from box
schemes. As income and grocery expenditure rise, the share captured by box falls to 45% and 44%
respectively. In both cases the relationship is statistically significant (see Table 3). This result is
consistent with the idea that variety is important, especially for keeping more affluent consumers
interested in box offerings. Surprisingly, no relationship was found between tenure and produce
expenditure (F₂, 306 = 0.20, p = 0.820). The box scheme captures half of fresh produce expenditure
regardless of how long a given consumer has participated. It bears noting that the three categories
compared here were arbitrarily constructed, and choosing the wrong cut-offs might influence the
results. A more robust approach would be to develop a multivariate regression model in which
continuous or categorical variables are brought together to tease out significant relationships and
interactions, but such a model lies outside the scope of the study.
4.4 PRODUCERS’ STRENGTHS & CONSTRAINTS

In considering box schemes as viable social enterprise, attention must be given not only to consumers’ needs but also to producers’ agency. In the Western Cape, there are several public and nonprofit programmes that are doing a fairly good job of equipping new urban farmers with the technical skills necessary to grow food. However, once farmers leave a training course they face a number of persistent constraints on their ability to practice urban agriculture, especially for those seeking to earn an income. Some of these obstacles are durable access to land, inadequate access to urban markets, lack of credit, low skill levels in basic business management, affordable water resources, the vulnerability of urban gardens, and the challenge of committing to a project in the face of pressing household needs (Battersby-Lennard, 2011; Haysom, 2010; May & Rogerson, 1995; Phiri, 2008; RUAF, 2010; Walker, 2011).

The farmer questionnaire was organized around these issues as identified in the literature, and questionnaire results then guided the researcher in writing case studies. In cross-case analysis, four main themes were teased out – personal characteristics, support services, dependency and external factors – within which to explore factors that have influenced farmers’ agency, particularly regarding their relationship with the social enterprise intermediary. This chapter sets out the cross-case analysis that emerged from producers’ case studies; the case studies in their entirety are appendices to the study.

4.4.1 Farmers’ introductions

Evona is a 45-year-old coloured woman living in Lavender Hill, a peri-urban community located about 20 kilometers southeast of Cape Town’s city centre. Evona was born in nearby Grassy Park and attended a local public school until Standard 5, when she had to leave to help her mother care for siblings. Although her home language is Afrikaans, she speaks English well enough to talk about her life and her experiences as an urban farmer.

Evona balances multiple roles in the garden, the community and her home. She shares head of household status with her husband, and together they support six children ranging in age from 7 to 27. Evona has not had a job in the formal sector in over three years, and her three adult children are also unemployed. Her household survives on her husband’s employment wages (if he is working) along with a fluctuating amount of supplementary income from Evona’s garden business. At the researcher’s first introduction, Evona’s husband had a full-time job, but his hours were cut back to nil midyear; as of July 2012, Evona was the sole breadwinner in her family.

Sandiso is a 32-year-old black man living in Nkanini in Khayelitsha, a large and well-established ‘informal settlement’ located some 30 kilometers southeast of Cape Town’s city centre. He prefers to be called Benji, which is the name he chose when he converted to the Rasta religion. Benji was born and raised in Soweto in urban Johannesburg, but he came to Cape Town with his mother and half-siblings in search of work about five years ago. His early formal education was sporadic, moving between public schools in Soweto and boarding schools in rural Umtata, and he has completed some secondary schooling. Benji’s home language is Zulu, but he speaks fluent Xhosa and good English.
Benji has a twelve-year-old daughter who lives with her mother in Johannesburg. While he is concerned for his daughter’s wellbeing in his absence, he says he cannot bring her to Cape Town until he is earning enough money to support them both – a daunting prospect given that he has been formally unemployed in Cape Town since 2008. His long-term dream, however, is to be able to return to family land in the Eastern Cape where he can farm on a larger scale and support his family. Until then, he wants to build his garden business in Cape Town, earning enough money to bring his daughter to live here and move out of the container he currently calls home.

Evona and Benji have both experienced what Sen calls ‘relational capability deprivation’ (Sen, 2000) as a result of their positions in South African society. The persistent racialised inequality that characterises the legacy of apartheid is evident in both of their lives: low educational attainment, chronic unemployment, and the social exclusion of living in poor conditions in marginalised peri-urban settlements. Evona’s and Benji’s agency, e.g. their ability to make and act upon choices to improve their lives, is severely constrained by social, economic and political circumstances, many of which are largely beyond their control. When asked about their experience of life in South Africa, they are acutely aware of how limited their chances have been – and continue to be – in lifting themselves out of poverty given the obstacles these circumstances present. It is within this context that Benji and Evona eagerly pursued opportunities presented by two urban agriculture social enterprises, which have offered them real skills training, regular cash income in the face of unemployment and access to customers otherwise beyond their reach.

### 4.4.2 Personal characteristics

There are important personal characteristics that Evona and Benji share, which have greatly contributed to their achievements as urban farmers. Namely, they have each displayed remarkable levels of **commitment** in pursuit of their garden business endeavors. Both farmers have persisted in working long, physically demanding hours in their respective gardens for three or more years, despite transport issues, inclement weather and the chronic lack of assistance with garden labour demands. Their demonstrated **dedication** to realizing the long-term rewards of farming has been key to the growth of each of their businesses. In and of itself, this unwavering commitment sets Benji and Evona apart from so many other prospective farmers, who often emerge with enthusiasm from urban agriculture training programmes only to abandon gardens within a few months or less (Haysom, 2010; Phiri, 2008; Walker, 2011).

In a similar vein, both Benji and Evona possess the **entrepreneurial drive** and motivation required of all successful businesspeople and which are often challenging to find among urban farmers (Moustier & Danso, 2006). Recognising the importance of ongoing learning, both have continuously participated in any educational opportunities presented to them, especially where it could add value to their business. Both farmers are aware that building their abilities and knowledge bases will be vital to growing to their businesses and are willing to do the work necessary to get there. This innate combination of drive, dedication and commitment is an important aspect of Benji’s and Evona’s individual agency, which has enabled them to make the most of the urban agriculture training programmes in which they participated.
4.4.3 Support services & skills building

Evona initially encountered the idea of food gardening in 2008 when she heard about a training programme at Soil for Life from a community member who works for the organization. At the time, Evona was unemployed and her family often had little money for food. Participating in the programme seemed like a good way to learn how to grow healthy foods for her family to eat and possibly earn some money from selling vegetables. While Evona had no prior knowledge of gardening whatsoever, she was eager to embrace any opportunity to better herself and her family’s situation.

The ‘home gardener’ training programme in which Evona participated was one year long: hands-on classes at Soil for Life’s site in nearby Tokai, once a week for the first three months, then once a month for the remaining nine months. The programme addresses all of the technical aspects of organic food gardening from a beginner’s standpoint. Participants are also taught how to make compost for fertilizer (vital for growing in the poor quality soil that characterises much of peri-urban Cape Town), how to propagate seedlings and how to naturally control garden pests. The course was offered to Evona at no charge and included a modest start-up allowance of seeds, seedlings and compost, as well as ongoing technical assistance and some basic business skills training. Soil for Life also assisted Evona in securing access to a plot of land less than a kilometer from her home at Levana Primary School, where she could start a garden alongside one of the organization’s projects aimed at learners.

Figure 4 shows Evona’s garden at Levana Primary School, where she has been producing rotating varieties of vegetables, fruits and herbs for about three years. Evona uses a trenched-bed growing method and irrigates by hand using a hosepipe and inverted plastic bottles. Within fenced school grounds and bordered on one side by a busy street facing blocks of flats, the garden consists of approximately 325m² plot of beds, a 35m² shadecloth structure and a 70m² compost heap (opposite the beds, not pictured).

![Figure 5: Evona’s garden at Levana Primary School, Lavender Hill (October 2012)](image-url)
Because she had never gardened before, Evona says that the technical training was the most important aspect of Soil for Life’s programme. The fact that the course was offered at no cost was also key, as her family had little cash resources at the time. Evona also believes that the long-term nature of the programme has been beneficial for problem-solving when unexpected technical issues arise in the garden, as well as in continual learning as she has improved her reading, writing and English skills, as well as some business skills, over time. In this way, participating in Soil for Life’s training has made a definite impact on Evona’s agency.

In 2007, Benji participated in a food gardening course offered by Abalimi Bezekhaya, a community-based NPO that promotes urban agriculture for improved food security and income opportunities in a number of Cape Town’s disadvantaged communities. Benji says that at the time, he and his extended family were hungry on a regular basis. He wanted to learn how to grow food that they could eat; given that he was also unemployed, he was attracted to the idea of possibly earning money from gardening. Abalimi’s course is five days long and includes basic instruction on how to grow organic vegetables, how to enrich soil and make compost, natural techniques for controlling pests and some elementary ‘agribusiness’ skills. The hands-on course is held at Abalimi’s demonstration garden in the community, and once completed, participants are provided with free seedlings and manure to start their own gardens.

Benji and three other young men eventually obtained permission to use a plot of land on the edge of Khayelitsha (Figure 5), where they have been farming for over three years now. The ‘Green Point’ garden is approximately 1/4 HA of government-owned land on the edge of an informal settlement, bordered by a busy thoroughfare on one side, open marshland on another side and fenced along all four sides. Benji and his co-farmers share the garden with a few elderly men and women from the neighboring informal settlement, using a raised-bed growing method for a rotating variety of vegetables and herbs and irrigating with a sprinkler system provided by the DoA (which also provided the containers seen in the photo). A manure heap sits just beyond the far left of the photo, where a portion of the garden remains unplanted.

![Figure 6: Benji’s ‘Green Point’ garden in Town Two, Khayelitsha (July 2012)](image)
Having spent time as a teenager helping with the harvest on his family’s farm, Benji says that even though he knew “how to put a seed into the ground,” it was the “technology” of growing food that he lacked: techniques for pest control, advantages of mulching, water-conservative irrigation, crop rotation etc. He says learning this science of food gardening was the most valuable part of his training with Abalimi.

The difference between the two farmers’ experiences lies in the duration, type and content of training and support, which have impacted on their individual successes. The technical training provided by both NPOs is fairly equivalent and effective in imparting the practical skills new farmers need to grow food crops. That being said, Soil for Life offers its farmers regular follow-up workshops over the course of an entire year, which presents ongoing opportunities to troubleshoot technical issues and fine-tune production skills, as well as focuses on progressive personal and business skills development. Abalimi’s programme, on the other hand, is a five-day intensive training with only periodic follow-up visits by fieldworkers to check on production activities for those farmers who grow for the organisation’s box scheme. This places a greater responsibility on farmers to sort out technical and managerial problems on their own, failing to offer long-term, progressive support that helps create successful urban agriculture entrepreneurs (de Satge, 2008; Crush et al., 2011; Phiri, 2008).

Perhaps most importantly, for farmers with limited formal education, business management is an especially challenging set of skills to learn in a short period of time (Bingen et al., 2003; Coulter et al., 2009) and is perhaps best developed only after technical skills have been established. In this respect, Soil for Life’s ongoing and progressive attention to record-keeping and product marketing has been an advantage for Evona; while she still does not track all of the income, expenses or production volume in her garden, over time she has slowly picked up basic aspects of one of these tasks (recording sales) with the support of Soil for Life’s field staff. Conversely, Benji does not perform any of these activities, although he does acknowledge that this was part of Abalimi’s initial training programme and he recognises that he needs these skills to grow as a businessperson. Harvest of Hope tracks expenses, production volume and profit for each of the gardens participating in the box scheme, and its field staff coordinates planting and picking schedules with Excel spreadsheets on a weekly basis; therefore the responsibility for these tasks is taken out of farmers’ hands. Consequently, Benji’s agency continues to be somewhat more limited in this area than Evona’s, but overall both farmers are constrained by this weakness.

4.4.4 Dependency

Farmers cannot effectively transition from dependence on the intermediary to becoming independent business owners without direct access to profitable markets and some level of income diversification to help ease the transition (Cofie et al., 2008), nor without the capacity to perform vital business skills, particularly the ability to track income, expenses and production (Bingen et al., 2003). Benji and Evona each rely a great deal on the continued support provided by their respective social enterprises.
Soil for Life’s ongoing support has benefitted Evona’s **income diversification**. Not only is she able to grow produce of consistent quality, but she has also been able to master the skills of making compost and growing seedlings (see Figure 6). With the encouragement of Soil for Life’s field staff, Evona’s entrepreneurial mindset led her to organise donations of green waste to make larger quantities of compost, and she built a simple shade-cloth structure out of scavenged materials to house her seedling nursery; a growing portion of her garden income now comes from selling bags of compost and bundles of seedlings to other home gardeners in her community (many of whom are referred to her by Soil for Life). She has also gone on to learn how to make and market a variety of preserves and chutneys with her garden produce, again through the organisation’s ongoing workshops. Given her demonstrated success and increasing visibility in the community, Soil for Life has also hired her to provide training to other home gardeners. All of this has helped diversify her business, alleviating some of her dependency on the organisation and contributing to her agency.

**Figure 7: Seedlings for sale in Evona’s garden (October 2012)**

Benji’s garden income, on the other hand, is derived almost completely from vegetable production for Harvest of Hope, which consumes most of his available labour. He would like to be able to make compost to sell, but Harvest of Hope’s regular donation of manure has somewhat deincentivised this activity. Benji would also like to grow seedlings on site for his own use – rather than buying them from Abalimi – and for sale, but he has not yet been able to obtain the materials to construct a nursery. While the organisation does occasionally offer workshops to farmers (such as a recent session reviewing how to make higher-quality compost and how to start a worm farm), it also runs
two garden centres that sell compost, seeds, seedlings and other materials to farmers. In addition, Harvest of Hope relies on its contract farmers to consistently provide produce for its box scheme, and field staff activities are therefore focused mainly on supporting farmers in this area. All of this may represent a slight conflict of interest for the organisation’s mission to empower urban farmers towards self-sufficiency; in any case, Benji has not been able to diversify his income and in this sense continues to depend heavily on Abalimi and Harvest of Hope.

In terms of **market access**, Evona has a slight advantage over Benji in that she has been able to tap into a consistent, albeit low-income, local market for her garden products. Even so, she recognizes that without Soil for Life buying some of her products for retail sale to higher-income customers in their Tokai garden centre, her livelihood would suffer. Similarly, Benji relies on Harvest of Hope to sell his produce through the box scheme, as he does not have direct contact with the scheme’s customers. The farmers are limited in developing their businesses by the lack of **direct access** to profitable markets. That being said, neither farmer would be able to link to such markets at all in the absence of the intermediary. Consequently, this aspect of the farmers’ relationship with the social enterprise both benefits and constrains their agency.

While Evona’s and Benji’s experiences of income diversification and market access differ slightly, neither farmer possesses the **business management skills** necessary to be independent of the social enterprise. They are unable to quantify the volume of produce sold from their gardens, nor do they track all garden income or expenses. As discussed above, Evona has recently begun to record her sales to Soil for Life, but this is the only active record-keeping she undertakes; Benji does not perform any record-keeping whatsoever because Harvest of Hope handles this task. A clear limitation on their agency, this lack of business skills is an obstacle to becoming independent of the intermediary, especially considering that accessing credit or grants without the ability to provide records is likely to be problematic.

### 4.4.5 External constraints

Urban farmers experience any number of context-specific external constraints on success, many of which are largely beyond their control. The questionnaire identified issues of access to land, limits on labour capacity and cash resources, community violence and social stigma as challenges to agency that Benji and Evona face on a regular basis.

**Access to land** is problematic for both farmers. Evona has been gardening at Levana School for about three years, but because it is school property, access to the garden is restricted to school days and hours. This is frequently problematic when she needs access in the evenings, on weekends or during school breaks; the garden regularly suffers from unwanted neglect when this happens (for example, plants wilt quickly in summer heat without daily watering and seedlings drown when not protected from winter rains). Because of this restricted access, and because she would like more space in which to increase production, Evona has been seeking vacant land in other areas of Lavender Hill but has been stymied time and again by the complicated and lengthy process involved in obtaining permission to use land for gardening purposes (Lewis, 2011). Benji has been similarly frustrated by the challenge of securing an adequately-sized plot of land closer to where he lives. The Green Point garden is a relatively large plot but is nearly an hour’s walk from his neighborhood. His tenure is only loosely secured by a short letter from a municipal employee no longer working in the
department. Benji has also been petitioning a local city councilor for access to a large vacant plot closer to his home, but with no positive result to date.

Benji’s and Evona’s businesses are also constrained by their limited labour capacity. While there have been other men and women who have helped with garden maintenance in the past, Evona says participation is often unpredictable and inconsistent. Soil for Life trainees and interested home gardeners sometimes work in the garden under Evona’s supervision, but she often struggles to get people to work the full number of hours to which they have committed. In discussing recent training courses she taught, Evona describes how people’s initial enthusiasm for gardening often fades when participants begin to understand the amount of labor involved and the length of time they will have to wait to earn money from selling produce. As her garden business expands and her income-earning activities diversify, Evona has less time available to perform the physical work of maintaining the garden but is often unable to find people with the willingness and long-term commitment required of farming.

Benji faces this same problem, despite the fact that he maintains his garden with the help of two co-farmers. The garden’s irrigation system is not automated, so they must start and stop it by hand, which Benji feels is a waste of time on days that the plots do not require tending (especially given the distance one must walk in order to get there). His increasing business networking activities and growing involvement in other community upliftment projects sometimes pull him away from the physical labour of gardening, and he says it is difficult to find people who are willing to commit to making the long walk to the garden, to work hard in the hot sun or in the rain, and to wait one to two months for any cash rewards. As a result, his garden is not growing at full capacity because Benji says there is not enough labour to farm it.

When discussing obstacles to success in her gardening business, Evona says that violence in the community is a major problem. Lavender Hill is a crime-ridden area plagued by gangs, gun violence and drugs. Shootings in the streets are common, even during the day, and fear of violence regularly keeps people off the streets, hiding in the relative safety of their homes. This fear of gang-related violence has kept Evona from working in her garden on multiple occasions (most recently in July 2012 following a fatal shooting nearby). Evona also describes the four times that gangsters have broken into the garden in the past three years, damaging plants, stealing vegetables and equipment, tearing shade nets and destroying the seedling nursery structure. These break-ins were significant setbacks for Evona’s business since cash resources for equipment replacement and repairs are almost nonexistent. She would love to be able to expand her business and open a vegetable stall to sell garden produce, but she says that it would almost surely be robbed by gangsters.

Likewise, the lack of money to invest in the garden (e.g. buying tools, improving the irrigation system and attracting labourers with a small stipend) also prevents Benji from expanding his garden business. Furthermore, he says that social stigma related to him and his co-farmers being Rasta is a constant issue. He feels that some government officials to whom he has appealed for support either do not take him seriously or negatively pre-judge him for being a young, black Rasta, assuming that all Rastas do is smoke ‘ganja’ (marijuana) all day. Along this same line, Benji says that conflict with the elder farmers who share the garden is becoming increasingly troublesome; jealousy about Benji’s group’s success and profitability, combined with suspicion about the Rastas’ use of ganja in the garden, regularly provokes arguments.
In fact, as a result of this conflict, by late October 2012 Benji’s group had all but abandoned their income-producing garden. Although still seeking permission for land use elsewhere, they have meanwhile been actively developing a much smaller project closer to their homes (Figure 7) but production volume will be lower and there is currently no money coming in until first harvest. This change represents a real setback for Benji and his garden business.

4.4.6 Summary

Analysis of farmers’ case studies has revealed how their connection to the social enterprise has impacted on their agency. Figure 8 is a simple illustration of the relationship between poor producers’ agency and socioeconomic development in South Africa, as set forth in this study. Agency and development take place within the context of poverty and inequality at macro (du Toit, 2008/2012; Giddens, 1979) and micro (Nussbaum, 2003; Sen, 1999) levels. In this sense, poverty is an obstacle to development that perpetuates limited agency. A social enterprise can ‘intermediate’ a path to development in a way that increases individual producers’ agency and contributes to socioeconomic growth (Fonteneau & Develtere, 2009; von Broembsen, 2012).
Figure 9: Producers’ agency as ‘intermediated’ by social enterprise in relation to socioeconomic development
Through a social enterprise intermediary, Evona and Benji have gained real improvements to their agency: tangible, transferable technical skills in food production; cash income; access to markets and business resources. Beyond these immediate benefits, Evona mentioned that her ability to speak and read English has gotten better in the course of training programmes, and she says her confidence overall is much greater than it used to be. Benji comments that he has made many contacts in other communities and internationally through Abalimi (most recently he and his co-farmers were the subject of a documentary) and he hopes to pursue relationships that could help develop his business. Both farmers note that their families’ food security has been positively impacted by becoming farmers, and each is well-recognized as a role model of successful urban agriculture in their respective communities. The farmers are dependent on the intermediaries in terms of direct access to higher-value markets and are reliant on them for handling the more advanced aspects of business management. However, the scope of South Africa’s Vision 2030 NDP suggests that achieving broad socioeconomic goals aimed at poor people’s agency is likely to take time. So given current circumstances, for poor producers like Benji and Evona this may be the best possible scenario for the time being.
4.5 THE ‘IDEAL’ BOX SCHEME

Research has shown that a social enterprise model is able to make positive contributions to producers’ agency, an argument also supported by this study’s results. However, a successful social enterprise box scheme has dual missions: social impact and financial sustainability. This means that schemes must design a product that will generate profits, as well as explore ways of expanding the social mission. Constructing the ‘ideal’ box scheme in Cape Town therefore necessitates thinking about the study’s results around consumer demand, with specific attention to consumers’ purchasing motivations for, and satisfaction with, their boxes. This will help to identify important product characteristics, as well as suggest specific items that could make up box contents. It is then necessary to consider box schemes’ current stage(s) of development within the overall context of South Africa’s organic produce market, and to think about aspects of producers’ agency that could be further improved within the scheme. These results are brought together to outline key characteristics of an ‘ideal’ social enterprise box scheme.

4.5.1 Determining box contents

4.5.1.1 Consumer motivations

The largest proportion of consumers surveyed\(^{12}\) (50%) reported that the box’s organic nature is the most important reason they participate in the scheme, followed by its connection to a social programme (24%), and with product quality and local origin being tied for a distant third (6% each). These results correspond with what the literature tells us about why consumers buy box schemes in other parts of the world; concerns about the ecological and social factors of food translate into consumers’ increasing willingness to alter consumption habits and seek out products that are environmentally and socially value-added (Brown et al., 2009; Haldy, 2004a; Hinrichs, 2000).

This consumer trend toward organic foods is evidenced in South Africa by the growth of the retail organic market over the past ten years, particularly with regard to sales at Woolworths and Pick n Pay, two of South Africa’s largest grocery retailers. From 2003 to 2005, for example, Woolworths’ sales of organic foods went up by more than 50% each year (Bienabe et al., 2011). In 2008, Pick n Pay’s organic sales grew by 62% in one year alone (Pick n Pay, 2008). Such increases are noteworthy given that these are among the top retailers in South Africa’s consumer grocery market (Thomas White Int’l Ltd, 2011). While these figures include sales of all organic food products, not only organic produce, they clearly demonstrate that South African consumers’ food purchasing habits are increasingly influenced by products’ organic nature.

However, the actual availability of organic produce in South Africa’s supermarkets is sporadic and limited (Barrow, 2006; Waarts et al., 2009), a fact which this study’s results corroborate by the near absence of organic produce found on retail shelves in the product price comparison (Section 4.3). Furthermore, South African consumers report lack of availability, not high price, as the main obstacle to purchasing organic products (ACNeilsen, 2005). When consumers in this study were asked about their attitudes to buying organic, 48% (n=335) of respondents said they buy organic when it is

\(^{12}\) n = 354
available but will resort to buying conventional products if they are more accessible. This result is particularly interesting in light of Bienabe et al.’s (2011) price premium analysis of organic products offered by Woolworths, which found that South African consumers’ willingness to pay for organic food is significant.

The picture that emerges is one in which consumers are inclined to purchase organic, sometimes even when prices are higher, but are inadvertently forced to choose conventional products due to lack of organic options. A study on South Africa’s organic market found that organic produce consumption across the country takes place primarily in metropolitan Cape Town, Tshwane and Durban (Barrow, 2006). The study’s results around consumers’ purchasing motivations indicate a clear gap in South Africa’s growing market for organic food – a gap that can be filled by box schemes which focus exclusively on organic products.

4.5.1.2 Dimensions of consumer satisfaction

Respondents were asked to rank agreement on a Likert scale with statements about their satisfaction with four box characteristics: variety of box contents, quality of box contents, amount of produce in the box and box price. Table 4 shows none of these satisfaction measures to vary significantly by scheme at the 5% significance level, which indicates that all three scheme models are delivering their product equally well. This lack of statistical significance also means that it is acceptable to pool the data for further analysis.
Table 4: Self-reported satisfaction by box scheme and by satisfaction criteria

<table>
<thead>
<tr>
<th>Satisfaction Criteria</th>
<th>Ethical Co-op</th>
<th>Harvest of Hope</th>
<th>Wild Organic Foods</th>
<th>Multiple/Unidentified</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price</td>
<td>Strongly Disagree</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>2</td>
<td>3</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>52</td>
<td>54</td>
<td>49</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>46</td>
<td>43</td>
<td>37</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Volume</td>
<td>Strongly Disagree</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>6</td>
<td>8</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>57</td>
<td>51</td>
<td>61</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>30</td>
<td>39</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Quality</td>
<td>Strongly Disagree</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>63</td>
<td>48</td>
<td>58</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>31</td>
<td>46</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Variety</td>
<td>Strongly Disagree</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
<td>13</td>
<td>23</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Neutral</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
<td>54</td>
<td>53</td>
<td>61</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>Strongly Agree</td>
<td>30</td>
<td>21</td>
<td>27</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

When the sample is pooled (Figure 9), it is clear that box schemes generally produce high levels of consumer satisfaction regardless of the dimension of satisfaction investigated. However, consumers report less satisfaction with variety and quality, than with price and volume. Over twice as many respondents disagreed that the variety of box contents was satisfactory (16%), as compared to only 6% of consumers reporting the same level of dissatisfaction with the other attributes. Furthermore, only 23% of consumers strongly agreed that box variety was good, which is substantially lower than the proportion of respondents who strongly agreed that the price, volume and quality of their box was satisfactory. It is clear that addressing consumers’ concerns about variety is critical to maintaining and increasing levels of satisfaction.
The logical next step was to explore consumers’ willingness to pay for box improvements based on their overall satisfaction. A consumer satisfaction index was calculated for all respondents in the pooled sample. Each of the four measures of satisfaction (variety, amount, quality and price) were given a number value from 1 to 5 based on the respondent’s Likert scale ranking (with 1 = strongly disagree and 5 = strongly agree). These four numbers were then added together into an index of overall satisfaction, from 4 = least satisfied to 20 = most satisfied. This consumer satisfaction index is compared to the responses to questions about willingness to pay for quality and variety. Table 5 relates the percentage of respondents willing to pay more, and the stated amount, to their level of overall satisfaction.
Table 5: Willingness to pay (wtp) more for improved quality and variety by level of overall satisfaction

| Consumer Satisfaction Index | Improved Quality | | | | Improved Variety | | |
|-----------------------------|------------------|---------|---------|------------------|---------|---------|
|                             | % wtp | amount (R) | % of box cost | % wtp | amount (R) | % of box cost |
| Least Satisfied <12         | 42    | 16        | 15        | 61    | 17        | 17        |
| 13 – 14                     | 30    | 21        | 17        | 50    | 21        | 19        |
| 15 – 16                     | 12    | 19        | 14        | 28    | 18        | 15        |
| 17 – 18                     | 15    | 21        | 17        | 32    | 19        | 19        |
| Most Satisfied 19 – 20      | –     | n.a.      | n.a.      | 25    | 19        | 19        |

One expects that the more satisfied overall, the less likely a person will be to pay more for box improvements. This holds true for the data on willingness to pay for improved quality. Respondents with an overall satisfaction index of 19 or 20 are not willing to pay anything more for quality. Less satisfied respondents are willing to pay around 16% more than the current price to see box quality improve. However, for variety everyone is willing to pay more, regardless of satisfaction level; the stated amount that respondents are willing to pay for improved variety is in the order of R19. This suggests that consumers prioritise variety over quality, even when very satisfied with the product. Furthermore, the fact that consumers willingly place a premium on improved variety represents an opportunity for box schemes to potentially increase profits and boost consumer satisfaction if they successfully address the issue.

4.5.1.3 Consumers’ fresh produce purchasing habits

Consumers were asked to identify what other types of fresh produce they buy on a regular basis, in addition to the contents of their boxes. Responses offer some insight as to consumption habits, as well as guidance about additional produce that could potentially be included in boxes when considering established demand and the ability for such crops to be grown in the Western Cape. Table 6 summarises the items consumers most frequently reported as part of their regular fresh produce purchases.
Table 6: Regular fresh produce purchases in addition to the box as proportions of total responses (n = 962 multiple responses)

<table>
<thead>
<tr>
<th>Fruits</th>
<th>Salad Vegetables</th>
<th>Staple Vegetables</th>
<th>Other Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berries 9</td>
<td>Tomatoes 6</td>
<td>Potatoes 5</td>
<td>Broccoli 4</td>
</tr>
<tr>
<td>Bananas 7</td>
<td>Cucumbers 5</td>
<td>Onions 5</td>
<td>Mushrooms 4</td>
</tr>
<tr>
<td>Apples 7</td>
<td>Lettuces 5</td>
<td></td>
<td>Garlic 3</td>
</tr>
<tr>
<td>Avocados 4</td>
<td></td>
<td></td>
<td>Red/Yellow 2</td>
</tr>
<tr>
<td>Stone Fruit 3</td>
<td></td>
<td></td>
<td>Bell Peppers</td>
</tr>
</tbody>
</table>

Additional purchases were grouped into fruits, salad vegetables, staple vegetables and other vegetables. Within the category fruits, consumers buy berries, apples, bananas and stone fruit in addition to what they get in their boxes. In the category salad vegetables, the three most common additional purchases are tomatoes, cucumbers and lettuces. The boxes do not provide enough staple vegetables, as consumers buy additional potatoes and onions; the other vegetables mentioned most frequently were broccoli, mushrooms, garlic and red and yellow bell peppers. In addition, when asked about what other products they would like to see in their boxes, consumers responded enthusiastically about eggs, bread, dried herbs, jams and chutneys as possible additions. This presents opportunities for ancillary enterprise development alongside organic produce farming and could increase the overall value of the box to consumers. While box contents are determined to a large extent by growing conditions, seasonality and producers’ technical capabilities, these findings offer schemes a list of potential box contents, created in direct response to consumers’ expressed desires and reported consumption habits, as a starting point for product development.

4.5.1.4 Consumers’ recommendations for improved boxes

In response to an open-ended question that solicited recommendations for better boxes, 33% of respondents expressed a desire for some level of box customisation, while 17% identified variety as something to be improved upon. A further 12% each noted quality and the need for fruits to be included. The quotes that follow illustrate the motivations behind consumers’ recommendations:

“The single biggest reason I purchase from Wild [Organic Foods] is that they are flexible to meet my needs because there are certain things I don’t like to have in my box. I would consider switching if other services offered customisation.”

“It would be nice to have some way of customising your own veg box so that if there are some vegetables you are not fond of, you can replace them.”
“We like the social upliftment aspect, so originally wanted to go with Harvest of Hope, but they only do veggies (not fruit). We also looked at Ethical Co-op, but Wild [Organic Foods] is the only box where you can swap in/out any veggies that you don’t like/would prefer. This is what ultimately sold us on Wild [Organic Foods] and the reason that we still get their box.”

“...A greater variety from one week to the next. Often the veg remains the same - understandable because that’s what is in season, but perhaps there is room for creativity.”

“The veg tend to be repetitive and often the outer layers are already dodgy or the quality is low.”

“I would prefer a slightly higher level of preparation of veg, eg washing, excess leaves removed etc.”

“I know it’s a veg box but it would be great to be able to get all fruit and veg in one box.”

“Having fruit would be great and if it added to the existing veggies then I would be happy to pay more.”

Dealing with consumers’ individual preferences for flexibility and customisation in the variety of produce offered is a challenge that many box schemes face (Brown et al., 2009; Hinrichs, 2000; Hoekstra and Small, 2010). The anecdotal data here shows that this issue applies to Cape Town consumers as well. Consistency in delivering a competitive level of quality is also important, and it appears that including fruit in boxes would meaningfully contribute to meeting consumers’ needs. Furthermore, a 2010 survey of 56 Harvest of Hope customers cited the inappropriate size of the box (23%) and pickup logistics (25%), in addition to the persistent issue of variety (25%), as reasons why they chose to quit purchasing from the scheme (Hoekstra & Small, 2010). These are all key areas of consumer satisfaction for schemes to consider.

4.5.2 The box scheme development model

One of the key hypotheses that drives this study is that development-orientated urban agriculture enterprise which seeks to address poor producers’ agency should employ a social enterprise model. Since a fuller discussion of this argument is found in Chapter 2, it is sufficient to simply restate here that research has shown urban agriculture social enterprise to increase farmers’ agency when it links them to suitable alternative markets for their produce (de Satge, 2011; de Satge & Williams, 2008; Hoekstra & Small, 2010; Kirkland, 2008). In the context of pro-poor urban agriculture, this study proposes that the starting point for designing an ‘ideal’ box scheme is a social enterprise model.

Moving forward from there, the study’s results have thus far helped to identify the organic character of the product and to propose a list of potential box contents. However, in the dual pursuit of financial sustainability and social impact, it is necessary to develop a scheme that not only meets current market demand for organic produce, but which also sets itself up to respond to predicted changes in consumer demand and to address salient aspects of producers’ agency.
Haldy’s (2004b) model, discussed in greater detail in Chapter 2 (section 2.4.3), is a useful tool to guide an enterprise’s marketing efforts based on its type and stage of growth, and it offers an indication of future changes in demand that schemes may anticipate over time. When the box scheme development model is applied to the schemes in this study, they are categorised as follows:

Harvest of Hope is a Type 2 multiple-box scheme, offering three sizes of standard boxes which consumers cannot yet customise, although survey results indicate that this is something with which the scheme’s consumers are somewhat dissatisfied.

Wild Organic Foods is a Type 4 individualised box scheme, where buyers are able to select box contents to suit individual tastes and can also choose from a variety of higher-value organic food products in addition to produce. However, this scheme is quickly moving towards becoming a Type 5 internet shop box scheme, as it is preparing to launch a new website with online ordering capacity.

Ethical Co-op is classified as a Type 5 internet shop box scheme. Consumers are able to customise boxes with a wide range of organic and/or ‘ethical’ products via the scheme’s integrated website ordering system. This scheme is the only one in the study to offer non-food items, such as cleaning supplies and personal care products, alongside its organic produce.

These stages of development coincide to an extent with the length of time the respective schemes have been in operation, at least in the case of Harvest of Hope (about 4 years) and Wild Organic Foods (about 9 years). The exception here is Ethical Co-op, which has been an internet shop box scheme since it began because one of its founders has a background in information technology and the business was established on a web-based model. All three schemes also stated that growth-related decisions have only been made as profits allowed.

Classifying the box schemes according to Haldy’s development model offers insight into issues relevant to each stage, as well as strategies that each scheme could employ to prepare for, and progress towards, the next stage. Table 7 presents these changing factors as box schemes develop along the continuum.
Table 7: Enterprise issues and strategies by box scheme development model classification

<table>
<thead>
<tr>
<th></th>
<th>Type 1</th>
<th>Type 2</th>
<th>Type 3</th>
<th>Type 4</th>
<th>Type 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stage of Market Development</strong></td>
<td>Emergence of box scheme concept in market</td>
<td>Light competition 1 to 2 years after start-up</td>
<td>Customer pressure increasing but significant change in logistics too costly/risky</td>
<td>Need to raise quality of service and admin to meet customer expectations; use of IT reduces produce waste, automates procedures, increases info availability</td>
<td>After full implementation of IT system (website) sales of extras become main source of profit; emphasis on sales-per-customer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pricing</strong></td>
<td>Fixed price per box, often lower than retail</td>
<td>Fixed price per box, still often lower than retail</td>
<td>Fixed price per box with add’l cost for extras, pricing on retail level due to increased handling</td>
<td>Pricing per box content, delivery charges add’l, pricing on retail level</td>
<td>Retail level pricing, possible discount schemes for high purchases</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Level of Customisation</strong></td>
<td>None</td>
<td>Customer chooses between different boxes</td>
<td>Increasing customer influence on services and terms of trade</td>
<td>High choice of likes/dislikes, freedom to alter box</td>
<td>Limited only by range of transport and minimal orders</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Variety of Products</strong></td>
<td>Very limited</td>
<td>Slightly wider produce variety, sourcing from more external suppliers</td>
<td>Increasing variety of produce, introduction of new product groups (ex bread, storable produce) offsets rising admin costs by increasing per-customer sales</td>
<td>High variety of produce, introduction of high-value products (ex dairy, meat)</td>
<td>Full range of produce and add’l products based on superior logistics for managing inventory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Importance of Extras</strong></td>
<td>Minor to none</td>
<td>Extras appearing (ex 6-pk eggs)</td>
<td>More extras in smaller sizes, source of add’l profit as admin costs rise</td>
<td>Very important due to increased admin and transport costs for delivery</td>
<td>Sales-per-customer increase by up to 30% when sold via internet shop</td>
</tr>
</tbody>
</table>

(Source: Haldy, 2004b)
Based on the application of Haldy’s model, as a Type 2 scheme Harvest of Hope must address the issue of variety if it hopes to develop beyond its current stage. Serious consideration should also be given to offering consumers some form of box customisation, especially in light of competition with other schemes offering this feature. Moreover, Harvest of Hope could consider increasing the amount of ‘extras’ for consumers, either in the form of small surprise additions included in the box for free (for example, packets of dried herbs) or as occasional higher-value items in the place of produce (such as eggs or bread). These recommendations are anecdotally supported by results of the consumer survey discussed previously in this chapter.

As a Type 4 scheme, it is important that Wild Organic Foods provide a high level of customer service and focus on administrative efficiency as the logistics of the enterprise become more complex. Positive customer comments¹³ in the survey regarding the former suggest that the scheme is attending to this need. Similarly, management’s efforts to streamline administrative operations and upgrade their website to link and automate customer/supplier ordering further indicate that Wild Organic Foods is working towards efficiency and growth. Conversely, survey data reveal the persistent issue of variety to be problematic here as well, a finding that is surprising since this scheme’s customers can ‘chop-and-change’ produce items in their box. Wild Organic Foods will need to explore further what exactly their customers mean by ‘variety’ in order to address this area of dissatisfaction.

Ethical Co-op began, and has maintained itself, as a Type 5 scheme. Haldy’s model is somewhat limited in guiding the enterprise towards growth since this is seen to be final stage in box scheme development, which is clearly not the case here. Haldy does point out the inherent risk of an enterprise inadvertently moving away from organic produce sales when offering a wide range of non-food items, but given that Ethical Co-op has been in operation for over 7 years, this risk seems unlikely. Based on survey results and customer comments¹⁴, what can be said is that Ethical Co-op must strive towards providing a higher level of customer service if it wishes to compete with similar schemes. Finally, its comparatively small number of consumers with tenure less than two years¹⁵ reveals a low level of uptake, which suggests that the scheme must develop marketing strategies to attract new customers if it wishes to expand.

---

¹³ For example: “great box + great service – one can change one’s order online and add or subtract easily so we are very happy with Wild Organics [Foods]”

¹⁴ For example: “I’ve had experience with Ethical Co-op and was not as happy with the service as I am with Wild [Organic Foods]”

¹⁵ Of the 49 survey respondents who identified Ethical Co-op as their box scheme, only 20% have been in the scheme less than six months, while the majority of its customers (55%) have been in the scheme for two years or more.
4.5.3 Characteristics of the ‘ideal’ box scheme

The results of this study, in combination with the literature, suggest several characteristics which appear to be important for the profitability and social impact of a social enterprise box scheme.

4.5.3.1 Market & business competency

In pursuit of economic sustainability, a social enterprise box scheme must conduct careful market analysis, particularly in emerging organic markets. Local Marketing of Organic Products in Developing Countries affirms, “... products do not sell themselves. In order to sell them one must get active, analyse the different market opportunities, understand consumers’ demands and promote the products” (Florchinger et al., 2007, p8). A successful box scheme must therefore develop an appropriately-priced product, for which there is adequate demand, and must employ effectively-targeted marketing strategies to promote the product, attract and educate customers (Dubbeling et al., 2010; Haldy, 2004a).

Consumer survey results show varying gaps in each scheme’s ability to meet consumer demand, revealing areas of dissatisfaction that need improvement, as well as opportunities to increase product value and profitability. The product price comparison draws attention to schemes’ abilities to compete with one another and with retailers, illustrating in terms of pricing strategies where each scheme stands in the market. Finally, the application of the box scheme development model provides insight into each enterprise’s stage of development and offers guidance for strategising growth. When combined, these results demonstrate precisely the kind of context-specific market analysis required to inform a box scheme’s success.

Attention to salient market factors is part and parcel of a box scheme’s overall need for management with sufficient business competency to operate with administrative efficiency, respond to a changing market and plan for long-term success. This may seem inherently logical when thinking about a traditional business model, but it is an area often lacking in social enterprise (Urban, 2008; Weerawardena & Mort, 2006). For example, the study highlights the potential advantage of Wild Organic Foods’ management having university-level commerce training and corporate experience, evidenced in the scheme’s highly competitive pricing and its move toward a new stage of growth with plans for streamlined internet ordering. On the other hand, Harvest of Hope’s management has a very limited business background, which may have contributed to its concerning differential in product price; it may also pose a challenge to the scheme’s growth, which will likely involve increasingly complex logistics and closer attention to expenses and profit margins. Similarly, Ethical Co-op’s growth is also dependent on developing an effective marketing strategy for attracting new customers, something which may be outside its management’s experience.
4.5.3.2 Consumer convenience

Brown et al.’s (2009) study on consumer motivations for using organic box schemes found that convenience in ordering and obtaining the product is important, and Haldy’s (2004b) box scheme development model illustrates that a scheme’s ability to meet consumer expectations as it grows will eventually necessitate offering convenient internet ordering and flexible delivery options. This was borne out by numerous comments in the consumer survey, in which many respondents expressed their satisfaction with the ease of ordering via email (Wild Organic Foods)\textsuperscript{16} or via website (Ethical Co-op)\textsuperscript{17}. Other consumers complained about inconvenient times and locations for picking up their boxes; this could be especially problematic for Harvest of Hope\textsuperscript{18}, as it is the only scheme that does not offer a delivery option. Making it quick and simple for customers to order online, and providing them with many pick-up locations with adequate after-work hours, are both aspects of convenience that should be addressed.

4.5.3.3 Packaging

Comments in the consumer survey\textsuperscript{19} revealed that packaging is important when it has an effect on product quality, e.g. when produce is packed in a bag and then gets damaged in transit. Some type of rigid packaging that protects more easily-damaged produce is preferable for product quality and facilitates transport, especially when stackable. Feedback from box schemes’ management explains that customers often fail to return expensive plastic or wooden crates typically associated with box schemes, necessitating an alternative solution. While both Harvest of Hope and Wild Organic Foods use either plastic or paper bags, Ethical Co-op has chosen to use recycled cardboard boxes as packaging. The used but good condition boxes are purchased from a re-seller; customers can then return the boxes the following week, reuse them around the home or recycle them. However, Harvest of Hope says that because their produce is often packed wet, cardboard will not work for them; Wild Organic Foods says that cardboard has been deemed too expensive in the past. Even so, the use of cardboard boxes appears to be an effective compromise between cost, function and environmental concerns, especially in direct response to consumer feedback about damaged produce.

\textsuperscript{16} For example: “I love Wild Organics because you can add or substitute ... when you place your electronic order. The email ... allows you to plan ahead a bit if you need.”

\textsuperscript{17} For example: “I am very happy because with the Ethical Co-op website, I am able to order the standard veg box, and then order whatever other items I need as additional items”

\textsuperscript{18} For example: “I would like to collect it [the box] at a point that’s closer to home and open until late. At the moment, I miss my box from Montebello Nursery because they close before I get there.” “I desperately need a more convenient collection point ... I may have to cancel my membership because of an inconvenient collection point.”

\textsuperscript{19} For example: “Please keep the HoH [Harvest of Hope] crates, not the bags, they squash soft items and are not as easy to transport”
4.5.3.4 Consumer education

There is a widely acknowledged tension between consumers’ inclination towards buying organic, socially responsible produce and their strong desire for flexibility of choice (Brown, et al., 2009; Haldy, 2004a; Hinrichs, 2000). Participating in a local, organic box scheme, especially one with only a few standard boxes from which to choose, means that consumers are faced with a conflict: give up freedom of choice in exchange for mostly imperceptible benefits to health, environment and society, or buy whatever suits their tastes even if it means ignoring concerns about sustainability. This begs the question of how a scheme can offset the negative aspects of this trade-off in a way that helps customers feel more comfortable accepting a product that might not be exactly what they want.

This is where consumer education is integral to a box scheme’s marketing strategy. The advantages of buying organic produce (such as nutritional value and improved taste) and the environmental and economic benefits of supporting a local food system are largely invisible to consumers (Florchinger et al., 2007); so too are the limits on box variety posed by seasonality and farming conditions. Consequently, it is necessary for the box scheme to take on the role of active educator, regularly sharing information about the positive effects of buying local, organic produce and helping consumers to understand why certain items are in their box and why others are not.

This can be achieved in part by including a paper newsletter in consumers’ boxes. While many schemes post newsletters on their websites (both Wild Organic Foods and Ethical Co-op take this route), putting a newsletter in boxes gives consumers something tangible that can increase their knowledge about specific aspects of the box – a physical tool for information-sharing that they can refer to later or pass on to others. Articles about local issues related to the scheme and personal stories about staff and producers can help connect with consumers in a way that retail supermarkets are often unable to do (Hinrichs, 2000), and making visible some of the abstract social aspects of consumers’ motivations to buy. A study on communication in box schemes found that most consumers viewed the newsletter as an important aspect of the scheme; in addition, when recipes that use box contents are part of the newsletter, it becomes an interactive tool by engaging consumers at a household level (Torjusen et al., 2008). Harvest of Hope says they often get positive feedback from customers about how much they like receiving recipes in each week’s box.

The act of purchasing from a box scheme demonstrates consumers’ willingness to buy based on specific social, environmental and health-related motivations. It is then the scheme’s job to help customers feel good about their purchase and alleviate some of their anxiety around lack of choice. Schemes can use a well-targeted newsletter to creatively and directly confront issues that constrain box contents, as well as highlight the invisible benefits that motivate consumers to buy in the first place; the end goal is reducing dissatisfaction with variety and positively reinforcing buying decisions. It seems straightforward, but of the three schemes surveyed, only Harvest of Hope actually puts anything interactive in the box, and to the best of the researcher’s knowledge, none of the schemes have shared producers’ stories or provided information about local farming conditions. Wild Organic Foods and Ethical Co-op would do well to track how often their website newsletters are actually read, and could perhaps trial a paper newsletter and then solicit customer feedback about it. All three schemes could use the consumer survey’s results and comments to guide newsletter content addressing areas of concern and enhance scheme successes.
4.5.3.5 Expanding producers’ agency

Given the study’s premise that a successful social enterprise box scheme increases producers’ agency, developing an ‘ideal’ scheme means exploring ways in which this agency could be expanded in conjunction with the results discussed in Section 4.5. Firstly, producers’ interaction with consumers is particularly important. The Torjusen et al. (2008) study mentioned above found that schemes which actively pursued consumer education had a lasting impact not only on household consumption habits, but also on the way consumers felt about other actors in the food system. This is a characteristic inherent to direct agricultural markets (such as box schemes), which may present opportunities for face-to-face contact between producer and consumer. As Hinrichs (2000, p300) states, “Through such interactions, farmers and consumers learn more of each other’s circumstances, interests and needs, and create a more integrated community centred on food and a common identity as eaters”.

Increasing producers’ agency means more than just providing them with a cash income from produce sales. It also means connecting them to markets otherwise inaccessible due to spatial and socioeconomic segregation (Daniels & Jeans, 2009; von Broembsen, 2010/2012). A social enterprise box scheme acting as an intermediary does just that – it acts as a link between low-income producers and higher-value markets. In so doing, the box scheme increases producers’ financial and human resources (de Satge & William, 2008; Hoekstra & Small, 2010; Kirkland, 2008) and makes a meaningful impact on farmers’ lives. However, an opportunity to further improve producers’ agency may be lost if face-to-face contact between consumers and producers is not actively pursued.

By way of illustration, this interaction could take place if producers are made part of box distribution to consumers, or if schemes organise events involving all actors. In a South African context where historical inequality is persistent and people have limited contact with other social groups (Adato et al., 2006; Philip, 2009; Seekings & Nattrass, 2006), the opportunity to make regular connections around the consumption of food could promote greater mutual understanding and respect, for example if producers are promoted as bearers of farming knowledge and consumers are encouraged to ask questions and learn about where their food comes from. Such contact might build agency further by helping producers develop face-to-face marketing and business skills; for instance, a farmer could improve on maths when counting out change, become familiar with the paperwork involved in scheme logistics, and practice making sales pitches or responding to complaints. These are key aspects to running a box scheme, for producers who aspire to do so, and represent transferable skills that could enhance employability for all producers.

To an extent, Harvest of Hope does attempt to engage with consumers in this way, conducting weekly public tours of producers’ gardens and inviting consumers to visit the packing shed where their boxes are assembled; however, these events are voluntary and take place during business hours when consumers are likely to be working. Producers are encouraged to participate in packing boxes to develop an understanding of the scheme’s operations, but once they learn about this process, there are no other aspects of operations in which they can be involved. Furthermore, farmers are not generally given the opportunity to run a box distribution point, which would be an ideal way for producers to connect with consumers each week when. When asked about this issue, Harvest of Hope staff acknowledged that (albeit sporadic) face-to-face contact between consumers
and producers in the past has been positive, and that more effort could be made to develop such opportunities in the future.

Finally, when thinking about how to further expand intermediaries’ ability to improve producers’ agency, the idea of work-learning programmes arises. Given that many poor producers face low levels of education and lack of business skills (Neves & du Toit, 2012; van Broembsen, 2010/2012), a work-learning programme in which they work side-by-side with scheme staff could make a direct impact on those skills gaps, helping motivated and capable producers like those who participated in this study to progress as individuals and entrepreneurs. Developing an effective work-learning programme clearly presents structural and logistical challenges, but it could be a possible route for schemes to cut staff expenses in certain areas and to train producers who might later move on to become employees or business partners, potentially opening the door for new urban farmers to enter the market.

Table 8: Summary of characteristics set forth for the ‘ideal’ box scheme

<table>
<thead>
<tr>
<th>Product</th>
<th>Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Cardboard box as packaging</td>
<td>Social enterprise model</td>
</tr>
<tr>
<td>Staple, salad &amp; other (specific) vegetables</td>
<td>Market analysis &amp; business competencies</td>
</tr>
<tr>
<td>Staple fruits</td>
<td>Consumer convenience</td>
</tr>
<tr>
<td>Add’l food products</td>
<td>• online ordering</td>
</tr>
<tr>
<td>• eggs</td>
<td>• pick-up/delivery logistics</td>
</tr>
<tr>
<td>• bread</td>
<td>Consumer education</td>
</tr>
<tr>
<td>• dried herbs</td>
<td>• Newsletter &amp; recipes in box</td>
</tr>
<tr>
<td>• jams/chutneys</td>
<td>• Opportunities for interaction</td>
</tr>
<tr>
<td>‘Extras’ &amp; surprise items on occasion</td>
<td>Producers’ agency</td>
</tr>
<tr>
<td>Some level of customisation based on consumer input &amp; feedback</td>
<td>• Contact between farmers &amp; consumers</td>
</tr>
<tr>
<td></td>
<td>• Work-learning programme to build skills</td>
</tr>
</tbody>
</table>
4.5.4 Potential challenges to implementation

While the study sets forth a number of characteristics for developing an ‘ideal’ box scheme (see Table 8 on the preceding page), putting them into practice presents a number of challenges. Firstly, organic certification in South Africa is not legislated at a national level. Private firms have filled this gap, certifying organic products in accordance with strict international standards that are often beyond small-scale farmers’ capabilities; further, these are generally expensive and time-consuming procedures, making formal certification largely inaccessible to many producers (Bienabe et al., 2011). South Africa would benefit from a national organic certification policy with less rigorous standards (DoA, 2012) that also takes small-scale farmers’ needs into consideration.

Increasing variety in box contents could further complicate the already complex logistics typical of box schemes (Hinrichs, 2000; Hoekstra & Small, 2010). A consistent wide variety of produce may be beyond producers’ technical capabilities or unrealistic in certain seasons or growing conditions. In this sense, however, Harvest of Hope is in a unique position to address this issue since it has a direct influence on the produce its farmers grow. The scheme may be able to incorporate a wider variety of crops into Abalimi’s farmer training programmes, and fieldworkers could adjust planting schedules and assist farmers with introducing new varieties and rotating crops. Allowing consumers some level of customisation likewise presents logistical challenges, increasing the amount of administrative oversight necessary to coordinate hundreds of individualised boxes each week. However, schemes that make use of web-based ordering systems may be able to integrate some of the logistics involved in coordinating orders, suppliers and distribution; taking advantage of such technology could potentially balance out a portion of increased logistics with increased administrative efficiency.

It is clear that the issues of variety and customisation will progressively become more important as box schemes grow (Haldy, 2004b), but this is where active consumer education in marketing strategies might help to offset product dissatisfaction. Along this line, putting a newsletter in boxes could incur additional costs for schemes in terms of paper and content writing but such costs are outweighed if, over time, the scheme loses customers who become dissatisfied as their expectations rise.

Poor urban farmers face specific constraints on urban agriculture that affect their ability to produce for a box scheme, namely durable access to land and finance (RUAF, 2010). The farmers’ experiences described in this study highlight how limited access to land, in terms of size and location of plots, prevents producers from expanding their garden activities in line with their full technical capabilities. Similarly, the lack of credit instruments or microfinance to subsidise farmers’ and labourers’ inter-harvest incomes and invest in garden equipment and inputs prevents capable farmers from progressing to a higher level of production capacity. These are well-established, persistent obstacles to poor producers’ success that demand policy attention.
Terms of participation also matter a great deal for poor producers (Dubbeling et al., 2010; du Toit, 2008). Power relations between the social enterprise intermediary and producers must be taken into account. There are real risks of unequal socioeconomic relationships being perpetuated if poor producers are labelled or commodified in a way that reinforces their marginalised status (Daya, 2012). In addition, intermediaries often initiate a top-down relationship with producers in which contract terms are largely defined without producers’ input (von Broembsen, 2012). Farmers must have a voice in negotiating box contents, prices and the role of the intermediary in their production activities; this may call for farmers to be better organised as producers, a task which would likely require external assistance (Dubbeling et al., 2010; Florschinger et al., 2007). Moreover, power relations between higher-income consumers and low-income producers must also be considered, especially where direct agricultural markets depend on niche products serving middle- and upper class demand (Hinrichs, 2000). Finally, promoting producer-consumer contact in the South African context presents its own challenges where distrust or resentment between groups could problematize interaction.
CHAPTER 5
CONCLUSION

5.1 SUMMARY OF THE STUDY

In South Africa, chronic poverty is characterized by a lack of agency, as evidenced by many poor South Africans’ low levels of education, high unemployment rates and scarce cash resources. Poor people’s lack of agency means that even taking advantage of the very limited choices available to them is difficult; building agency therefore increases people’s capacity to act on opportunities, as well as makes more opportunities available to them. The government’s most recent national development plan recognizes the need to address issues of agency if the country is to alleviate poverty and promote positive socioeconomic development. Urban agriculture has emerged in many cities’ development agendas, and urban agriculture enterprise offers poor urban farmers the chance to earn income and obtain valuable skills. However, careful attention to market realities and livelihoods contexts is key to effective, sustainable implementation. Training its lens on Cape Town, this study set out to explore whether box schemes present a viable opportunity for social enterprise development that seeks to build producers’ agency.

Using a mixed-methods action research approach, the study conducted a consumer survey that quantified how the box fits into household expenditure and unpacked relevant features of consumer demand and satisfaction. Box schemes capture a significant portion of subscribers’ expenditure on fresh produce, as well as on total groceries, and this holds over consumers’ tenure with the scheme. This finding suggests that there is a viable market for box schemes in Cape Town. Consumers’ primary purchasing motivations are centered around boxes being organic and being connected to a social programme; these characteristics appear to be important in targeting this consumer base. Overall, consumers are happy with their boxes but variety is a sticking point on which even the most satisfied consumers place a premium, regardless of scheme. This is an area schemes must address, especially as consumer expectations increase over time.

The study described three different models of box schemes in the current market in order to draw out potential strengths and weaknesses. Data from the consumer survey facilitated a comparison of the different schemes’ ability to compete against one another. Results indicate that a social enterprise model is able to compete with other models in acquiring consumers and delivering product satisfaction. To further illustrate market competition, a price comparison of each schemes’ product, against the others and against the top three retailers, was also conducted. The social enterprise model fared worst in this respect; the scheme will need to address this issue to remain competitive.
Finally, case studies of two urban farmers uncovered some successes and limitations in building agency via a social enterprise box scheme. Producers’ agency is influenced by personal characteristics, the content and duration of support services for skills-building, the need to diversify income and access markets, and external constraints that must be identified in context. Farmers’ case studies demonstrate that a social enterprise box scheme can make a positive impact on poor producers’ agency, but there is room to expand this impact through consumer-producer interaction and work-learning programmes.

5.2 IMPLICATIONS

This study is a pilot investigation into the viability of social enterprise box schemes. The results presented are therefore not conclusive; rather, they serve to guide policy consideration, development practice and further research. What is important to recognise here is the need for in-depth, context-specific analysis to develop a successful urban agriculture social enterprise – analysis that considers both market-orientated aspects of consumer demand, as well as socially-orientated aspects of producers’ agency.

The study’s results indicate that there is a market for urban agriculture products in Cape Town. This supports research on the food “quality turn” (Allaire, 2003, p62), which finds a growing consumer market for organic produce in South Africa (Barrow, 2006; Bienabe et al., 2011) in line with that of the global North towards local, sustainable, organic food choices (Sahota, 2007). Urban agriculture in South Africa could capitalize on this niche organic market, but a recent study on southern African countries found that urban food production’s contribution to local economies is hindered by “the inadequacy of urban markets as a mechanism of getting household-level produce to the commercial consumer” (Crush et al., 2011, p296).

The study’s results thus draw attention to a misalignment of market supply and demand that is a missed opportunity for socioeconomic development. Developing urban agriculture value chains requires supportive local and national policy environments and well-organised production capacity (Crush et al., 2011). For example, this might involve addressing urban farmers’ access to land and financing in the form of microcredit or subsidies; it could also entail promoting urban agriculture enterprise in policies aimed at growing the entrepreneurial sector. The RUAF - From Seed to Table programme focuses on supporting production in niche markets in order to develop urban agriculture value chains (Dubbeling et al., 2010); the programme is helping small enterprises and producers take advantage of thesis markets in 18 cities around the world, including Harvest of Hope in Cape Town (RUAF, 2012). Whatever route taken, if urban agriculture is to meet growing consumer demand and contribute to economic growth, then creating an enabling environment and building production capacity are interrelated public-private sector issues that warrant further examination.

The study’s results also demonstrate that a social enterprise box scheme can compete in the market. This is important when thinking about the viability of the social enterprise model for socioeconomic development. In South Africa, recent research has shown that a social enterprise box scheme does improve poor producers’ agency (de Satge, 2011; de Satge & William, 2008; Kirkland, 2008), a finding with which this study’s results concur. Research on other types of social enterprise in South Africa has further shown this model to make a positive contribution in beneficiaries’ lives. For
example, Amm (2009) found that three social enterprises (two in the craft sector and one in computer technology) created jobs and income, provided skills acquisition, and according to the employees themselves, improved their overall quality of life. von Broembsen (2012) also found that a craft-related social enterprise intermediary provided income-earning opportunities and formal economy access that would have been otherwise unavailable to poor producers.

Clearly a social enterprise model can deliver on a social mission; what has been less clear is whether it can perform in a competitive market. In fact, the literature recognises this issue is problematic for many social enterprises (Fonteneau & Develtere, 2009: Urban, 2008: Weerawardena & Mort, 2006). The finding that a social enterprise model is able to compete with for-profit businesses moves this debate forward. While the study identifies weaknesses in the model that are in line with the literature, its overall findings suggest that it may not be the model itself that cannot compete, but rather some other aspect of the enterprise, such as the product, lack of adequate demand or poor market research. If this is the case, then a social enterprise model may be able to sit alongside for-profit business models as a viable component of development agendas that promote small enterprise growth.

5.3 SIGNIFICANCE

This study has addressed a gap in the research where urban agriculture enterprise and social justice-orientated economic development are concerned, and in doing so, has revealed opportunities for further exploration of these issues. Results here will inform government policy and programme planning, as well as box scheme social enterprise practice. In fact, as a result of the action research approach, some of the study’s results have already been applied by Harvest of Hope. For example, in response to unflattering data in the price comparison, the scheme has implemented a monitoring plan to track box weight each week, and consideration is being given to increasing interaction between urban farmers and box scheme consumers.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

Finally, the study highlighted a number of areas for future research. There is almost no quantitative data on the supply side of urban farming and its contribution to the local economy, and little is known about the real impact of government and NPO spending on urban agriculture programmes. Furthermore, there have been no studies to explore the ancillary enterprise opportunities that box schemes present, and there are few evaluative tools to measure the success of box scheme social enterprises. Such research will greatly enhance knowledge around how urban agriculture can be used to promote development agendas. Lastly, an interesting result from the consumer survey finds that 40% of consumers give away some of the produce in their box, over half of which give it away to a household worker. Since most household workers in South Africa are members of marginalized groups (D’Souza, 2010; du Toit, 2010), and some of the produce being given away comes from the very communities to which it is returning, this may be a compelling issue to pursue.
REFERENCES


Dubbeling, M., Hoekstra, F., and van Veenhuizen, R. 2010. From Seed to Table: Developing urban agriculture value chains. Urban Agriculture Magazine, 24, 3-10.


Faculty of Humanities

Research Consent Form

Title of Research Project: “Growing Opportunities for Social Justice: Social Enterprise and Veg Boxes in Cape Town, South Africa”

Principal Researchers: Amy Thom, MPhil Candidate, Politics Dept
Dr. Beatrice Conradie, Economics Dept

Department Address: Political Studies, 5th Floor Robert Leslie Bldg
University of Cape Town
Private Bag X3
Rondebosch 7701
South Africa

Telephone: 021 650 4774 / 078 087 5340

Email: Amy.Thom@uct.ac.za
Beatrice.Conradie@uct.ac.za

Name of research participant

[Blank]

Nature of the research study

Participants will take part in a detailed survey by answering questions asked by the researcher, with the assistance of a translator as needed. Participants will be asked to:

- provide basic household information,
- describe their experiences of urban farming in and around Cape Town,
- give feedback about urban farming support services,
- think about opportunities related to food gardening and
- offer their personal perspectives on living in South Africa.

The survey will be conducted in a location that suits all parties (such as in the participant’s garden) and will last for approximately one hour.
Participant’s involvement

<table>
<thead>
<tr>
<th>Risks</th>
<th>The participant will not be exposed to any physical or psychological risks as a result of taking part in the study.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>The participant may benefit from sharing his/her personal experiences or opinions with the researcher. The participant may also experience the benefits of positive changes made to government policies or NPO programmes that could emerge as a result of the research.</td>
</tr>
<tr>
<td>Costs</td>
<td>There are no financial costs to participate in the study. Participants will be asked to commit approximately one hour of their time to complete the study questionnaire.</td>
</tr>
<tr>
<td>Payment</td>
<td>The participant will be given a choice among modest tokens of appreciation (for example: baseball caps, cloth bags, garden tools or shop vouchers) in exchange for their time and contribution to the research study.</td>
</tr>
</tbody>
</table>

I agree to participate in this research project. I have read this consent form and the information it contains and I have had the opportunity to ask questions about the study. I agree to my responses being used for education and research on the condition that my privacy is respected and that only my first name is recorded. I understand that I am under no obligation to take part in this project, and I understand I have the right to withdraw from this project at any stage.

Signature of Participant __________________________ Name of Participant __________________________ Date ____________

Signature of Person Seeking Consent __________________________ Name of Person Seeking Consent __________________________ Date ____________

Amy Thom __________________________ Date ____________

Dr. Beatrice Conradie __________________________ Date ____________
**FARMER QUESTIONNAIRE**

**SECTION I. FARMER INFORMATION**

“I would first like to get some basic information about you.”

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male [ ] Female [ ]</strong></td>
<td><strong>Age</strong></td>
<td><strong>Race</strong></td>
<td><strong>City, province &amp; country of birth</strong></td>
<td>(rural or urban area?)</td>
</tr>
<tr>
<td><strong>Home language(s)</strong></td>
<td><strong>Other language(s) spoken</strong></td>
<td><strong>Current community</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. Are you the head of your house?</strong></td>
<td>Yes</td>
<td>No</td>
<td>Shared</td>
<td></td>
</tr>
<tr>
<td><strong>If not, who is?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2. How many people in total live in your household?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employed adults?</strong></td>
<td><strong>Unemployed adults?</strong></td>
<td><strong>Children?</strong></td>
<td><strong>Disabled?</strong></td>
<td></td>
</tr>
<tr>
<td><strong>1-3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4-6</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7-9</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10+</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3. How long have you lived in your current community?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>&gt; 1 year</strong></td>
<td><strong>1-3 years</strong></td>
<td><strong>3-5 years</strong></td>
<td><strong>5-10 years</strong></td>
<td><strong>10+ years</strong></td>
</tr>
<tr>
<td><strong>4. Do you have a job?</strong></td>
<td><strong>Unemployed</strong></td>
<td><strong>Part-time</strong></td>
<td><strong>Full-time</strong></td>
<td><strong>Contract</strong></td>
</tr>
<tr>
<td><strong>What length of time at that status?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>If unemployed, are you still looking for work?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5. How much schooling have you had?</strong></td>
<td><strong>No formal schooling</strong></td>
<td><strong>Primary school</strong></td>
<td><strong>Some secondary school</strong></td>
<td><strong>Matric</strong></td>
</tr>
<tr>
<td><strong>Can you read and write?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>In what language(s)?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Can you do maths?</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION II. MOTIVATION TOWARDS GARDENING

1. “Why did you decide to start food gardening? Please think about each of these statements and how important each one was to you when you started gardening.”

Please √ tick all boxes that apply and then circle the MOST IMPORTANT

| (a) My family needed food to eat                      |     |
| (b) I wanted to earn money from selling vegetables   |     |
| (c) I have previous experience growing food          |     |
| (d) I saw other people in my community doing it      |     |
| (e) A friend or family member invited me to participate |   |
| (f) I learned about it from an organization or the local government |     |
| Name of org or dept?                                 |     |
| (g) I was unemployed and had free time available to work |   |
| (h) Other reason?                                    |     |

2. “Why do you continue to garden? Please think about each of these statements and how important each one is to your choice to continue gardening.”

Please √ tick all boxes that apply and then circle the MOST IMPORTANT

| (a) My family depends on the food I grow to eat       |     |
| (b) My family depends on the extra income I earn from selling vegetables |     |
| (c) I enjoy the activity of farming                  |     |
| (d) Farming makes me feel like an important part of the community |   |
| (e) Being a farmer makes me feel good about myself  |     |
| (f) I am still unemployed and have free time available to work |   |
| (g) I want to earn more income from selling vegetables or from other opportunities related to farming |     |
| (h) Other reason?                                    |     |

SECTION III. SUPPORT SERVICES

1. “What kind of gardening skills training have you received? How important has it been to you?”

Please mark all statements by circling a number on the scale.

1 = I did not receive this kind of training  2 = Not Important At All
3 = Only Somewhat Important  4 = Very Important

| (a) Training on how to grow food | 1 2 3 4 |
| (b) Training on how to make compost | 1 2 3 4 |
| (c) Training on how to control insects or diseases in the garden | 1 2 3 4 |
| (d) Advice for solving problems in the garden | 1 2 3 4 |
| (e) Other?                      |     |

Please name the NPO or agency ______________________________________________________

2. “About how many days or weeks was your initial training?”

3. “Do you still use garden skills training or advice? If so, about how many times each month?”
4. “Which of the garden skills training above has been the most important to you?”

5. “Have you received any financial support from a community organization or government office (example: low-cost garden supplies, grant for water or electricity)?”
   Yes [ ] No [ ] If yes, please name NPO or agency ____________________________________________

6. “Please think about the different kinds of financial support that you have received and how important it has been to you.” Please mark all statements by circling a number on the scale.
   1 = I did not receive this kind of training  2 = Not Important At All
   3 = Only Somewhat Important  4 = Very Important

<table>
<thead>
<tr>
<th>(a) Free or low-cost garden supplies</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specifically, which supplies have you received?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seeds/seedlings ~ compost ~ manure ~ tools</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were these supplies free or low-cost?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(b) Free or subsidized water or electricity</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you receive financial assistance with water or electricity or both?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Were these utilities free or low-cost?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(c) Free or low-cost training courses</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were these courses free or low-cost?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| (d) Other?                                               |   |   |   |   |

7. “Have you received any other kinds of support for gardening? If so, how important was it to you?”
   Please mark all statements by circling a number on the scale.
   1 = I did not receive this kind of training  2 = Not Important At All
   3 = Only Somewhat Important  4 = Very Important

<table>
<thead>
<tr>
<th>(a) Assistance with securing land for gardening</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b) Assistance obtaining bore holes and water pumps for irrigation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(c) Training on business skills</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(d) Training to improve reading, writing or numeracy skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e) Links to markets for the sale of garden products</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>(f) Help with solving problems among people in the garden or in the community</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(g) Other?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. “Which of those in the box above have been the most important?”

9. “Do you have any other garden needs for which you receive no support?”

10. “Do you feel you could be a successful gardener on your own, without support?”
   Yes [ ]  No [ ]

11. “Have you had any frustrating or disappointing experiences as a farmer in Cape Town? Briefly explain one of the most frustrating or disappointing experiences that you have had as a food gardener.”
SECTION IV. GARDEN INFORMATION

1(a). “How long have you been farming in your current garden?” _____________________________
(b). “If this is not your first farming experience, for how long have you been farming in your whole life?” _____________________________ years

2(a). “About how far is your current garden from where you live?” _____________________ km
(b). “How long does it take to travel from your home to your garden?” ______________ min
   please circle one walking taxi bus vehicle
(c). “Is there a cost for transport and if so, how much per trip?” R _______________

3(a). “How many hours per week do you work in your garden?” ______________ hrs
(b). “If you have another job outside the home, how many hours per week do you work at that job?” ______________ hrs
(c). “What kinds of things affect the number of hours you’re able to work?”
   weather transport garden access other _____________________________

4(a). “How many other people work in your garden with you?” ________men ________women
(b). “About how many hours per week/per person do they work in the garden?”
   ____________________________________________________________________________
(c). “What kinds of things affect the number of hours they’re able to work?”
   weather transport garden access other _____________________________

5(a). “What growing method do you use in your garden?”
   Trenched bed [ ] Raised bed [ ] Ridges [ ] Containers [ ]
(b). “What irrigation method do you use in your garden?”
   Sprinklers [ ] Drip [ ] By hand/hosepipe [ ]

6. “Please think about all of the challenges you deal with in your garden. What do you think are your most critical problems?” Please rank the following in order of importance to you.
   1 = Most Important ==>  6 = Least Important
   
   Access to land / adequate growing space 1 2 3 4 5 6
   Water for irrigation 1 2 3 4 5 6
   Need for fertilizer 1 2 3 4 5 6
   Obtaining seeds & seedlings 1 2 3 4 5 6
   Pests & disease 1 2 3 4 5 6
   Vandalism / theft 1 2 3 4 5 6

7(a). “Who owns the land on which you garden?”
   I own it [ ] Gov’t owner [ ] Private owner [ ] Other [ ]
(b). “Where is this land located?”
   i.e. in a backyard, an open field, alongside a school or powerlines, next to a gov’t bldg
(c). “About how big is the garden?” _____________________________
(d). “Do you have open access to your garden or is it restricted?”

<table>
<thead>
<tr>
<th>Open</th>
<th>Restricted</th>
</tr>
</thead>
</table>

8. “Now think about all of the money you spend for your garden. In this month, about how much money will you spend for these items?”

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>R__________</td>
</tr>
<tr>
<td>Transport</td>
<td>R__________</td>
</tr>
<tr>
<td>Water</td>
<td>R__________</td>
</tr>
<tr>
<td>Electricity</td>
<td>R__________</td>
</tr>
<tr>
<td>Seeds/seedlings</td>
<td>R__________</td>
</tr>
<tr>
<td>Fertilizer</td>
<td>R__________</td>
</tr>
<tr>
<td>Tools/equipment</td>
<td>R__________</td>
</tr>
<tr>
<td>Packaging</td>
<td>R__________</td>
</tr>
<tr>
<td>Pesticides</td>
<td>R__________</td>
</tr>
<tr>
<td>Add’l labor</td>
<td>R__________</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>R__________</td>
</tr>
</tbody>
</table>

9. “What types of food you grow in your garden?” first √ ticking the box next to the items grown then fill in about how much of each item is produced per month (during the growing season)

Example: [ √ ] Spinach _____10_____ bunches

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butternut</td>
<td></td>
</tr>
<tr>
<td>Spinach</td>
<td></td>
</tr>
<tr>
<td>Carrots</td>
<td></td>
</tr>
<tr>
<td>Beetroot</td>
<td></td>
</tr>
<tr>
<td>Mealies</td>
<td></td>
</tr>
<tr>
<td>Potatoes</td>
<td></td>
</tr>
<tr>
<td>Onions</td>
<td></td>
</tr>
<tr>
<td>Tomatoes</td>
<td></td>
</tr>
<tr>
<td>Bell Peppers</td>
<td></td>
</tr>
<tr>
<td>Leeks</td>
<td></td>
</tr>
<tr>
<td>Cucumber</td>
<td></td>
</tr>
<tr>
<td>Fennel</td>
<td></td>
</tr>
<tr>
<td>Herbs</td>
<td></td>
</tr>
<tr>
<td>Squash</td>
<td></td>
</tr>
<tr>
<td>Pumpkin</td>
<td></td>
</tr>
<tr>
<td>Peas</td>
<td></td>
</tr>
<tr>
<td>Cabbage</td>
<td></td>
</tr>
<tr>
<td>Lettuce</td>
<td></td>
</tr>
<tr>
<td>Brinjal</td>
<td></td>
</tr>
<tr>
<td>Marrows</td>
<td></td>
</tr>
<tr>
<td>Beans</td>
<td></td>
</tr>
<tr>
<td>Celery</td>
<td></td>
</tr>
<tr>
<td>Spring onions</td>
<td></td>
</tr>
</tbody>
</table>

Anything else grown?

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
</tr>
</thead>
</table>

10. “What do you think affects the amount of food you can grow in your garden?”

11. “What do you think affects the size and quality of veg you grow?”

12. “Why do you choose to grow these foods?” Please √ tick all that apply and circle the most important reason.

[ ] My family and I enjoy eating these foods.
[ ] These are foods I have the most knowledge to grow.
[ ] These are foods that people within my community want to buy.
[ ] These are items I hope to sell outside my community.
13. “What do you do with the food you grow in your garden? Please think about how much of your veg is eaten, given away or sold.”

- Eaten at home: ____________ %
- Given to people outside my household: ____________ %
- Sold by me: ____________ %
- Sold by others (ex: an NPO or gov’t agency): ____________ %

14(a). “Do you make compost for your garden?” Yes [ ] No [ ]
(b). “If yes, do you have enough compost to make good soil for growing?” Yes [ ] No [ ]
(c). “If you do not make compost at your garden, why not?”
Please √ tick all that apply and then circle the most important reason.
- Not enough space for a compost heap
- Not enough green scraps/food waste to make compost
- I do not think compost is good fertilizer
- It takes too much time to maintain the compost heap
- Turning the heap is physically difficult for me
- I don’t know how to make compost
- I have tried to make compost in the past but it doesn’t work
- I don’t like touching rubbish

15(a). “What do you think is your biggest strength as a farmer?”
(b). “What do you think is your weakest area as a farmer?”

SECTION V. GARDEN BUSINESS DEVELOPMENT

1(a). “About how much money do you personally earn from selling your garden veg?” R ________________ per month
(b). “Who decides how to spend the money that you earn from your garden?”
- I decide how to use this money
- I give this money to someone else in the household (who? ___________________________ relationship, gender & age)
(c). “How do you use the money that you earn from the garden?”
Please √ tick all that apply
- The money is spent on household needs
- The money is spent on garden needs
- The money is saved for the future
(d). “How do you decide how to divide garden income among the people who work with you?”
2(a). “Which skills do you want to learn, or think you would need to learn, in order to improve your garden business?” Please √ tick all that apply. Please circle which you think is the most important.

<table>
<thead>
<tr>
<th>Reading and/or writing in English</th>
<th>Computer skills</th>
<th>Maths for keeping books</th>
<th>How to plan budgets for garden income and expenses</th>
<th>How to plan a garden schedule to grow more veg</th>
<th>How to make different food products for sale (such as chutneys or dried herbs)</th>
<th>How to make compost or worm tea for sale</th>
<th>How to sell more veg in my community</th>
<th>How to sell to other Cape Town communities outside my own</th>
</tr>
</thead>
</table>

(b). “Is there anything else that you might want or need to learn to help you be more successful?”

(c). “What obstacles do you think are preventing you from earning more income from your garden?”

3. “When you think about the land and size of your garden, do you feel that it is producing the most food possible?”

- [ ] Yes, the land is producing as much as possible
- [ ] No, the land could be producing more food if I had more or better...

Please circle all that apply: labour, water, fertilizer, equipment, advice.

4. “Are you willing to work more hours, hire extra labour or invest in garden supplies/equipment? If yes, are you able to work more hours or pay for these things?” Please √ tick all that apply.

- Yes, I’m willing to work more hours myself
- Yes, I’m willing to hire more labour
- Yes, I’m willing to buy more garden equipment

- No, I don’t want to work more hours myself (why not?)
- No, I’m not willing to hire labour (why not?)
- No, I’m not willing to buy more garden equipment

- I’m willing to hire labour and/or buy equipment but I do not have the extra money

- I’m physically unable to work more hours in the garden
  *please circle if this is due to:* age, disability, chronic illness

- I cannot work more hours in the garden due to household demands
  *please circle if this is due to:* another job, household work, caring for, children, elders, ill dependents
5(a). “Do you have other sources of financial support to rely on while you are developing your garden business?” Yes [ ] No [ ]
(b). “If yes, what other sources of support do you reply on?”

<table>
<thead>
<tr>
<th>Source</th>
<th>Ticking Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job wages (self)</td>
<td></td>
</tr>
<tr>
<td>Job wages (someone else)</td>
<td></td>
</tr>
<tr>
<td>Social grants</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

Do you currently grow for a box scheme or organization that sells your veg for you? If yes, please answer the following questions:

6(a). “Are you satisfied with the amount of money you earn from the box scheme?”
Yes [ ] No [ ] Yes, but want to earn more [ ]
(b). “About how much money do you earn each month?” R _________________________
(c). “Are you learning new skills by participating in the box scheme?” Yes [ ] No [ ]
(d). “If yes, what are you learning?” _____________________________________________
(e). “Do you want to be able to sell your veg on your own, independent of the organization?”
Yes [ ] No [ ]
(f). “If yes, what do you need to help make that happen? If no, why not?”
(g). “What do you like most about being part of the box scheme?”
(h). “What do you like least about it?”
(i). “Do you feel that participating in the box scheme is preparing you for more income-earning opportunities in the future?” Yes [ ] No [ ]

SECTION VI. MARKETS FOR GARDEN PRODUCTS

1. “Please think about the items that you sell from your garden, where you sell them and how you sell them.” Please √ tick all that apply.

<table>
<thead>
<tr>
<th>I sell</th>
<th>This product</th>
<th>Within my comm’ty</th>
<th>Outside of my comm’ty</th>
<th>How?</th>
<th>On my own</th>
<th>Through an org’zn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fresh or dried herbs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food products</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(something ready-to-eat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>that you prepare with</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>food from your garden)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seedlings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. “Please think about the ways in which you sell your veg.”
   Please √ tick all that apply and then circle the top two ways.
   [   ] Over the garden fence
   [   ] Out of my home
   [   ] From a stall or shop that I own
   [   ] From a stall or shop that someone else owns
   [   ] Through a veg box scheme / organization
   [   ] From another market outside of my community
   Other way? ______________________________

3(a). “Do you grow enough for your customers?”
   [   ] Yes, my customers are happy with the amount of veg that I have to sell
   [   ] No, my customers often want more than I have to sell
   What do they want? _______________________________________
   During which months of the year? ________________________________

(b). “Do your customers ever ask you for things which you do not grow?”
   [   ] Yes  [   ] No

(d). “If yes, which items?” _________________________________________

5. “How do you get your veg to your customers?”
   Please √ tick all that apply.

   Customers come to the garden
   I walk with veg to where it is sold
   I take veg on public transport such as a taxi or bus
   I drive veg in a vehicle that I own, or family or friend
   Veg is picked up by an organization
   Other way?

6(a). “How do you decide on prices for what you sell?”
   Please √ tick all that apply.

   I use the same prices that I see others use for the same items
   I choose a price that I would like to pay for the item
   I use advice from an organization for pricing my produce
   Other way?

(b). “Do you let anyone pay later for some veg sales or do you only accept cash on the spot?”
   Please √ tick all that apply.

   I only accept cash
   I sometimes allow payment later for people I know
   I regularly allow customers to pay later
7(a). “How do you manage the business tasks of your garden?”
Please ✓ tick all of the tasks that you do yourself.

- Deciding on prices
- Finding places to sell
- Talking to customers
- Keeping books for sales and expenses
- Other?

(b). If you choose to let someone else do these tasks, why did you decide to do that?

8(a). “Have you received training on business skills?” Yes [ ] No [ ]

(b). “If yes, what did you learn that you can remember now?”

(c). “What part of this training was most helpful to you?”

(d). “In what areas do you feel you need more training in order to run a business?”

9. “Do you feel prepared to run a business on your own?” Yes [ ] No [ ]

10. “When it comes to business opportunities, in which of these would you be interested?”
Please ✓ tick all that apply.

- Growing and selling different types of veg
- Making and selling food products
- Selling veg in an organized scheme (ex: weekly boxes)
- Operating my own veg stall
- Running a delivery service for fruit and veg
- Making compost for sale
- Growing seedlings for sale
- Other?

11. “When you think about earning money from your garden, would you rather
[ ] Be the boss and handle all parts of running your own garden business
[ ] Just get paid for the veg I grow and let someone else handle the business responsibilities


**SECTION VII. SOCIAL JUSTICE**

“I would like to know how you feel about living in South Africa. Please think about each of these statements and how much you agree or disagree, and remember it’s ok to be honest about your opinions.”

Please mark all statements by circling a number on the scale.

1 = Disagree  2 = No opinion  3 = Agree

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I have decent work opportunities available to me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I earn enough income to provide for all of my household needs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I have had opportunities to obtain quality education or training that improves my quality of life</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. My family and I have enough satisfying, nutritious food to eat on a daily basis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I can obtain quality healthcare for medical needs and emergencies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I feel that I live in a safe and respectful community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I feel like an equal part of the society in which we live</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. My local government representative listens to my community’s wants and needs and responds to them</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments about any of the above?
FARMERS’ CASE STUDIES

EVONA’S STORY

Evona is a 45-year-old coloured woman living in Lavender Hill, a peri-urban community located about 20 kilometers southeast of Cape Town’s city centre. Evona was born in nearby Grassy Park and attended a local public school until Standard 5, when she had to leave to help her mother care for siblings. Evona is a petite woman with a ready smile; her initially shy demeanor quickly gains confidence and enthusiasm when the conversation turns to anything garden-related. Although her home language is Afrikaans, she speaks English well enough to talk about her life and her experiences as an urban farmer.

Evona initially encountered the idea of food gardening in 2008 when she heard about a training programme at Soil for Life from a contact in the community who works for the organization. At the time, Evona was unemployed and her family was hungry, often with little money for food. Participating in the programme seemed like a good way to learn how to grow healthy foods for her family to eat and possibly to earn some money from selling fresh produce. Evona had no prior knowledge or interest in gardening whatsoever, but she was eager to embrace any opportunity to better her family’s situation.

The ‘home gardener’ training programme in which Evona participated was one year long: hands-on classes at Soil for Life’s site in nearby Tokai once a week for the first three months, and then once a month for the remaining nine months. The programme addresses all of the technical aspects of organic food gardening from a beginner’s standpoint, and participants are also taught how to make compost for fertilizer (vital for growing in the poor quality soil that characterises much of peri-urban Cape Town), how to propagate seedlings and how to naturally control pests in the garden. The course was offered to Evona at no charge and included a modest start-up allowance of seeds, seedlings and compost, as well as ongoing technical assistance and some basic business skills training. Soil for Life also assisted Evona in securing access to a plot of land less than a kilometer from her home at Levana Primary School, where she could start a garden alongside one of the organization’s projects aimed at learners.

Because she had never gardened before, Evona says that the technical training was the most important aspect of Soil for Life’s programme. The fact that the course was offered at no cost was also key, as her family had little cash resources at the time; Evona also believes that the long-term nature of the programme has been beneficial for problem-solving when unexpected technical issues arise in the garden, as well as in promoting ongoing learning as she has improved her business management skills over time.

Evona’s garden is an oasis of green bordering the rubbish-strewn street that divides Levana School from the block of flats opposite. The garden is protected on the street side by a tall, razor wire-topped mesh fence that surrounds the entire school property, and it is separated from the rest of the school grounds by a lower, somewhat crude handmade fence of recycled materials. A compost heap sits to the right of the garden entrance, and narrow dirt pathways lead visitors past bathtubs and tires full of plants and through rows of vegetable beds neatly lined with inverted plastic soda bottles full of water for conservative irrigation. At the rear of the garden, a simple structure covered with shadecloth houses trays of seedlings on tables made from pressboard scraps; a sign hanging from a post above the work area commands “Please keep nursery clean at all times. Do not mess by order.” The entire garden area is about 430 square meters in total, divided among the
vegetable beds, the compost heap and the nursery structure. Brimming with plant life, it appears to be producing at its full capacity given the available space.

Evona has been gardening at Levana School for about three years, walking to the garden most weekdays to plant, water by hand, weed beds, harvest vegetables, turn compost and care for seedlings. Because it is on school property, Evона’s access to the garden is restricted to school days and hours. This is frequently problematic when she needs access in the evenings, on weekends or during school breaks, and the garden regularly suffers from unwanted neglect when this happens. Plants wilt quickly in summer heat without daily watering, and Evона says, “I lost so many seedlings in the last school holiday [July 2012] because we couldn’t get into the garden ... and in January [2012] as well.” Because of the constraints on space and access, Evona has been seeking vacant land in other areas of Lavender Hill, but she has been stymied time and again by the complicated and frustrating process involved in getting permission to use land for gardening purposes.

Evona grows a wide variety of vegetables, herbs and some select fruits, all depending on the season and stage of crop rotation. She estimates about 25% of what is grown goes towards her family’s consumption, about 50% is sold within the community, and the remaining 25% is sold to Soil for Life, who in turn sell it to the public from a retail shop. People come to the garden to buy produce and Evona often carries boxes of vegetables home with her so that neighbors can buy from her house; from time to time she also takes produce to her mother’s neighborhood via taxi to be sold there as well. On the other hand, Soil for Life picks up the produce they buy directly from the garden so Evona does not have to coordinate transport.

In addition to growing fresh food, Evona produces compost (soliciting donations of green and brown materials when necessary to make compost at larger volumes) for her own use as garden fertilizer, as well as for sale to Soil for Life trainees and local home gardeners; she also propagates seedlings for the same purpose. Evona sets her own prices for produce sold in her neighborhood, generally choosing to charge customers slightly less than what is being asked in local shops. Soil for Life pays Evona similar prices for the produce they buy from her, but they pay a reduced price for trainees’ compost and seedlings as compared to the rate Evona typically charges people who come to the garden for those items. Evona frequently makes batches of chutneys, jams and preserves that she sells in the community and through Soil for Life, who further support this activity through group chutney-making sessions that teach new recipes and coach participants in marketing techniques. Evona also recently began offering training courses on food gardening to small groups in the community on behalf of Soil for Life, who pay her for each group that participates in a three-month course. This diverse set of activities, all of which originate in Evona’s food garden, generate the cash income upon which she and her family depend.

Evona invests at least 15 to 20 hours per week working in the garden, with many more hours spent out in the community on related activities, such as assisting home gardeners, teaching courses and generating interest in new garden projects. There is currently one other man from the community who tends the garden with her, and he and Evona distribute profits from produce sales according to the numbers of hours they have worked. In the past there have been other men and women who have helped with garden maintenance, but Evona says participation is often unpredictable and inconsistent. Soil for Life trainees and interested home gardeners sometimes work in the garden under Evona’s supervision, but she often struggles to get people to work the full number of hours to which they have committed. In discussing recent training courses she has taught, and a new garden project she started with a group of local gangsters, Evona describes how people’s initial enthusiasm for gardening often fades when participants begin to understand the technical
learning curve and the amount of labor involved; her last two groups of trainees finished the course with much smaller numbers than when they began, and the gangsters’ garden is now being maintained by just one man.

Estimating the volume of produce grown in the garden is not currently possible since Evona does not record what is planted or harvested. Nor does she track garden expenses, such as seeds, occasional transport, garden equipment or deliveries of compost material. She does, however, keep records of all sales related to Soil for Life, and she intends to start doing the same for her own sales of produce, seedlings and compost. This information is all recorded by hand since Evona’s computer literacy is limited; she recently obtained a secondhand laptop so she can improve in this area, but the prohibitive cost of buying a power cord is hindering her ability to use it.

Evona says her biggest strength as a gardener is making compost and seedlings and she expresses a desire to reduce her involvement in the Levana School food garden project so she can further develop this business. She also wants to help people in Lavender Hill to grow their own food so they need not go hungry. Her dream is to run a successful business focusing on seedlings and compost, independent of Soil for Life; but she is hesitant to get overexcited about prospects for the future, saying “I don’t want to get my hopes up too much … you have to crawl before you can walk.” She acknowledges that although she wants to have a garden business on her own, she relies heavily on Soil for Life’s ongoing support and links to markets for sale of fresh produce and other garden products.

When discussing obstacles to success in her gardening business, Evona says that gang violence in the community is a major problem. Lavender Hill is a predominantly coloured community, with residents living in small houses, groups of concrete brick flats and intermittent blocks of shacks. It is a low-income, crime-ridden area plagued by gangs, gun violence and drugs. Shootings in the streets are common, even during the day, and specialized squads of the South Africa Police Service are often called in to maintain temporary peace agreements between warring gangs. Evona speaks about children being used to run ‘tik’ and ‘ganja’ (methamphetamines and marijuana) and fear of violence regularly keeps people off the streets hiding in the relative safety of their homes. This fear of gang-related violence has kept Evona from working in her garden on multiple occasions, most recently in July 2012 following a fatal shooting near the garden. Evona also describes the four times that gangsters have broken into the garden in the past three years, damaging plants, stealing vegetables and equipment, tearing shade nets and destroying the seedling nursery structure. These break-ins were significant setbacks for Evona’s business since cash resources for equipment replacement and repairs are almost nonexistent. She says, “I won a new shovel in a garden competition but the gangsters stole it … I don’t know how I will get a new one.” She would love to be able to expand her business and open a vegetable stall to sell garden produce, but she says that it would almost surely be robbed by gangsters.

Evona balances her multiple roles in the garden, in the community and in her home. She shares head of household status with her husband, and together they support six children: three adults aged 27, 24 and 21, none of whom are currently employed, and three children aged 15, 11 and 7. Evona has not had a job in the formal sector in over three years, when she was last working as an inspector in a textile factory. Her household survives on her husband’s employment wages if he is working (about R4,000 per month), along with a fluctuating amount of income from Evona’s garden business. At first introduction, Evona’s husband had a full-time job doing electrical work but his hours were cut back to nil midyear; as of July 2012, Evona was the sole breadwinner in her family. This newfound role has positively affected the dynamic between her and her husband, who
she says now takes on more household tasks like cooking and caring for their youngest child. While her husband was initially somewhat scornful of her gardening, he has become much more supportive; recently he even expressed an interest in learning how to garden at home now that he is unemployed, and he has been pitching in with household chores and helping the youngest child with homework. Evona would like to construct a seedling nursery at her home so that she could enlist her unemployed adult children’s help in the business.

Evona says she has become much more confident since she started her garden, and her pride in the knowledge and skills she now possesses is evident. She is an urban farmer, an entrepreneur, a businesswoman and a respected member of the community who is recognized and admired for her ability to grow food and to help others do the same. This recognition is not without a downside, however, as Evona reports that people often come to the garden asking for free vegetables, and she says there has been conflict in the past about her refusal to give away food and lose potential income. Despite the challenges to her success, Evona still feels very positive about her personal and professional development as a result of becoming a food gardener, and she is cautiously hopeful about what the future holds.
**BENJI’S STORY**

Sandiso is a 32-year-old black man living in Nkanini in Khayelitsha, the largest and perhaps most well-established ‘informal settlement’ located some 30 kilometers southeast of Cape Town’s city centre. He prefers to be called Benji, which is the name he chose when he converted to the Rasta religion over five years ago. Benji was born and raised in Soweto in urban Johannesburg, but he came to Cape Town in search of work about five years ago with his mother and half-siblings. Benji’s home language is Zulu, but he speaks fluent Xhosa and good English. His early formal education moved between public schools in Soweto and boarding schools in rural Umtata; he has completed some secondary schooling and can read and write and perform basic maths. Benji has improved these skills through participation in various personal development and skills-building programmes over the years. He is tall and lean, with long dreadlocks that he wears wrapped in a cloth turban on top of his head. Benji has a friendly smile and an engaging personality, with an enthusiasm and unabashed curiosity that often leads conversations in unexpected directions.

In 2007, Benji participated in a food gardening course offered by Abalimi Bezekhaya, a community-based nonprofit organisation that promotes urban agriculture for improved food security and income opportunities in Khayelitsha and other neighboring disadvantaged communities. Benji says that at the time, he and his extended family were hungry on a regular basis, rarely having more than the occasional onion or potato alongside their pap or mealie meal. He wanted to learn how to grow food that they could eat, and given that he was also unemployed, he was attracted to the idea of possibly earning money from gardening. Abalimi’s course is five days long and includes basic instruction on how to grow organic vegetables, how to enrich soil and make compost, natural techniques for controlling pests and some elementary ‘agribusiness’ skills. The hands-on course is held at Abalimi’s demonstration garden in the community, and once completed, participants are provided with free seedlings and manure to start their own gardens.

Benji’s family has farming roots in the Eastern Cape and from the age of 14 or 15 onwards he began visiting his family’s farm to help with the harvest. Despite this experience, Benji says that while he knew “how to put a seed into the ground,” it was the “technology” of growing food that he lacked: techniques for pest control, advantages of mulching, water-conservative irrigation, crop rotation etc. It was learning this science of food gardening that he says was the most valuable part of his training with Abalimi.

Shortly after completing his training, Benji met two other like-minded young Rasta men and together they formed Inity, a registered nonprofit organization with the mission of growing healthy organic food, promoting respect for nature and uplifting the community through gardening and knowledge sharing. The group began their current garden project in Khayelitsha in 2009, where they began growing in earnest for Harvest of Hope, the box scheme organized by Abalimi. Inity’s garden, which Benji calls Green Point, is a plot of fenced land alongside a busy thoroughfare in an area called Town Two. Bordered by marshland on one side and a township on the other, the garden is fairly large (about a quarter of a hectare), and the space is shared with a group of elderly people from the community who also grow food. It is an active urban farm, with long plots of vegetable crops changing after each harvest, and it is not uncommon to see small herds of goats or a random cow wandering the land outside the garden fence.

Benji and his colleagues were granted permission to use the land by a local city councilor’s office, but their tenancy is formalized only by a short letter, which says they can use the plot for gardening purposes but must vacate within thirty days if the city deems it necessary. In addition to the seedlings and compost initially provided by Abalimi, Benji and his group also appealed to the
Western Cape Department of Agriculture for support when they established the garden, receiving funding for a rudimentary irrigation system, fencing and two containers for storage and shelter.

The garden grows a wide variety of vegetables dictated primarily by the box scheme’s needs and rotating after each harvest to accommodate soil fertility. Planting is coordinated by an Excel-based schedule that Abalimi manages; Benji simply follows the schedule as instructed by Abalimi’s field staff, who also track the garden’s production and the money it generates for the farmers. Benji and the two other founding members of Inity work in the garden more or less full-time, walking about ten kilometres to Town Two from their homes in Nkanini on a daily basis to weed vegetable beds, plant seedlings and harvest each week for the box scheme. The garden’s irrigation system is not automated, so they must start and stop it by hand, which Benji feels is a waste of time on days that the plots do not require tending (especially given the distance he must walk in order to get there). His increasing administrative responsibilities in the garden, combined with a number of other community projects in which he is in involved, means that his time has been increasingly pulled away from the physical labour of gardening over the past year. He says that it is difficult to find people who are willing to commit to making the long walk to the garden, to working hard in the hot sun or in the rain, and to waiting one to two months for any cash rewards. As a result, the garden is not growing at its full capacity, with a large corner remaining fallow because Benji says there is not enough labor to farm it.

Almost all of the garden’s produce is sold through Abalimi’s box scheme. Benji is unable to estimate the volume harvested or the overall profit generated, because despite receiving some training on tracking such figures, Abalimi keeps those records and Benji has not pursued this task independently. A smaller amount of produce is sold ‘over the fence’ but Benji admits to preferring the prices he earns from Abalimi’s customers over those he is able to charge within the community. Abalimi sets their prices in a formal contract signed with farmers who grow for the box scheme, but Benji said that the contract has not been revised or renegotiated recently and he was not clear on the terms, nor did he have a copy of it.

While eager to diversify into other income-earning areas, Benji and his colleagues are somewhat limited in their ability to grow seedlings by the lack of an appropriate nursery structure, and Abalimi’s regular provision of free manure has somewhat de-incentivised creating compost for their own use or for sale. The idea of starting a piggery was also introduced at one point, but again requires a structure for housing the animals, as well as the significant obstacle of obtaining city approval for tending livestock. Because it is their sole source of financial support, Benji and Inity are now highly dependent on the modest cash income generated by the box scheme (about R1000 each per month).

When asked about his strengths as a farmer, Benji says that being the only youth actively involved in urban agriculture has been an advantage for he and his colleagues. When compared to so many of the city’s other urban farmers – the majority of whom are in their 40s, 50s and 60s – Benji’s youthful energy and enthusiasm, not only for working in the garden but also in doggedly pursuing any and all opportunities that cross his path, are a meaningful part of his success. His age also qualifies him for youth-oriented development programmes potentially unavailable to older farmers, and also grants him the unique position of being a role model to other young people in the community.

Despite his achievements as an urban farmer, however, there are several obstacles that Benji identifies as challenges to overcome if he is to move towards success and out of poverty. He wants to grow as a businessman but recognizes that his lack of management skills, in terms of important
administrative tasks like keeping books as well as overall time management as he gets busier, is a problem that he needs to address. The garden’s distance from his home is a constant logistical issue, consuming valuable time walking to and from, or cutting into Benji’s small budget a few rands at a time for taxi fare. The lack of money to invest in expanding the garden, e.g. buying tools, improving the irrigation system and being able to offer labourers a stipend, prevents Benji and his co-farmers from increasing the garden’s output and consequently increasing their business. Finally, Benji says that conflict with the older farmers who share the garden is becoming increasingly troublesome, with jealousies about Benji’s group’s success and profitability provoking arguments and vague threats related to the Rastas’ use of ganja in the garden. As a result, Benji is considering abandoning the plot as soon as an alternative location is secured.

Benji’s long-term dream is to be able to return to his family’s land in the Eastern Cape where he can run a profitable farm on a larger scale and raise a family. Until then, he wants to build his farming business here in Cape Town, growing and selling produce independently to customers outside of his community and earning enough money to move out of the container he currently calls home. Benji has a twelve-year-old daughter who lives with her mother in Soweto, and he is concerned for her wellbeing and the values with which she is being raised in his absence, but he says he cannot bring her to live with him in Cape Town until he is earning enough money to support the two of them.

Benji also has a strong commitment to both his religion and his community. The Rasta tenets of unity, love for others and connection with Mother Earth translate into a meaningful desire to uplift those who are still experiencing poverty and hunger, just as Benji and the other members of Inity have experienced such trials. To this end, Benji and his colleagues want to provide community training on home food gardening so that their neighbors can grow the vital, nutritious food they otherwise could not afford to buy. Benji says, “Many people only eat veg on Sunday and ... have never seen some of the veg that grows in the garden” He is passionate about sharing his farming knowledge with others for the good of the community. Similarly, Benji and his colleagues have all suffered the consequences of being young, black and unemployed – a set of circumstances that can feel (and may well be) insurmountable for many young people in South Africa. It is Benji’s wish that his role as a farmer and activist will inspire other youth to participate in urban agriculture and positive community upliftment activities, and he is hopeful that the growth of Inity’s garden business will someday create paying jobs for the chronically unemployed young men and women he calls neighbors and friends.

**Update:** As of late October 2012, Benji and Inity have all but abandoned their production activities at the Green Point garden due to the conflict with the elder farmers. Benji says the issue is “cultural” because in African culture, elder people are entitled to the respect and deference of the youth. The fact that Benji and his colleagues are young, Rasta and comparatively successful (often with many visitors from outside the community coming to the garden) has offended the elder people and apparently created a jealous conflict that cannot be resolved. At this point the entire garden project has moved to Nkanini, much closer to Benji’s home but on a much smaller plot. Until the new project yields a harvest, Benji and his colleagues in Inity have given up the modest income they were earning from Harvest of Hope. He is currently working on a funding proposal in search of financial support to invest in the garden business. Although he remains optimistic, Benji’s business has taken a significant step backwards and his future prospects have become more uncertain.
CONSUMER SURVEY

Posted on www.surveymonkey.com from April to May 2012

1. From which box scheme do you buy?
   - Ethical Co-Op
   - Harvest of Hope
   - Wild Organics
   - Other (please specify)

2. Please take a moment to think about why you buy from this veg box scheme. Choose your TOP Reasons for Buying
   - Affordable price
   - Convenience of pickup
   - Quality of product
   - Support social welfare programme

   #1 Most Important
   #2 Important
   #3 Somewhat Important

3. Assuming that price, quality, selection, etc. are all equal, are you MORE LIKELY to buy from a box scheme that supports a social welfare programme (such as job creation or poverty alleviation) over one that does NOT have a clear social benefit?
   - Yes, I would choose a box scheme with a social benefit over one without
   - No, a social benefit programme is not something that would influence my choice of box scheme

4. How many people in TOTAL live in your household?
   (fill-in question)

5. Does everyone in your household eat out of your veg box? If NOT, how many people in your household DO actually eat out of it?
   (fill-in question)

6. Do you share your veg box with anyone who does not live in your household? If yes, about how much do you share and with whom?
   - Neighbour
   - Co-worker
   - Household worker
   - Friend or relative

   Share about 25%
   Share about 50%
   Share about 75%
   Other (please specify)
7. How long have you been buying from this veg box scheme?

First-time buyer
Less than 1 month
1 - 3 months
3 - 6 months
6 - 12 months
1 - 2 years
More than 2 years

8. Where did you first hear about this veg box scheme?

Magazine or newsletter
My child's school
Flyer at a local business
Radio programme
Website
Social media (Facebook, Twitter, etc.)
Other (please specify)

9. How much do you pay for this veg box each week?

(fill-in question)

10. Besides this veg box, about how much additional money do you spend on fruit and veg each WEEK?

R50 - 100
R100 – 250
R250 - 500
Over R500

11. About how much money does your household spend every MONTH on food groceries (including fruit, veg, meat, grains and dairy)?

Less than R1,000
R1,000 - 2,000
R2,000 - 3,000
R3,000 - 4,000
R5,000 - 7,000
More than R7,000

12. What is your household's total monthly income?

R5,000 - 10,000
R10,000 - 15,000
R15,000 - 20,000
R20,000 - 30,000
R30,000 - 40,000
R40,000 +
13. Where else do you shop for fruit and veg? Please choose the TWO PLACES where you shop most often.

Farmer’s market
Woolworths
Pick n Pay
Fruit & Veg
Spar
Checkers
Shoprite
Other (please specify)

14. What fruit and veg are you buying from the shop that’s NOT in your veg box?

(fill-in question)

15. Please rate your agreement with the following

(Likert scale: Strongly Agree - Agree - Disagree - Strongly Disagree - No Opinion)

I am happy with the PRICE of my veg box
I am happy with the QUALITY of my veg box
I am happy with the AMOUNT of veg in my box
I am happy with the VARIETY of veg in my box

16. Buying ORGANIC fruits and vegetables is important to me

Very important - I only buy organic
Important - I buy organic when it’s available/affordable
Somewhat important - I buy both organic and conventional

17. Which best describes your approach to buying organic?

I buy organic only, regardless of cost, and I make substitute choices based on organic availability
I buy organic when I can afford it, but I sometimes choose conventional if it’s cheaper
I buy organic when it is available, but I will buy conventional if it’s more accessible

18. I would consider paying more for my veg box if it had DIFFERENT KINDS OF VEG in it each week

Yes
No
I am happy with my box as is

19. I would consider paying more for my box if it had BETTER QUALITY veg in it each week

I am happy with my box as is
Yes
No
20. Hypothetically speaking, how much more might you be willing to pay for an IMPROVED veg box that better suits your preferences (i.e. different kinds of veg, larger quantity, better quality, etc)?

R5 - 10  
R10 - 15  
R15 - 20  
R20 - 25  
R25 +

21. Do you have any other recommendations for a BETTER VEG BOX or BETTER SERVICE in this scheme? We are very interested in your feedback, so please let us know what would make you a happier customer!

(fill-in question)

22. Are there any OTHER PRODUCTS that you would like to see if your veg box? ex: jam, bread, chutney, eggs, honey, oil, tea, etc.

(fill-in question)

23. Are you a home gardener? If so, do you use compost as fertilizer in your garden?

Yes, I buy compost for my garden  
Yes, I make my own compost for my garden  
No, I don’t use compost at all

24. If you buy compost, what price do you pay?

(fill-in question)

25. If it were offered, would you be interested in buying compost alongside your veg box in a similar scheme?

Yes  
No

THANK YOU FOR PARTICIPATING